



Steinberg Documentation Team: Cristina Bachmann, Martina Becker, Heiko Bischoff, Lillie Harris, Christina Kaboth, Dennis Martinez, Insa Mingers, Matthias Obrecht, Sabine Pfeifer

Translation: Ability InterBusiness Solutions (AIBS), Moon Chen, Jérémie Dal Santo, Rosa Freitag, GiEmme Solutions, Josep Llodra Grimalt, Vadim Kupriianov, Roland Münchow, Boris Rogowski, Sergey Tamarovsky

This document provides improved access for people who are blind or have low vision. Please note that due to the complexity and number of images in this document, it is not possible to include text descriptions of images.

The information in this document is subject to change without notice and does not represent a commitment on the part of Steinberg Media Technologies GmbH. The software described by this document is subject to a License Agreement and may not be copied to other media except as specifically allowed in the License Agreement. No part of this publication may be copied, reproduced, or otherwise transmitted or recorded, for any purpose, without prior written permission by Steinberg Media Technologies GmbH. Registered licensees of the product described herein may print one copy of this document for their personal use.

All product and company names are $^{\text{m}}$ or $^{\text{m}}$ trademarks of their respective owners. For more information, please visit www.steinberg.net/trademarks.

© Steinberg Media Technologies GmbH, 2024.

All rights reserved.

Dorico Elements_5.1.30_en-US_2024-04-19

Table of Contents

		170	Layouts
9	New features	176	Player, layout, and instrument names
14	Introduction	183	Flow names and flow titles
14	Platform-independent documentation	185	Videos
14	Usage of musical terms		
15	Documentation structure	191	Write mode
16	Typographical conventions	191	Project window in Write mode
17	Key commands	206	Inputting vs. editing
17	How you can reach us	212	Rhythmic grid
	-	214	Caret
18	Dorico concepts	219	Note input
18	Design philosophy and higher-level concepts	254	Note durations
19	Projects in Dorico	258	MIDI recording
19	Modes in Dorico	266	Notations input
20	Flows in Dorico	410	Selecting notes/items
20	Players in Dorico	418	Editing items
21	Instruments in Dorico	425	Hiding non-printing elements
22	Popovers	426	Hiding/Showing attachment lines
22	Notes and rests in Dorico	426	Undoing/Redoing actions
23	Rhythmic position	427	Navigation
24	Layouts in Dorico	433	Instrument filters
25	Page templates in Dorico	438	Signposts
25	Key commands in Dorico	439	Insert mode
26	Options dialogs in Dorico Elements	443	Arranging tools
28	User interface	454	Transposing tools
28	Project window	463	Musical transformations
42	Workspace setup	481	Comments
51	Color setup	487	Splitting flows
55			
	Language setup	489	Engrave mode
57 58	Preferences dialog	489	Project window in Engrave mode
56 64	Key Commands page in the Preferences dialog	494	Note spacing
04	Jump bar	501	Moving items graphically
68	Project and file handling	504	Tucking index properties
68	Hub	505	Play mode
70	Starting new projects	505	Project window in Play mode
71	Opening projects/files	515	Tracks
72	Projects from different versions of Dorico	523	Playhead
72	Missing Fonts dialog	525	Playing back music
74	Project Info dialog	530	Enabling independent voice playback
76	Project templates	532	Muting/Soloing tracks
77	File import and export	534	Repeats in playback
101	Auto-save	537	Swing playback
104	Project backups	540	Transport window
105	Project Statistics dialog	543	Playback templates
107	Setup mode	552	Endpoints
107	Project window in Setup mode	559	MIDI trigger regions
119	Players, layouts, and flows	561	Print mode
121	Players		
126	Ensembles	561	Project window in Print mode
128	Instruments	566 570	Printing layouts
134	Instrument changes	570	Exporting layouts as graphics files
140	Percussion kits and drum sets	574 575	Printers
150	Fretted instrument tuning	575	Page arrangements for printing/exporting
154	Capos	577	Duplex printing
163	Player groups	578	Page vs. paper size
167	Flows	579 581	Graphics file formats
107	1 10 10 3	5X1	Annotations

583	Page formatting	711	Loading inserts into channels
584	Changing the page size and/or orientation	712	Changing the reverb plug-in
585	Changing page margins	713	Stage templates
586	Applying page template sets to layouts	720	Space templates
587	Changing the default staff size	728	Library
587	Changing the default staff/system spacing	728	Layout Options dialog
588	Changing the vertical justification of staves/	730	Notation Options dialog
	systems	732	Playback Options dialog
590	Hiding/Showing empty staves	734	Music fonts
592	Hiding/Showing blank staves after final flows	736	Text formatting
593	Starting layouts on left-hand pages	744	Expression maps
593	Allowing/Disallowing multiple flows on the same page	763 770	Percussion maps Playback techniques
594	Changing when the First page template is used		·
595	Hiding/Showing flow headings	773	Notation reference
596	Hiding/Showing information above flow	774	Introduction
	headings	775	Accidentals
597	Changing the horizontal justification of final	775	Deleting accidentals
	systems	776	Hiding/Showing or parenthesizing accidentals
598	Margins	777	Changing the size of accidentals
601	Staff size	778	Hiding/Showing colors for accidentals
604	Staff spacing	778	Stacking of accidentals
612	Casting off	781	Altered unisons
617	System breaks	783	Microtonal accidentals
620	Frame breaks	783	Accidental duration rules
623	Tacets	787	Articulations
626	Condensing Part formatting propagation	788	Copying and pasting articulations
626	Part formatting propagation	788	Deleting articulations
630 634	Page templates Flow headings	788	Positions of articulations
636	Frames	792	Articulations in playback
645	Music frame chains	793	Bars
		793	Bar length
646	Properties	793	Deleting bars/beats
646	Properties panel	796	Changing the width of empty bars
647	Local vs. global properties	796	Splits in bars
648 649	Changing the property scope Changing values in numeric value fields	798	Barlines
		798	Per-flow notation options for barlines
650	Key Editor	799	Types of barlines
650	Key Editor panel	802	Hiding/Showing systemic barlines and
661	Notes in the Key Editor		brackets/braces
671	Played vs. notated note durations	803	Hiding/Showing systemic barlines on single-
673 674	Playing Techniques editor Velocity editor		staff systems
677	Dynamics editor	804	Moving barlines graphically
683	MIDI Pitch Bend editor	805	Barlines across staff groups
684	MIDI CC editor	808	Bar numbers
689	Tempo editor	808	Hiding/Showing bar numbers
693	Histogram tool	809	Hiding/Showing bar number enclosures
696	Transform tool	810	Hiding/Showing bar number ranges on multi-
698	Key Editor configurations		bar rests
700	Mixer	811	Hiding/Showing guide bar numbers
700	Mixer panel	811	Bar number paragraph styles
701	Mixer window	813	Positions of bar numbers
702	Mixer toolbar	817	Bar number changes
703	Mixer channels	818	Subordinate bar numbers
707	Hiding/Showing channels	820	Bar numbers and repeats
707	Scrolling through channels	821	Beaming
707	Changing the height of channels	821	Per-flow notation options for beam grouping
708	Changing the volume of channels	822	Beam grouping according to meters
709	Panning channels	822	Beaming notes together manually
710	Adding FX channels	826	Changing the thickness of beams
710	Renaming channels	826	Beam placement relative to the staff

828 829 832 835 836 838 839	Beam slants Centered beams Creating cross-staff beams/tremolos Beam corners Secondary beams Tuplets within beams Rests within beams	909 909 910 911 911 913	Hiding/Showing immediate dynamics Hiding/Showing combined dynamic separators Parenthesizing dynamics Changing the appearance of sforzando/ rinforzando dynamics Erasing the background of dynamics Voice-specific dynamics
839	Stemlets	914	Dynamic modifiers
840	Fanned beams	918	Gradual dynamics
841	Note and rest grouping	925 928	Messa di voce hairpins Niente markings
841	Hiding/Showing ties across beat boundaries	930	Groups of dynamics
842 844	Creating custom beat groupings for meters Changing the beat grouping for cut common	931	Linked dynamics
044	time signatures	933	Dynamics font styles
845	Brackets and braces	934	Dynamics in playback
846	Changing bracket grouping according to	938	Figured bass
	ensemble type	939 940	Hiding/Showing figured bass in layouts Showing figured bass on rests
848	Hiding/Showing braces on single staves	941	Showing single brackets on figured bass
849 851	Secondary brackets Sub-sub-brackets	942	Figured bass hold lines
		945	Positions of figured bass
852 853	Chord symbols Chord components	948	Appearance of figured bass
853	Chord symbol appearance presets	952	Fingering
858	Chord symbol font styles	952 953	General placement conventions for fingering Changing fingerings to substitution fingerings
859	Positions of chord symbols	954	Changing existing fingerings
863 864	Chord symbol regions Transposing chord symbols	955	Changing the staff-relative placement of
865	Respelling chord symbols		fingerings
867	Hiding/Showing the root and quality of chord	957	Changing the size of fingerings
0.5-	symbols	958 959	Showing enclosures/underlines on fingerings Hiding/Showing fingering
867	Changing the arrangement of compound	959	Deleting fingerings
868	chord symbols Erasing the background of chord symbols	960	Fingering font styles
870	Parenthesized chord symbols	961	Cautionary fingerings
874	Chord symbols imported from MusicXML	962 967	Fingerings for fretted instruments Fingering slides
875	Chord diagrams	970	Fingering sides Fingerings for valved brass instruments
876	Chord diagram components	971	Hiding/Showing string fingering shift
877 879	Hiding/Showing chord diagrams Used chord diagrams grids	070	indicators
882	Hiding/Showing fingerings in chord diagrams	973	Fingerings imported from MusicXML files
883	Changing the chord diagram shape	974	String indicators
885	Creating new chord diagram shapes	975 976	Deleting string indicators Positions of string indicators
887	Chord diagram font styles	978	Front matter
889	Clefs Showing clefs after grass notes	978	Adding titles
890 891	Showing clefs after grace notes Moving clefs graphically	979	Adding composers
892	Hiding/Showing clefs	980	Adding lyricists
894	Changing the octave of clefs	980 981	Adding copyright information
895	Clefs with octave indicators	982	Editing layout transposition text Hiding/Showing borders on layout names
897	Octave lines	983	Grace notes
898 899	Positions of octave lines Hiding/Showing octave lines	983	General placement conventions for grace
900	Octave lines in Engrave mode		notes
900	Changing the vertical stacking order of octave	985	Turning existing notes into grace notes
	lines	985 986	Turning grace notes into normal notes Showing grace notes before/after barlines
902	Cues	987	Grace note size
903	Dynamics	987	Grace note slashes
903	Types of dynamics	989	Grace note stems
904	Positions of dynamics	989 990	Grace notes in playback
908	Changing dynamic levels	220	Grace notes in playback

991 992 993	Holds and pauses Types of fermatas Types of breath marks	1076 1077	Changing the speed of trills Hiding/Showing speed changes in trill extension lines
993 993 997	Types of breath marks Types of caesuras Positions of holds and pauses Holds and pauses in playback	1077 1078 1083	Hiding/Showing trill extension lines Trill intervals Trill interval appearance
1000	Key signatures	1085	Trills in playback
1001 1002 1003	Key signature arrangements Types of key signatures Hiding/Showing key signatures at the start of systems	1089 1089 1092 1092	Arpeggio signs Types of arpeggio signs Length of arpeggio signs General placement conventions for arpeggio
1003 1005 1006	Positions of key signatures Cautionary key signatures Enharmonic equivalent key signatures	1093	signs Arpeggios in playback
1009	Enharmonic equivalent key signatures Tonality systems Equal Division of the Octave (EDO)	1096 1097	Glissando lines Glissando lines across empty bars Changing the style of glissando lines
1009 1010 1010 1012	Equal Division of the Octave (EDO) Lyrics Types of lyrics Types of syllables in lyrics	1097 1098 1099 1100	Changing the style of glissando lines Changing glissando line text Glissando lines in Engrave mode Glissando lines in playback
1013	Copying and pasting lyrics	1103	Guitar bends
1015 1015	Exporting lyrics Filters for lyrics	1105 1107	Guitar pre-bends and pre-dives Guitar post-bends
1015	Positions of lyrics	1107	Vibrato bar dives and returns
1022	Lyrics paragraph styles	1109	Bend intervals
1023 1026	Lyric text editing Lyric hyphens and lyric extender lines	1110 1110	Hiding/Showing guitar bend hold lines Changing the direction of guitar pre-bends/
1028	Lyric line numbers		pre-dives
1030 1031	Verse numbers	1111	Hiding/Showing accidentals on guitar pre-
1031 1033	Elision slurs	1112	bends/pre-dives Deleting guitar pre-bends, pre-dives, and post-
1033	Notes Notehead sets		bends
1040	Assigning notes to strings	1112	Guitar bends in Engrave mode
1041 1042	Hiding/Showing noteheads Hiding/Showing ledger lines	1118 1118	Guitar techniques Vibrato bar techniques
1042	Changing the width of ledger lines	1119	Tapping
1043	Changing the consolidation of rhythm dots	1120	Hammer-ons and pull-offs
1044	View options for notes and rests	1122 1123	Showing notes as dead notes Changing vibrato bar dip intervals
1047 1048	Bracketed noteheads Showing brackets on noteheads	1123	Changing the staff-relative placement of quitar
1050	Showing brackets of Hoteheads Showing brackets around one/all noteheads in		techniques
	tie chains	1124	Deleting guitar techniques
1051 1052	Splitting brackets on chords Changing the shape of round notehead brackets	1125 1126 1127	Jazz articulations Jazz ornaments Resitions of intra articulations
1054	Notehead brackets in Engrave mode	1127	Positions of jazz articulations Changing the type/length of existing jazz articulations
1055 1055	Stems Stem direction	1128	Changing the line style of smooth jazz
1059	Stem length	1120	articulations
1060	Hiding/Showing stems	1129	Deleting jazz articulations
1062	Harmonics	1130 1130	Page numbers Page number paragraph styles
1063 1064	Turning notes into harmonics Changing the harmonic partial	1131	Changing the page number numeral style
1065	Hiding/Showing or parenthesizing harmonic accidentals	1131 1132	Hiding/Showing page numbers Hiding/Showing guide page numbers
1066	Appearances/Styles of harmonics	1133	Harp pedaling
1071	Ornaments	1134	Changing the appearance of harp pedal diagrams
1071 1072	Changing ornament intervals Positions of ornaments	1135	Hiding/Showing harp pedaling in layouts
1072	Trills	1137	Hiding/Showing borders on harp pedal
1075	Hiding/Showing trill marks	1139	diagrams Positions of harp pedal diagrams

1139	Partial harp pedaling	1220	Positions of repeat markers	
1141 1142	Pedal lines Sustain pedal retakes and pedal level changes	1222 1224	Repeat counts Bar repeats	
1147 1149	Positions of pedal lines Splitting pedal lines	1225	Changing the length of the repeated phrase in bar repeat regions	
1150 1151	Merging pedal lines Pedal line start signs, hooks, and continuation lines	1226 1226 1229	Hiding/Showing region highlights Bar repeat counts Bar repeat grouping	
1156 1158	Text pedal line signs Pedal lines in playback	1231	Numbered bar regions	
1159	Pedal lines imported from MusicXML files	1232 1232	Hiding/Showing numbered bar regions Numbered bar region counts	
1160 1161	Playing techniques Adding text to playing techniques	1236 1236	Rhythm slashes Slash voices	
1162	Erasing the background of playing techniques	1239	Slash regions	
1163 1164	Hiding/Showing playing techniques Positions of playing techniques	1243	Slash region counts	
1166	Playing technique continuation lines	1246	Slashes in multiple-voice contexts	
1171	Groups of playing techniques	1249 1249	Rests General placement conventions for rests	
1174 1176	Lines Line components	1250	Implicit vs. explicit rests	
1177	Positions of lines	1252 1253	Per-flow notation options for rests Hiding/Showing rest colors	
1183	Length of lines	1253	Moving rests vertically	
1186 1186	Changing the body style of lines	1254	Deleting rests	
1187	Changing the caps of lines Changing the direction of lines	1256	Hiding/Showing bar rests in empty bars	
1188	Adding text to lines	1257	Multi-bar rests	
1195	Lines in Engrave mode	1261 1262	Slurs General placement conventions for slurs	
1196	Rehearsal marks	1267	Slur styles	
1196 1197	Positions of rehearsal marks	1270	Slur curvature direction	
1197	Changing the index of rehearsal marks Changing the rehearsal mark sequence type	1272	Cross-staff and cross-voice slurs	
1199	Adding prefixes/suffixes to rehearsal marks	1273 1275	Nested slurs Linked slurs	
1199	Editing the rehearsal mark paragraph style	1276	Slur segments	
1201	Markers	1278	Slurs in Engrave mode	
1201 1202	Hiding/Showing markers Changing the vertical position of markers	1282 1284	Slur height Slur shoulder offset	
1202	Changing the vertical position of markers Editing marker text	1285	Slurs in playback	
1204	Editing the marker/timecode font styles	1287	Staff labels	
1204	Changing the timecodes of markers	1288	Hiding/Showing staff labels	
1205	Defining markers as important	1290	Hiding/Showing staff labels at system/frame	
1206 1207	Timecodes Changing the initial timecode value	1291	breaks Staff label contents	
1207	Changing the unitial timecode value Changing the vertical position of timecodes	1291	Instrument transpositions in staff labels	
1208	Changing the timecode frequency	1295	Player group labels	
1210	Repeat endings	1296 1297	Staff label paragraph styles	
1210	Changing the total number of playthroughs in repeat endings	1297	Staff labels for percussion kits Staff labels on condensed staves	
1212	Lengthening/Shortening segments in repeat endings	1300 1300	Staves Extra staves	
1213	Positions of repeat endings	1301	Ossia staves	
1213	Editing repeat ending text	1302	System dividers	
1214	Changing the appearance of repeat ending segments	1303 1305	System objects System indents	
1214 1215	Lengthening/Shortening repeat ending hooks Repeat endings in MusicXML files	1307	Divisi	
1213	Repeat markers	1308	Tablature	
1217	Repeat marker paragraph styles	1309	Rhythms on tablature	
1217	Changing the index for repeat markers	1309 1310	Hiding/Showing notation staves and tablature Changing the allocated string for notes on	
1218	Editing repeat marker text	.510	tablature	
1220	Hiding/Showing repeat markers	1312	Editing the tablature numbers font style	

1313 1314 1314 1316 1317 1318 1318 1319 1323 1327 1328	Tempo marks Types of tempo marks Positions of tempo marks Changing tempo text Tempo mark font styles Hiding/Showing tempo marks Parenthesizing tempo marks Metronome marks Gradual tempo changes Tempo equations Text items	1404 1404 1406 1407 1413 1414 1416 1417 1417	Per-flow notation options for unpitched percussion Notations on notes in percussion kits Percussion kit presentation types Percussion legends Voices in percussion kits Universal Indian Drum Notation Voices Per-flow notation options for voices Hiding/Showing voice colors Allowing/Disallowing noteheads in opposing
1329 1333 1333 1334 1335 1338 1339	Types of text Changing the paragraph style of text items Aligning text items with the start of systems Enabling/Disabling text collision avoidance Adding borders to text items Erasing the background of text items Hiding/Showing text items	1418 1422 1422	voices to overlap Note positions in multiple-voice contexts Unused voices Notes crossed to staves with existing notes in other voices Glossary
1341 1342 1343 1345 1347 1349 1350 1351 1352 1354 1356	Ties Ties vs. slurs Tie styles Tie curvature direction Non-standard ties Hiding/Showing laissez vibrer ties Deleting ties Splitting tie chains Ties in Engrave mode Tie height Tie shoulder offset	1438	Index
1359 1360 1362 1364 1365 1367 1372 1374 1375 1375	Time signatures Types of time signatures Cautionary time signatures Pick-up bars Large time signatures Time signature styles Positions of time signatures Hiding/Showing time signatures Ending interchangeable time signatures Changing the design of time signatures Time signature font styles		
1377 1378 1379 1381 1381 1382 1382 1383	Tremolos General placement conventions for tremolos Tremolos in tie chains Changing the speed of tremolos Deleting tremolos Rhythmic positions of notes with tremolos Moving tremolo strokes Tremolos in playback		
1386 1386 1388 1388 1389 1390 1391 1394	Tuplets Nested tuplets Turning existing notes into tuplets Turning tuplets into normal notes Allowing/Disallowing tuplets to span barlines Tuplet beams Tuplet brackets Tuplet numbers/ratios		
1397 1397 1398	Unpitched percussion Percussion kits vs. individual percussion instruments Playing techniques for unpitched percussion instruments		

New features

New Features in Version 5.1.30

Status bar width

You can now hide/show tools in the status bar. See Hiding/Showing status bar tools.

Systemic barlines

 You can now hide systemic barlines and brackets/braces at individual system/frame breaks and codas. See Hiding/Showing systemic barlines and brackets/braces.

Coda gaps

 You can now change the gap preceding individual coda sections. See Changing the gap before codas.

New Features in Version 5.1.20

Comments panel improvements

 You can now sort comments by different attributes, and change which pieces of information are shown. See Reordering comments and Hiding/Showing comment information.

Mixer values

• You can now enter exact panning and volume values in Mixer channels. See Changing the volume of channels and Panning channels.

Staff label improvements

- When hiding/showing staff labels, you can now apply your changes to the first flow only, or to all flows in the layout. See Hiding/Showing staff labels.
- You can now indent the first systems of flows only when staff labels are hidden. See Changing the first system indent.

Aggregate time signatures

• It is now possible to combine aggregate time signatures with the same denominator into a single time signature, while retaining dashed barlines for meter divisions. See Combining aggregate time signatures.

New Features in Version 5.1.10

Harp pedals editor

• A new **Harp Pedals** section in the Playing Techniques panel allows you to create harp pedal diagrams using a visual editor. See Playing Techniques panel.

Colors for accidentals

 You can now show cautionary and forced accidentals in different colors, independently of each other. See Hiding/Showing colors for accidentals.

New Features in Version 5.1.0

Highlights

Iconica Sketch

• Iconica Sketch sounds, and playback templates for using them, are now included with Dorico Elements. See Playback templates.

Text export

• It is now possible to export all text in the project to a CSV file. See Exporting text.

Project statistics

 Dorico Elements can now generate statistics for the whole project or only an individual flow. Being able to know how many bars there are in a piece of music, and to differentiate between filled and empty bars, can be necessary when calculating engraving fees. See Project Statistics dialog.

History dialog

• You can now view your edits and selections in a dialog, and undo/redo all actions up to the selected one. See History dialog.

Polyphonic voice balancing

- Dorico Elements can now identify melodies and bass notes in polyphonic music, and emphasize them relative to accompanying notes. See Enabling/Disabling polyphonic voice balancing.
- There are further voice balancing options for themes in contrapuntal music specifically. See Enabling/Disabling dynamic rules for contrapuntal music.

Hold and pause playback

 Holds and pauses now affect playback, using a combination of changing note durations and inserting gaps. See Holds and pauses in playback.

More New Features

Project Info dialog

• You can now use italic, bold, and bold italic Markdown formatting for specific characters within fields in the **Project Info** dialog. See Project Info dialog.

Instrument change improvements

- You can now delay instrument changes until before the first note in the new instrument, and change where instrument change labels appear relative to cues. See Changing the position of instrument changes.
- You can now hide instrument change warnings in each layout independently. See Hiding/ Showing instrument change warnings.
- Dorico Elements now provides two paragraph styles for instrument change labels, allowing you to customize the appearance of instrument change warnings independently of the labels shown at new instruments' entries. See Instrument change label paragraph styles.

Hidden notations

 You can now input hidden tempo marks and playing techniques by enclosing your popover entry in parentheses. See Inputting tempo marks with the popover and Inputting playing techniques with the popover.

Mouse editing

• It is now possible to transpose notes by octave division when clicking and dragging with the mouse. See Changing the pitch of individual notes.

Exporting flows

You can now export flows as separate PDF files. See Exporting layouts as graphics files.

Lock Played Durations

This new function allows you to retain the played durations of notes, regardless of edits
you make to their notated positions/durations in the piano roll editor. See Key Editor panel
toolbar.

Used chord diagrams grids

• It is now possible to exclude individual chord diagram shapes from used chord diagrams grids. See Including/Excluding chord diagrams from used chord diagrams grids.

Dynamics improvements

 There are new options for the appearance and position of syllables in hyphenated gradual dynamics. See Changing the appearance of gradual dynamics and Abbreviating gradual dynamics.

Cautionary key/time signatures

• It is now possible to hide cautionary key signatures and time signatures at the ends of systems. See Hiding/Showing cautionary key signatures and Hiding/Showing cautionary time signatures.

Glissando playback

 Dorico Elements now supports continuous glissando playback using MIDI pitch bend. See Changing the glissando playback type.

New Features in Version 5.0.20

Mixer panel

• Channel strips are now shown in the Mixer panel when it is sufficiently tall. See Mixer panel.

Tie chains

• Edits to tie chains in Write mode, including changing the stem direction of notes, now affect all notes and ties in the chain.

New Features in Version 5.0.0

Highlights

Groove Agent SE

- Dorico Elements now comes with Groove Agent SE, allowing you to drag and drop patterns onto drum set tracks and trigger patterns using MIDI trigger regions. See Importing drum set patterns from Groove Agent SE.
- If you have installed Groove Agent SE, you can use new playback templates to load Groove Agent SE automatically when you add drum sets. See Playback templates.

Dorico Elements features

- You can now have unlimited players in a single project. See Players.
- Note spacing and staff spacing tools are now available in Engrave mode in Dorico Elements, allowing you to adjust horizontal and vertical spacing in more detailed ways.
 See Engrave mode.
- The **Playback Options** dialog is now available in Dorico Elements. See Playback Options dialog.
- The **Edit Font Styles**, **Paragraph Styles**, and **Character Styles** dialogs are now available in Dorico Elements, allowing you to change the formatting of text styles. See Text formatting.

Mouse editing

 It is now possible to transpose, move, and copy notes by clicking and dragging with the mouse. See Enabling/Disabling mouse editing.

Multiple item creation

 You can now input notations onto multiple staves simultaneously outside of note input. By default, Dorico Elements inputs notations at the first note on each staff. See Changing the item input position setting.

Scrubbing

• It is now possible to use scrub playback in Dorico Elements. See Scrubbing.

MIDI trigger regions

• This new feature allows you to play back notes without showing them in the music, such as when using patterns in Groove Agent for playback. See MIDI trigger regions.

Space and Stage templates

• These new features work together to make it much easier to produce realistic playback performances of your music. Stage templates allow you to position instruments as if they were on a real stage. Space templates emulate different rooms and concert halls by applying panning and reverb settings to instruments' stage positions. The end result is playback that uses the stereo field more realistically, with deeper and more natural reverberation. See Space templates and Stage templates.

Pitch contour emphasis

 This new algorithm allows melodies to play back even more expressively. See Enabling/ Disabling pitch contour emphasis.

More New Features

User interface improvements

- The status bar has been given additional options, allowing you to switch the current layout between concert/transposed pitch and galley/page view more easily. See Status bar.
- You can now enable/disable playhead following during playback in each project window independently. See Enabling/Disabling playhead following.

Middle C numbering convention

 You can now change the numbering convention used for middle C (MIDI note 60) throughout Dorico Elements. See Changing the middle C numbering convention.

Instrument numbering

• It is now possible to renumber instruments so that their numbering matches their default player order. See Renumbering instruments.

Staff label improvements

- In simple cases, horizontal alignment and leading set for individual instrument names is now used in staff labels, overriding the settings from the corresponding paragraph style. See Edit Instrument Names dialog.
- You can now show player names in staff labels only on the first system in each flow, with instrument names shown in staff labels on all other systems. See Showing instrument/player names in staff labels.

Rhythm dots

To select dotted note durations, you can now double-press note duration key commands.
 See Inputting notes with rhythm dots.

Text improvements

You can now enter Unicode characters into both text items and text frames more easily.
 See Inputting text items.

- You can now adjust leading in individual text items. See Text editor options in Write mode.
- You can now change the paragraph style applied to multiple selected text items simultaneously. See Changing the paragraph style of text items.

Playback improvements

- Notes and items can now be muted in specific playthroughs, allowing you to hear selected notes only the second time around, for example. See Muting notes/items individually.
- Dorico Elements now supports microtonal playback using MIDI pitch bend. See Expression Maps dialog.

Mixer improvements

- It is now possible to add multiple FX channels to the Mixer. See Adding FX channels.
- You can now rename channels in the Mixer. See Renaming channels.

Music fonts

• A variety of new music font families are now available by default. See Music fonts.

Hiding items

- You can now hide clefs in layouts of any transposition, independently of other layouts. See Hiding/Showing clefs.
- You can now hide octave lines in individual layouts. See Hiding/Showing octave lines.

Introduction

Thank you very much for purchasing Dorico Elements.

We are delighted that you have chosen Steinberg's scoring application and hope that you will enjoy using it for years to come.

Dorico is a next-generation application for producing beautiful sheet music, whether you are a composer, arranger, music engraver, publisher, instrumentalist, teacher, or student. Whether you want to print your music or share it in a digital format, Dorico is the most sophisticated program available.

Like all of Steinberg's products, Dorico has been designed from the ground up by a team of musicians who understand your needs and who are dedicated to producing a tool that is both easy to learn and use, but also capable of results of the highest quality. Dorico also integrates with your existing workflow and can import and export files in a variety of formats.

Dorico thinks about music the same way a human musician does and has a deeper understanding of the elements of music and musical performance than other scoring applications. Its unique design allows an unprecedented degree of flexibility, in music input and editing, in score layout, in rhythmic freedom, and many other areas besides.

Most sincerely yours,

The Steinberg Dorico Team

Platform-independent documentation

This documentation applies to the operating systems Windows and macOS.

Features and settings that are specific to one of these platforms are clearly indicated. In all other cases, the descriptions and procedures in the documentation are valid for Windows and macOS.

Some points to consider:

- The screenshots are taken from macOS and use the dark theme in Dorico Elements.
- Some functions that are available on the File menu on Windows can be found in the program name menu on macOS.

Usage of musical terms

This documentation uses American terminology for musical items.

The following table lists all the notes and notations that have different names in American and British English:

American name	British name
Double whole note	Breve
Whole note	Semibreve

British name	
Minim	
Crotchet	
Quaver	
Semiquaver	
Demisemiquaver	
Hemidemisemiquaver	
Semihemidemisemiquaver	
Demisemihemidemisemiquaver	
Semitone	
Whole tone	
Stave	
Bar	

Documentation structure

In our documentation, we divide information into three different types of topics, according to their content.

Descriptions of the user interface

Topics that describe the functionality of user interface items and list the options and settings of dialogs, panels, or other items.

Descriptions of basic concepts

Topics that describe concepts and explain the functionality of a specific software feature.

Descriptions of procedures

Topics that provide step-by-step instructions for how to perform a specific task. These topics often provide an example for why you might want to follow the steps and a brief summary of the result, including consequences to be aware of.

Because of this division of information, our documentation structure functions as a reference you can consult for specific information or instructions as required, rather than a guide you must read from start to finish.

TIP

Descriptive topics do not describe how to perform a task, and procedural topics do not explain what something is. To find general information about items or concepts, we recommend searching for them by name, such as "dynamics". To find instructions for performing particular actions, we recommend including a relevant verb in your search, such as "moving".

Links at the bottom of topics guide you to further relevant content. You can also check the sidebar for nearby, related topics in the documentation structure.

Typographical conventions

In our documentation, we use structural and markup elements to present information according to its purpose.

Structural elements

Prerequisite

Describes any actions or conditions you must have fulfilled before starting a procedure.

Procedure

Lists the steps that you must take to achieve a specific result.

Important

Informs you about serious issues; for example, issues that affect the system, the connected hardware, or that risk data loss.

Note

Informs you about issues or other relevant information.

Tip

Adds further information or useful suggestions.

Example

Provides you with an example.

Result

Describes the result of the procedure.

After Completing This Task

Informs you about actions or tasks that you can perform after completing the procedure.

Related Links

Lists related topics that you can find in this documentation.

Markup

Bold text indicates the name of a menu, option, function, dialog, window, and so on.

EXAMPLE

To open the **Project Info** dialog, choose **File** > **Project Info**.

If bold text is separated by a greater-than symbol, this indicates either a sequence of different menus to open, or directions to follow for navigation inside the dialog named at the start of the sequence.

EXAMPLE

Choose Edit > Notations > Voices > Change Voice > [Voice].

You can change this option in Preferences > Note Input and Editing > Editing.

File names and folder paths are shown in a different font.

EXAMPLE

example_file.txt

Key commands

Key commands are sets of keys that perform defined tasks when pressed together. They are also known as "keyboard shortcuts" or "hotkeys". Many key commands are the same on different operating systems but some are not, and this guide distinguishes them.

When key commands use equivalent modifier keys depending on the operating system, the modifier keys are indicated separated by a slash, with the Windows modifier key first and the macOS modifier key second.

EXAMPLE

Ctrl/Cmd-Alt/Opt-Down Arrow means: press Ctrl - Alt - Down Arrow on Windows, Cmd - Opt - Down Arrow on macOS.

When key commands require entirely different keys depending on the operating system, they are indicated with the Windows key command first, followed by the macOS key command.

EXAMPLE

(Windows) or \ (macOS) means: press # on Windows, \ on macOS.

In this documentation, we use key commands that match the language of the documentation. For example, key commands in the English documentation correspond to the English keyboard language.

RELATED LINKS

Key commands in Dorico on page 25 Key Commands page in the Preferences dialog on page 58 Changing the keyboard language on page 63 Changing the application language on page 55

How you can reach us

You can access additional information from the **Help** menu.

The menu contains links to various Steinberg web pages. Selecting one of these menu items automatically launches your web browser and opens the page. On these pages, you can find support and compatibility information, answers to frequently asked questions, information about updates and other Steinberg products, and so on.

Dorico concepts

Dorico is based on a number of key concepts that come from its design philosophy.

We recommend familiarizing yourself with these concepts, as this will greatly enhance your ability to work efficiently with Dorico and to navigate more easily through this documentation.

Design philosophy and higher-level concepts

Deep design considerations are required to create a notation software like Dorico, which might be of particular interest to users familiar with scoring applications. Dorico has a forward-thinking design that is led by musical concepts rather than computational convenience, and this provides many benefits.

In most other graphically-orientated scoring applications, the highest-level concept is the staff or the instrument definition that creates a staff or staves. When setting up your full score in such programs, you start by adding the correct number of staves, and you are immediately forced into making decisions about the layout. This means that you must know in advance whether two flutes share a staff or have their own individual staves, or whether there should be two trumpets or three. Many of these decisions have significant effects throughout the process of inputting, editing, and producing individual instrumental parts.

Typically, every system of a score must contain the same number of staves, even if some are hidden on particular systems. This requires the user to manage common conventions for themselves, such as multiple players of the same instrument sharing staves. This can be time-consuming and is naturally error-prone.

By contrast, Dorico is designed to conform more closely to how music is performed in the real world and to make the score a flexible expression of the practical choices that go into a musical performance, rather than to make the musical performance subservient to the way the score was initially prepared.

To that end, the highest-level concept of Dorico is the group of human musicians that performs a score. A score can be written for one or more groups; for example, a double choir, or an orchestra plus off-stage chamber ensemble, and so on. Each group includes one or more players which correspond to the humans who play one or more instruments. Players may either be individuals who play more than one instrument, such as an oboist doubling cor anglais, or groups in which everyone plays only one instrument, such as eight desks of violinists.

One crucial difference between Dorico and other scoring applications is that the musical content exists independently of the score layout in which it is viewed.

The actual music played by the group in your score belongs to one or more flows. A flow is any span of music that stands alone; for example, a whole song, a movement of a sonata or symphony, a number in a musical show, or even a short scale or exercise. Players might or might not have any music to play in a given flow. For example, all the brass players might be omitted from the slow movement of a classical symphony, or certain players might have nothing to play in some cues in a movie score. This is no problem as you can combine players in flows in any combination.

Dorico's design philosophy provides several benefits. Chief among them is its ability to produce multiple layouts that share the same musical content, but each having customized appearances to suit different requirements. For example, in the same project you can create a conductor's

score with as many instruments as possible condensed onto a smaller number of staves, a full score with each player's music on separate staves, a custom score layout containing just the piano and vocal staves for choral rehearsals, and an instrumental part for each player that only contains the music belonging to them.

This means it is not necessary to extract flows or parts as separate files: all this information can co-exist in the same Dorico project file.

Projects in Dorico

A project is an individual file that you create within Dorico. It can contain multiple separate pieces of music of any duration, written for any combination of instruments, and use as many layouts as required.

For example, you can create a single project that contains all the preludes and fugues in Bach's "The Well-Tempered Clavier" as separate flows. You could then have one layout that contains only the flows for Book 1 and another layout that contains the flows for Book 2.

In addition to the notated music, projects save other relevant information, such as the playback template applied.

Dorico projects are saved as .dorico files.

Modes in Dorico

Modes in Dorico represent a logical sequence of the workflow phases of preparing music, but you can switch between them at any time as required for your own workflow.

Dorico Elements contains the following modes:

Setup

In Setup mode, you can set up the fundamental elements of the project: instruments and the players that hold them, flows, layouts, and videos. You can also determine how they interact with each other; for example, by changing the players assigned to layouts.

You can view music in the music area and switch between viewing other tabs and layouts, but you cannot select or interact with anything in the music area in Setup mode.

Write

In Write mode, you can input and edit your music, including changing the rhythmic positions of items, changing the pitch of notes, and deleting notes and items. The available toolboxes and panels allow you to input all the notes and notation items that are most commonly used.

By design, you cannot move notes and items graphically on the page in Write mode. Graphical adjustments are only possible in Engrave mode.

Engrave

In Engrave mode, you can make fine adjustments to the position, size, and appearance of notes and items, and determine how the pages of your project are laid out.

By design, you cannot delete any notes or items, change their rhythmic positions, or change the pitch of notes in Engrave mode; this prevents mistakes when engraving.

Play

In Play mode, you can change how your music sounds in playback. You can do this by changing the playback template and assigning VST instruments, inputting automation,

adjusting the mix, and changing the sounding duration of notes in playback without affecting their notated duration.

Print

In Print mode, you can print your layouts or export them as graphics files. When printing layouts, you can specify the paper size and other options, such as duplex or booklet printing. When exporting layouts, you can specify different graphics file types, such as PDF or PNG, and the information you want to include in their exported file names.

RELATED LINKS
Setup mode on page 107
Write mode on page 191
Engrave mode on page 489
Print mode on page 561
Play mode on page 505

Flows in Dorico

Flows are separate spans of music that are completely independent in musical content; for example, a single song in an album, a movement in a sonata or symphony, a number in a stage musical, or a short scale or sight-reading exercise of only a few bars in length. A single project can contain any number of flows.

Each flow can contain music for any combination of players, independently of other flows. For example, brass players are often tacet in the second movements of Classical-period symphonies, so you can remove brass players from the flow for the second movement but leave them in the flows for other movements. In a set of cues for a movie, for example, specific players might not be required in some cues, so the corresponding flows can contain only those players who have anything to play.

The correct assignment of players to flows allows Dorico, for example, to generate tacet sheets automatically for individual instrumental parts.

RELATED LINKS
Players, layouts, and flows on page 119
Flow headings on page 634
Tacets on page 623

Players in Dorico

In Dorico, a player can represent an individual musician or multiple musicians in the same section. Players hold instruments, so you must add at least one player to your project before you can add instruments.

- A single player represents one person who can play one or more instruments. For example, a clarinettist who doubles on alto saxophone or a percussionist who plays bass drum, clash cymbals, and triangle.
- A section player represents multiple people who all play the same instrument. For example, a violin section player might represent all eight desks of the Violin I section in an orchestra, or a soprano section player might represent the whole soprano section in a mixed voice choir.

NOTE

Section players can only hold one instrument.

You can also group players together; for example, to separate off-stage players from on-stage players in a large-scale work. Grouping players together means they are positioned together in the score, numbered independently of players outside the group, and are bracketed together according to the ensemble type set for each layout.

Players can be assigned to any combination of layouts and flows.

RELATED LINKS
Player groups on page 163
Divisi on page 1307
Condensing on page 626
Brackets according to ensemble type on page 847

Instruments in Dorico

In Dorico, an instrument is an individual musical instrument, such as a piano, a flute, or a violin. Human voices, such as soprano or tenor, are also considered instruments.

In Dorico, instruments are held by players, just as real instruments are held by human players. Section players can only hold one instrument but single players can hold multiple instruments. This allows you to handle instrument changes easily, such as when an oboist doubling the cor anglais switches from one instrument to the other.

Each instrument automatically gets its own staff, but when instrument changes are allowed, the music for multiple instruments held by the same single player can appear on the same staff as long as no notes overlap.

Dorico has a database of information about the properties of each instrument. These include the playable range, common and uncommon playing techniques, notational conventions, transposition properties, tunings, clef, number of staves, type of staff, and so on. Having these properties predetermined makes it easier and quicker to set up projects correctly. For example, there is a Horn in F instrument that automatically shows treble clefs in transposed pitch layouts. Similarly, there is a timpani instrument that automatically hides all key signatures.

RELATED LINKS
Instrument changes on page 134
Transposing instruments on page 130

Popovers

Popovers allow you to input different notations and perform tasks, such as transposing a selection of notes, using only your computer keyboard. They are temporary value fields that use text entries for different items and tasks, and there are specific popovers for different purposes.



The dynamics popover with an example entry

One of the key benefits of popovers is that you can use them as you input notes: for example, once you reach the position where you want to input a new time signature, you can open the time signatures popover, input the time signature you want, and then continue inputting notes.

Although specific entries are required for many notations, the correct entries for different notations are consistently and logically structured. For example, tuplets are always expressed as a ratio, such as 3:2 or 5:4. Key signatures are expressed using capital letters for major keys and lowercase letters for minor keys. Time signatures are expressed as a pair of separated numbers; common time signatures use a slash, such as 3/4 or 6/8.

During note input, and depending on the notation you are inputting with the respective popover, notations are input either on the currently selected note, which is usually the last note you input, or at the current rhythmic position, indicated by the caret.

You can always identify popovers by the icon on their left-hand side, which are the same icons used in the Notations toolbox on the right of the window. The Notations toolbox allows you to hide/show the corresponding notation's panel, which is another way you can input notations.

You can only use popovers in Write mode, as that is the only mode where you can input notes and items together and change the pitch of notes. Popovers open above the top staff on which the caret is active or an item is selected, and at the caret position or the rhythmic position of the earliest selected item.

RELATED LINKS

Note input on page 219 Notations input on page 266 Notations toolbox on page 197

Notes and rests in Dorico

In Dorico, the notation and division of notes and rests is determined semantically by rules based on convention. This means that note and rest durations can change and appear differently later than when you first input them.

Dorico is able to update how notes and rests are notated depending on their context because of the following key concepts:

- **1.** Notes are treated as a single unit, even if they appear as a tie chain that contains multiple notes tied together.
- 2. Implicit rests automatically fill the gaps between the notes you input.

In combination with time signatures and Dorico's understanding of their corresponding meters, this allows you to input only the notes you want with the duration required. It is not necessary to input rests between notes or input ties for notes that cross the half-bar, for example. If you subsequently change the time signature or move notes rhythmically to start earlier or later, Dorico updates how notes and rests are notated, such as by notating a quarter note as two tied eighth notes if it now straddles a barline or consolidating two eighth note rests into a single quarter note rest if they are now in the same bar.

If you tie existing notes together, you might find that they turn into a single note, such as a half note instead of two tied quarter notes, or into a tie chain containing more notes. This is because tie chains are treated as single notes in Dorico, and Dorico automatically notates and beams notes appropriately depending on their duration, the prevailing time signature, and their position in the bar. Similarly, notes can change after you input notes immediately following them as this changes the context, such as a quarter note tied to an eighth note becoming a dotted quarter note when it is followed by an eighth note rather than a rest.

TIP

In Write mode, selecting any part of a tie chain selects the whole tie chain because it is a single note. However, you can still input notations, such as dynamics, in the middle of tie chains by activating the caret and moving it to the required rhythmic position within the tie chain.

You can change default settings for note and rest grouping, and also beam grouping, on a per-flow basis. You can force the duration of individual notes and rests; for example, if you want to specify subdivisions within a tie chain that are different than the prevailing meter.

RELATED LINKS

Implicit vs. explicit rests on page 1250

Note and rest grouping on page 841

Beam grouping according to meters on page 822

Forcing the duration of notes/rests on page 257

Rhythmic position

In Dorico, notes and items exist at rhythmic positions, which are calculated using their place in musical time in the flow rather than their position in a specific bar that has a particular time signature.

In Dorico, musical time is the number of beats starting from the beginning of each flow. For example, instead of a note existing on beat 3 in bar 4 in a 4/4 time signature, Dorico considers that note to exist at beat 15, regardless of the time signature and its position in a bar.

This approach allows for a lot of flexibility. For example, because notes and items exist independently of bars and time signatures in Dorico, you can change the time signature without changing when notes happen in relation to each other or adding rests at the end of each bar. Instead, the barlines simply move to different positions and note grouping is updated as required, such as notating a quarter note as two tied eighth notes if it now straddles a barline or crosses the half-bar. You can even start writing notes without inputting a time signature at all.

Similarly, you can easily push notes to later rhythmic positions or pull them in to earlier ones using Insert mode without the risk of them being incorrectly notated. It also means you can think of items existing in the music independently of notes, because items exist at a particular rhythmic position, rather than being attached to notes. To input items at rhythmic positions that do not coincide with the start of notes, such as dynamics in the middle of tie chains, you can either select any other item at that position, or activate the caret and input items at the caret position.

In Dorico, the rhythmic position of notes and items is separate from their graphical position on the page. The benefit of this is that you can input items at the position in the music where they must apply and then move them graphically without causing them to apply to different notes or inadvertently split multi-bar rests. For example, if you want strings to play *pizzicato* from the start of a bar, but because of tight vertical spacing you want to move the *pizz*. indication slightly to the side. Attachment lines link items to the rhythmic positions to which they apply, so it is always clear where they belong, but are not printed.

RELATED LINKS
Time signatures on page 1359
Notes on page 1033
Caret on page 214
Insert mode on page 439
Rhythmic grid on page 212
Hiding/Showing attachment lines on page 426

Layouts in Dorico

Layouts combine musical content, as represented by flows and players, with rules for page formatting and music engraving, and allow you to produce paginated music notation that can be printed or exported in various formats. For example, part layouts typically only show the music for one player, whereas full score layouts show the music of all players in the project.

A typical project for an ensemble contains several layouts. By default, Dorico projects contain a single full score layout that contains the music for all players, and a part layout for each player that only contains their music. However, you can also create as many layouts as required.

When you add the first player to a project, Dorico automatically creates a full score layout and a part layout. For all subsequent players you add to the project, Dorico creates a part layout for each player and assigns them all to the existing full score layout.

Layouts can contain any combination of players and flows. They share the musical content of these players and flows, such as the notes each instrument plays. For example, when you change the pitch of a note in the full score, that note's pitch is also updated in the corresponding part layout.

You can control practically every aspect of page formatting in each layout independently, including note spacing, staff size, page size, margins, and casting off; that is, the positions of system breaks and page turns. Changing these aspects in one layout does not affect other layouts. For example, inserting systems breaks in a part layout does not change the casting off in the full score.

Similarly, you can change the visual appearance of many items only in one layout, without affecting other layouts, using local properties. For example, you can hide text items in the full score layout but show them in part layouts.

The default formatting of pages in layouts is determined by page templates. By default, full score layouts use a different page template set to part layouts; however, you can apply a different page template set to each layout.

Deleting layouts does not delete any music from the project.

RELATED LINKS
Players, layouts, and flows on page 119
Page formatting on page 583
Casting off on page 612
Properties on page 646

Page templates in Dorico

Page templates in Dorico Elements allow you to achieve consistent page formatting by applying the same arrangements of frames to multiple pages and in different layouts.

Frames are boxes in which you can display text, music, and graphics. The default page templates contain a large music frame that takes up most of the page and text frames at the top and bottom. These text frames display different information according to the page template type.

All pages in your scores and parts inherit their default formatting from page templates.

Dorico Elements provides different types of page templates so that there is appropriate page formatting for first pages independently of subsequent pages, as the first page typically includes additional information, such as the title, composer, and copyright. Dorico Elements uses tokens to display this additional information.

Page templates are contained in page template sets. By default, Dorico Elements provides separate page template sets for full score and part layouts. Page template sets are automatically applied to every layout that you create.

NOTE

- In Dorico Elements, you cannot edit page templates or create new ones; this is only available in Dorico Pro.
- Changing individual pages in layouts is considered a page template override in Dorico
 Elements. This includes, for example, editing the title or running header in Write mode.
 Pages with page template overrides are not automatically deleted, even if they are empty
 because the layout became shorter.

If you want to change the information shown at the tops of pages, that is, the title and running header text that you cannot select, we recommend that you do so in the **Project Info** dialog to avoid page template overrides.

RELATED LINKS

Types of page templates on page 631 Project Info dialog on page 74 Tokens on page 638

Key commands in Dorico

Dorico's key commands have been designed to be logical, consistent, and accessible using a standard computer keyboard, without needing a number pad.

EXAMPLE

- The arrow keys on their own navigate the selection around the music area.
- Alt/Opt modifies selected items.

For example, in Write mode, adding **Alt/Opt** to the up/down arrow keys transposes notes by staff position; adding **Alt/Opt** to the right/left arrow keys moves notes/items rhythmically. In Engrave mode, adding **Alt/Opt** to any arrow key moves items a small amount graphically.

- **Shift Alt/Opt** changes the duration of notes/items in Write mode.
 - For example, **Shift-Alt/Opt-Right Arrow** lengthens notes/items by the current rhythmic grid resolution.
- Ctrl/Cmd increases the amount by which selected items are modified.

For example, in Write mode, adding **Ctrl/Cmd** - **Alt/Opt** to the up/down arrow keys transposes notes by an octave; **Ctrl/Cmd-Shift-Alt/Opt-Right Arrow** doubles the duration of notes. In Engrave mode, adding **Ctrl/Cmd** - **Alt/Opt** to any arrow key moves items a large amount graphically.

Shift plus letter keys opens popovers in Write mode.
 For example, Shift-D opens the dynamics popover; Shift-O opens the ornaments popover.

• Ctrl/Cmd - Shift plus specific letter keys opens options dialogs.

For example, **Ctrl/Cmd-Shift-L** opens **Layout Options**; **Ctrl/Cmd-Shift-N** opens **Notation Options**.

The default key commands in Dorico depend on your keyboard language setting, which follows your application language setting by default.

You can view available key commands in the following ways:

- Choose Help > Key Commands to open the Dorico Key Commands window, which provides an overview of all available key commands.
- Search for key commands of specific functions or menu items in Preferences > Key
 Commands. In this dialog, you can also assign new key commands or change default key commands
- When you move the mouse over a tool or a function that has a key command, a tooltip with the corresponding key command in brackets is shown.

RELATED LINKS

Interactive Dorico key commands map on page 60 Key Commands page in the Preferences dialog on page 58

Options dialogs in Dorico Elements

Options to control the default appearance of music and functionality of Dorico Elements are available in different dialogs according to their type and purpose.

We recommend becoming familiar with the available options in these dialogs, as finding the most appropriate settings for each project reduces the requirement for manual intervention and graphical tweaks.

Any changes you make in options dialogs apply to the current project only, unless you save your settings as default, which updates the default settings with which all future projects start.

Dorico Elements contains the following dialogs for global settings:

Layout Options

Contains options that are likely to vary from layout to layout, such as page size, staff size, and the appearance and position of bar numbers. Options in **Layout Options** affect only the selected layouts but apply to all flows in those layouts.

Notation Options

Contains options that are likely to vary from flow to flow, such as beam grouping and accidental duration rules. Options in **Notation Options** affect only the selected flows but apply to all layouts in which those flows appear.

Playback Options

Contains options that control what you hear in playback and how notation items affect playback, including setting a dynamic curve for how much different dynamics affect the volume, whether repeats are included in playback, and whether you want a gap

between flows. Options in **Playback Options** affect the whole project but do not affect any other projects unless you save your settings as default.

TIP

Many options have equivalent properties, which you can change for individual notes and items.

RELATED LINKS

Layout Options dialog on page 728 Notation Options dialog on page 730 Playback Options dialog on page 732 Preferences dialog on page 57 Properties on page 646

User interface

The user interface of Dorico Elements is designed to keep all of the important tools at your fingertips. This chapter introduces you to key aspects of the user interface.

Project window

Dorico Elements's main project window allows you to access all the options and tools you need to work on a project. You can open multiple project windows for the same project or for different projects.



The project window comprises the following areas:

1 Toolbar

Allows you to access the modes, workspace options, the **Mixer** window, the **Video** window, and the mini transport. Also allows you to undo and redo actions.

2 Tab bar

Displays all open tabs. If you split the music area and open several tabs, tab groups are shown. Available in Setup, Write, and Engrave modes.

3 Central area

The central part of the project window where you work on your project.

When you start a new empty project, this area shows the project start area that allows you to add your first players.

Once you have added a player or an ensemble, this area becomes the music area that shows the music notation of the currently selected layout.

In Play mode, this area contains a track overview that displays your music in a similar way to that used in a digital audio workstation, or "DAW", such as Cubase.

In Print mode, the print preview area shows a preview of how your project will appear when printed onto paper or exported into a graphics file format.

4 Zones

Zones on the left, right, and lower edges of the project window contain panels that provide the notes, notations, and functions that you need to create and edit your music. Different panels are available in each zone according to the mode.

5 Toolboxes

Toolboxes provide access to items and tools that you can use to input and edit your music. Different toolboxes contain different items and tools according to the mode.

6 Status bar

Allows you to choose a different view and page arrangement of the music area. It also contains zoom options and a summary of your current selection in the music area.

RELATED LINKS

Starting new projects on page 70

Workspace setup on page 42

Project window in Setup mode on page 107

Project window in Write mode on page 191

Project window in Engrave mode on page 489

Project window in Play mode on page 505

Project window in Print mode on page 561

Toolbar

The toolbar allows you to access modes and workspace options as well as the **Mixer** and main transport options. It is located at the top of the project window and is available in all modes.

You can hide/show the toolbar in any of the following ways:

- Press Ctrl/Cmd-6.
- Choose Window > Show Toolbar.



The toolbar contains the following:

1 Modes

Selectable workspaces in the project window that represent different phases in the workflow of preparing a score. If the width of the main project window becomes sufficiently small, the mode buttons become a menu.

2 Workspace options

Allow you to select different layouts to open in the music area, hide/show zones, and hide/show the tab bar.

3 Show Video

Hides/Shows the Video window.

4 Show Mixer

Hides/Shows the Mixer window.

5 Mini transport

Allows you quick access to the main transport functions, including Play, Record, and Click.

Show Transport Bar

Hides/Shows the **Transport** window, which contains playback and MIDI recording functions.

Allows you to undo previous actions.

Redo

Allows you to restore previous actions that were undone using **Undo**.

RELATED LINKS

Hub on page 68

Modes in Dorico on page 19

Transport window on page 540

Videos on page 185

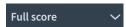
Mixer window on page 701

Undoing/Redoing actions on page 426

Workspace options

The workspace options in the middle of the toolbar provide options that allow you to select different layouts and to change the working environment.

Layout selector



Allows you to select other layouts to show in the current tab.

Show Tabs

Shows/Hides the tab bar above the music area.



Show Tabs when the tab bar is hidden

Show Tabs when the tab bar is shown

Hide/Restore Zones

Shows/Hides all open zones.



Hide/Restore Zones when zones are shown Hide/Restore Zones when all zones were previously shown but are now all hidden

RELATED LINKS

Layouts on page 170 Switching between layouts on page 42 Zones and panels on page 36 Hiding/Showing zones on page 43

Mini transport

The mini transport on the right of the toolbar provides quick access to the main transport functions of Dorico Elements.

Activate Project



Activates/Deactivates playback in the project. When playback is deactivated, transport and playback functions are disabled.

Time display

Shows the position of the playhead in one of the following formats:

- Bars, beats, and ticks
- Elapsed time in the following order of units: hours, minutes, seconds, milliseconds
- Timecode in the following order of units: hours, minutes, seconds, frames



You can change the content shown in the time display by clicking it.

Rewind to Beginning of Flow



Moves the playhead back to the beginning of the flow.

Play

Starts/Stops playback, either from the playhead position or the earliest selected item, depending on your setting on the **Play** page in **Preferences**.



Record

Starts/Stops MIDI recording.



Click



Plays/Mutes the metronome click during playback and recording.

Tempo Mode

Displays the tempo used for both playback and recording. The value changes according to the playhead position, and its appearance changes according to its mode.

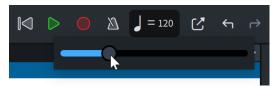




Fixed Tempo Mode

Follow Tempo Mode

- You can change the tempo mode by clicking the beat unit.
- You can change the metronome mark value used in fixed tempo mode by clicking the number to show a slider, then dragging the slider to the right/left.



Scrub Playback

Activates/Deactivates scrub playback.





Scrub Playback outside of scrubbing

Scrub Playback during scrubbing

TIP

The **Transport** window contains additional transport functions.

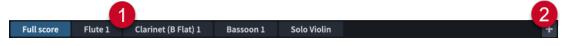
RELATED LINKS

Transport window on page 540
Playing back music on page 525
Moving the playhead on page 523
Scrubbing on page 527
MIDI recording on page 258
Changing the tempo mode on page 528
Changing the sound used for the click on page 518
Preferences dialog on page 57
Timecodes on page 1206

Tab bar

The tab bar in Dorico Elements allows you to display different layouts within the same project window. It is located between the toolbar and the music area.

You can hide/show the tab bar by clicking Show Tabs
in the toolbar.



The tab bar contains the following:

1 Tabs

Displays all open tabs, with their position from left to right reflecting the order in which you opened them. Each tab is labeled with the name of the selected layout. The tab currently in view in the music area is highlighted.

When you hover over an individual tab, an **x** appears that allows you to close the tab.



2 New Tab

Allows you to open a new tab. Tabs can contain a different layout, or an additional view of a layout that is already open in another tab or window.

TIP

You can change whether the tab bar is hidden or shown in new projects by default in **Preferences > General > View**.

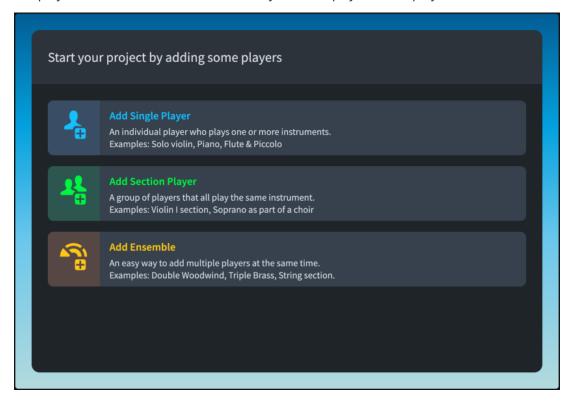
RELATED LINKS

Preferences dialog on page 57

Project start area

The project start area is displayed in the middle of the project window in Setup, Write, and Engrave modes when you set up a new empty project. When you add at least one player, the view changes into the music area.

The project start area shows cards that allow you to add players to the project.

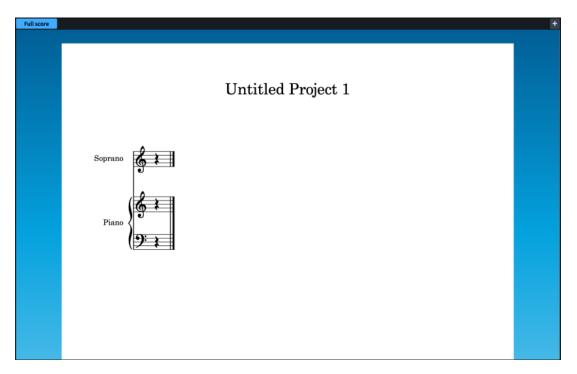


RELATED LINKS

Adding players on page 122

Music area

In Setup, Write, and Engrave modes, the music area shows the music notation of the currently selected layout. It is the central part of the project window where you work on your project.



The music area displays layouts in either galley view or page view. In Engrave mode, layouts always appear in page view.

The tab bar above the music area allows you to open multiple layouts in the project simultaneously and switch between them. The scroll bars to the right and to the bottom of the music area allow you to scroll within the layout.

You can use the layout selector in the toolbar to show other layouts in the music area.

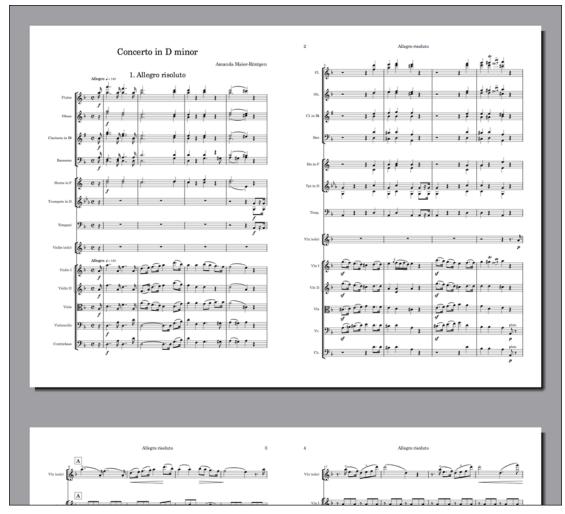
When zones are open on the right, left, and lower edges of the window, the size of the music area can be reduced. You can hide/show zones when necessary.

RELATED LINKS

Toolbar on page 29 Switching to galley/page view on page 49 Switching between layouts on page 42 Hiding/Showing zones on page 43 Navigation on page 427 Layouts on page 170

Print preview area

The print preview area is the central part of the project window in Print mode that shows a preview of what will be printed or exported as a graphic.



Print preview area displaying a score set to print 2-up

The print preview area shows a preview of the first layout selected in the **Layouts** panel. You can scroll through the pages that are shown, but you cannot edit layouts. If you want to make changes, you must switch to Setup or Write mode.

TIP

You can go directly to the first page in the layout by pressing **Home**, and to the last page by pressing **End**. You can change these key commands on the **Key Commands** page in **Preferences**.

If you select multiple layouts to be printed as part of the same print job, the print preview area only displays the first layout. If you want to show the expected page arrangement for each layout in the print preview, you must check each layout individually before you start printing.

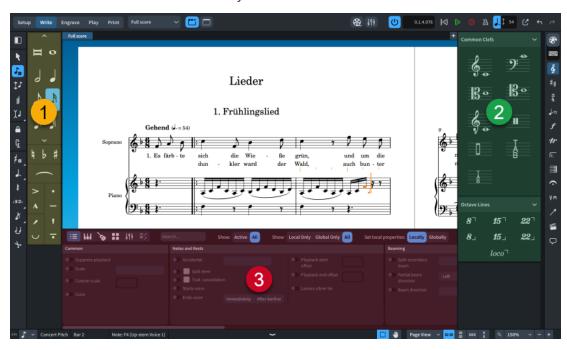
RELATED LINKS

Project window in Print mode on page 561 Layouts panel (Print mode) on page 562 Key Commands page in the Preferences dialog on page 58

Zones and panels

Zones on the left, right, and lower edges of the project window contain panels that provide the notes, notations, and functions that you need to set up, write, edit, and format your music. Different panels are available in each zone according to the mode.

You can hide/show each zone individually or all of them at the same time.



- 1 Left zone. In Write mode, this contains the Notes panel.
- 2 Right zone. In Write mode, this can display different panels, according to the current selection in the Notations toolbox.
- 3 Lower zone. In Write mode, this can display different panels, including the Properties panel and Mixer.

The zones contain different panels in each mode in Dorico Elements.

Modes and their panels

Mode	Left Zone	Right Zone	Lower Zone
Setup	Players panel	Layouts panel	Flows panel
Write	Notes panel	Notations panels	Properties, Keyboard, Fretboard, Drum Pads, Mixer, and Key Editor panels
Engrave	Formatting panel	n/a	Properties and Mixer panels
Play	Track Inspector and VST and MIDI panel	n/a	Mixer and Key Editor panels
Print	Layouts panel	Print Options panel	n/a

RELATED LINKS

Modes in Dorico on page 19

Hiding/Showing zones on page 43

Players panel on page 108

Layouts panel (Setup mode) on page 115

Flows panel on page 118

Notes panel on page 196

Right zone (Write mode) on page 200

Lower zone (Write mode) on page 201

Properties panel on page 646

Track Inspector on page 507

Key Editor panel on page 650

Mixer panel on page 700

Layouts panel (Print mode) on page 562

Print Options panel on page 563

Toolboxes

Toolboxes are located on the right and left edges of the project window in some modes. They contain different tools and options according to the current mode, but in general they allow you to input and modify notes/items and to show different panels in the corresponding zone.

The following toolboxes are available in the different modes:

Write mode

- Notes toolbox on the left of the project window
- Notations toolbox on the right of the project window

Engrave mode

• Engrave toolbox on the left of the project window

RELATED LINKS

Project window on page 28

Notes toolbox on page 192

Notations toolbox on page 197

Engrave toolbox on page 490

Status bar

The status bar at the bottom of the project window allows you to choose different views and page arrangements for the music area.

NOTE

Not all options in the status bar are available in all modes.



1 Rhythmic Grid selector

Allows you to change the rhythmic grid resolution, which affects certain aspects of inputting and editing, such as the amount by which items move.

2 Layout transposition

Allows you to change the transposition of the layout currently open in the music area.

3 Order

Allows you to change the instrument score order. Only available in Setup mode.

4 Selection summary

Displays the following information about the current selection, from left to right:

- The bar/range of bars of the current selection
- Summary of the selection; for example, the pitch and voice of a single selected note, or the implied chord of multiple selected notes

5 Disclosure arrow

Allows you to hide/show the lower zone.

6 Follow playhead

Allows you to enable/disable views in the corresponding window to follow the playhead during playback.

7 Selection tools

Allow you to switch between using the Marquee Tool and the Hand Tool.

8 View type

Allows you to change the view type of the layout currently open in the music area between page view and galley view.

9 Page arrangement options

Allow you to choose between different horizontal and vertical arrangements of either individual pages or pairs of pages, which are called spreads.

10 Zoom options

Allow you to change the zoom factor of the music area and its musical contents. There are preset zoom levels, but you can also use a custom zoom level.

11 MIDI activity indicator/Audio engine connection warning

Indicates that there might be MIDI or audio problems that require your attention.

- A brief green light indicates that Dorico Elements is receiving MIDI input from a connected device. If the green light is persistent, a connected MIDI device is sending lots of data, which can cause problems.
- A warning icon indicates that Dorico Elements is unable to send MIDI events to the audio engine; for example, if no device is chosen or the sample rate is wrong. You can click the warning icon to open the **Device Setup** dialog, where you can fix the problem in most cases.

RELATED LINKS

Rhythmic grid on page 212

MIDI recording on page 258

Playing back music on page 525

Enabling/Disabling MIDI input devices on page 265

Switching to galley/page view on page 49

Making layouts transposed/concert pitch on page 173

Changing the default player order on page 123

Changing the middle C numbering convention on page 50

Playback techniques on page 770

Percussion maps on page 763

Hiding/Showing status bar tools

You can change which tools appear in the status bar; for example, to reduce the minimum project window width.

PROCEDURE

Right-click in the status bar, then choose the tool that you want to hide/show.
 For example, to hide the summary of the current selection, choose **Selection Summary** so that no tick appears beside it.

RESULT

The corresponding tool is hidden/shown in the status bar in the current project and all future projects on your computer.

RELATED LINKS

Switching between modes on page 42

Selection tools

The status bar in Dorico Elements contains selection tools that you can use to select items and change the music shown within the music area.

Marquee Tool



Allows you to drag a rectangle to select multiple notes and notations.

Hand Tool



Allows you to move the view within the music area.

TIP

- You can press **Alt/Opt-H** to switch between selection tools.
- To use the other tool briefly without selecting it, **Shift**-drag with the mouse.
- You can change the default selection tool for all future projects on the Note Input and Editing page in Preferences.

RELATED LINKS

Selecting notes/items on page 410

Selecting multiple items using marquee selections on page 414

Moving the view in the music area on page 430

Preferences dialog on page 57

View types

In Dorico Elements there are different ways to view your layouts.

The following view types are available:

Galley View

Lays out all the staves in the current layout and flow on a single continuous system.

This view type is most useful during the process of inputting the music as it allows you to focus on the musical content of your project. Because it shows all staves, galley

view is particularly useful when inputting notes for single players holding multiple instruments.

By default, bar numbers are shown every bar above every staff. Staff labels are also shown above every staff, and follow the view as you scroll so they are always visible.

NOTE

Note spacing is unjustified in galley view and there is no automatic vertical collision avoidance, so notes and items might overlap. You can change the default gaps between staves in galley view for each layout independently.

Page View

Displays your layout paginated exactly as it appears when you print or export it. This view type is useful for determining appropriate page turns, for example.

NOTE

- The view type is reset to your default setting when you switch layouts.
- You can change the default view type used for all future projects in Preferences > General > View.

RELATED LINKS

Preferences dialog on page 57
Switching to galley/page view on page 49
Changing the staff spacing in galley view on page 607
Page formatting on page 583
Players on page 121
Instruments on page 128

Page arrangements for page view

Page arrangement options in the status bar allow you to change the way pages are arranged in the music area, for layouts shown in page view.

Spreads Horizontally



Displays pages in pairs as two-page spreads, with each pair laid out from left to right in a row

Spreads Vertically



Displays pages in pairs as two-page spreads, with each pair laid out from top to bottom in a column.

Single Pages Horizontally



Displays individual pages laid out from left to right.

Single Pages Vertically



Displays individual pages laid out from top to bottom.

Zoom options

Zoom options in the status bar allow you to change the displayed size of pages in the music area.

Custom Zoom



Opens a dialog that allows you to set a custom zoom percentage.

Set Zoom



Allows you to select one of the preset zoom scaling factors.

Zoom Out



Decreases the size of notes and notations in the music area.

Zoom In



Increases the size of notes and notations in the music area.

TIP

You can change the default zoom level that is used when opening layouts in all future projects in **Preferences** > **General** > **View**.

RELATED LINKS

Status bar on page 37

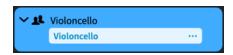
Preferences dialog on page 57

Zooming in/out of the music area on page 431

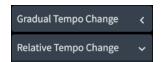
Disclosure arrows

Disclosure arrows indicate that objects, areas, and menus can be expanded/collapsed, either vertically or horizontally.

In Dorico Elements, disclosure arrows are commonly used to expand/collapse sections in panels and cards, such as player cards in the **Players** panel in Setup mode.



Disclosure arrow for a player card



Disclosure arrows for sections in the Tempo panel

RELATED LINKS

Players panel on page 108

Instruments on page 128

Options dialogs in Dorico Elements on page 26

Workspace setup

Dorico Elements enables you to set up your workspace according to your working style. For example, you can open multiple tabs to display multiple layouts in the same window. You can also open the same project in multiple project windows.

RELATED LINKS

Navigation on page 427 Hiding/Showing zones on page 43 Starting new projects on page 70

Switching between modes

You can switch between modes at any time and in different ways. For example, if you want to add more players to your project in Setup mode after starting to input music in Write mode.

PROCEDURE

- Switch between modes in any of the following ways:
 - Press Ctrl/Cmd plus one of the numbers 1 to 5 (Ctrl/Cmd-1 for Setup, Ctrl/Cmd-2 for Write, Ctrl/Cmd-3 for Engrave, Ctrl/Cmd-4 for Play, Ctrl/Cmd-5 for Print).
 - Click the corresponding button in the toolbar.
 - Choose Window > [mode].
 - To switch to Write mode, double-click in the music area in Setup mode or Engrave mode.

TIP

You can disable this option in **Preferences > Note Input and Editing > Editing**.

RELATED LINKS

Modes in Dorico on page 19
Project window on page 28
Toolbar on page 29
Preferences dialog on page 57
Opening multiple project windows on page 48

Switching between layouts

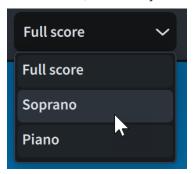
You can change which layout is displayed in the current tab in the music area in Setup, Write, and Engrave modes, or in the track overview in Play mode. For example, if you want to check individual part layouts.

NOTE

You can only switch between layouts to which players are assigned.

- Switch to another layout in any of the following ways:
 - To switch to the next layout, press Shift-Alt/Opt-] or choose Window > Next Layout.
 - To switch to the previous layout, press Shift-Alt/Opt-[or choose Window > Previous Layout.

- Select an item on a staff or in the piano roll of the player whose layout you want to open, then press W or choose Window > Counterpart Layout.
- In the toolbar, click the layout selector and select a layout from the menu.



RESULT

The selected layout is opened in the music area. It replaces the layout previously open in the tab.

TIP

You can assign a key command for **Center Selection** on the **Key Commands** page in **Preferences**. This command automatically brings the selection into view.

RELATED LINKS

Layouts on page 170

Assigning players to layouts on page 172

Navigation on page 427

Switching to galley/page view on page 49

Switching between flows in the track overview on page 507

Hiding/Showing zones

You can hide/show individual zones or all zones simultaneously; for example, to increase the space available for displaying music in the music area, or to access options in a specific panel.

NOTE

In some modes, not all methods are available.

- 1. Hide/Show the left zone in any of the following ways:
 - Press Ctrl/Cmd-7.
 - In the toolbox on the left, click **Show Left Zone .**
 - Click the disclosure arrow on the left edge of the main window.
 - Choose Window > Show Left Zone.
- **2.** Hide/Show the right zone in any of the following ways:
 - Press Ctrl/Cmd-9.
 - Click the disclosure arrow on the right edge of the main window.
 - In the Notations toolbox, click the button for any panel you want to show, or the active button for the panel you want to hide.

- Choose Window > Show Right Zone.
- **3.** Hide/Show the lower zone in any of the following ways:
 - Press Ctrl/Cmd-8.
 - Click the disclosure arrow at the bottom of the main window.
 - Choose Window > Show Lower Zone.
- **4.** Hide/Show all zones in any of the following ways:
 - Press Ctrl/Cmd-0.
 - In the toolbar, click **Hide/Restore Zones** .
 - Choose Window > Hide/Restore Zones.

RESULT

The corresponding zones are hidden/shown.

If you hide all active zones, the **Hide/Restore Zones** button in the toolbar indicates which zones were previously active but are now hidden.

TIP

- You can assign key commands for showing specific panels in the lower zone on the Key Commands page in Preferences.
- You can choose to hide the right/left zones when the lower zone is shown, and vice versa, automatically in all future projects in **Preferences** > **General** > **Window**.

EXAMPLE





Hide/Restore Zones button when zones are shown

Hide/Restore Zones button when all zones were previously shown but are now all hidden

RELATED LINKS

Zones and panels on page 36 Toolbar on page 29 Disclosure arrows on page 41 Properties panel on page 646 Preferences dialog on page 57

Opening new tabs

You can open multiple tabs in the same project window, which you can use to display multiple layouts or different views of the same layout. For example, you can show your full score layout in page view in one tab and in galley view in another tab.

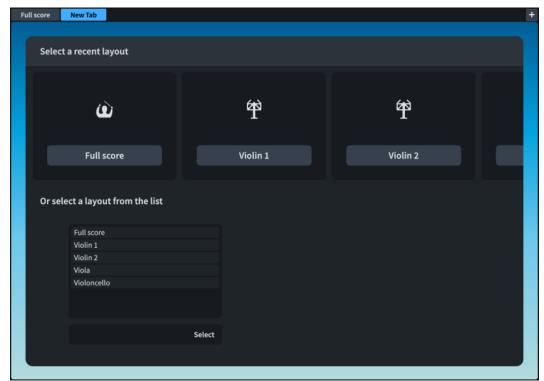
Each tab can contain a separate layout or a different view of a layout already open in another tab or window. Whenever you open a new tab, you are prompted to select a layout that you want to display in the tab.

You can find tabs in the tab bar, located at the top of the music area, below the toolbar. If no tabs are shown, click **Show Tabs** in the toolbar.

PROCEDURE

- 1. Open a new tab in any of the following ways:
 - Press Ctrl/Cmd-T.
 - At the right end of the tab bar, click **New Tab** +.
 - Choose Window > New Tab.

A new tab opens that shows recent layouts at the top and a list of other layouts in the project at the bottom. If the tab bar was hidden, it is now shown.



- **2.** Select a layout to open in the new tab in any of the following ways:
 - Click one of the icons.
 - In the list at the bottom, select a layout.
 - In the toolbar, click the layout selector and select a layout.

RESULT

The layout that you choose opens in the active tab.

TIP

You can also switch between different layouts within the same tab.

RELATED LINKS

Tab bar on page 32

Toolbar on page 29

Switching between layouts on page 42

Closing tabs

You can close individual tabs of layouts that you no longer need, and you can close multiple tabs at the same time.

PROCEDURE

- Close tabs in any of the following ways:
 - Select the tab you want to close and press Ctrl/Cmd-W.
 - Hover over the tab you want to close and click x.



- Right-click the single tab you want to close and choose Close Tab from the context menu.
- Right-click the tab you do not want to close and choose **Close Other Tabs** from the context menu.

NOTE

You cannot close the last tab in a window. If only one tab is open and you no longer want to see the tabs, deactivate **Show Tabs** in the main toolbar. The tab is no longer displayed, but the corresponding layout is still shown.

RESULT

If you selected a single tab and closed it, the selected tab and its corresponding layout are closed.

If you selected a single tab and closed other tabs, all open tabs except for the selected tab are closed.

Switching between tabs

You can switch between different open tabs to show different layouts in the music area.

PROCEDURE

- Switch tabs in any of the following ways:
 - To cycle forwards through all open tabs, press Ctrl-Tab.
 - To cycle backwards through all open tabs, press **Ctrl-Shift-Tab**.
 - Click the tab to which you want to switch.

TIP

- You can choose to keep selected items in view automatically when switching between tabs and windows on the **General** page in **Preferences**.
- You can assign a key command for Center Selection on the Key Commands page in Preferences. This command automatically brings the selection into view.

RELATED LINKS

Preferences dialog on page 57

Changing the order of tabs

You can move tabs to a different position on the tab bar.

PROCEDURE

Click and drag a tab to the new position.

The other tabs move to show where the dragged tab will be positioned.

Showing multiple tabs in the same project window

You can split your project window to display two tabs at the same time. The split can be either vertical or horizontal, allowing you to display different layouts either side by side or above one another.

PROCEDURE

- **1.** Select the tab of the layout that you want to move to a new tab group.
- **2.** Split the view in one of the following ways:
 - To show layouts side by side, choose Window > Vertical Split.
 - To show layouts above one another, choose Window > Horizontal Split.

RESULT

The project window is split to display two tabs at the same time. The selected tab is moved to the new tab group.

Moving tabs to another tab group

You can move tabs to other tab groups. For example, if you want to compare different layouts or two views of the same layout.

PREREQUISITE

You have opened at least two tabs, and they are both shown in the same project window.

PROCEDURE

• Click and drag the tab into the target tab group.

Moving tabs to other windows

You can move tabs to another open window of the same project to show the corresponding layouts in a new window. For example, if you want to compare two layouts on two displays.

NOTE

- The layouts must belong to the same project. If you attempt to move a tab to a window of a different project, a new window is created for the project to which the layout belongs.
- You can only move tabs to other windows if you have opened at least two tabs.

PROCEDURE

• Do one of the following:

- To create a new project window with the tab inserted, either click and drag the tab away
 from the tab bar and release it, or choose Window > Move Tab To New Window. You
 can also right-click tabs and choose this option from the context menu.
- To move the tab to an existing project window, click and drag the tab onto the tab bar in the corresponding project window.

Opening multiple project windows

You can open multiple project windows for the same project; for example, if you want to work on multiple layouts at the same time. You can also show a different mode of the same project in each window, such as having one window show Write mode and another show Play mode.

By default, all windows that belong to the same project show the playhead and move the view to follow the music during playback.

PROCEDURE

- Open a new project window in any of the following ways:
 - Press Ctrl/Cmd-Shift-T.
 - Choose Window > New Window.

RESULT

A duplicate of the window opens. It contains the same tabs and the same view options as the original window.

TIP

You can choose to keep selected items in view automatically when switching between tabs and windows on the **General** page in **Preferences**.

RELATED LINKS

Switching between modes on page 42
Switching between tabs on page 46
Playhead on page 523
Hiding/Showing the playhead on page 524
Enabling/Disabling playhead following on page 524

Switching to full screen view

You can maximize the amount of screen space available for your music by making any project window cover the whole screen.

You can also hide the desktop elements provided by your operating system; for example, the task bar in Windows or the system menu bar and Dock in macOS.

Within Dorico Elements, you can also hide/show the zones on the edges of the window.

PROCEDURE

Choose View > Full Screen.

AFTER COMPLETING THIS TASK

To return to the default view, choose **View** > **Full Screen** again.

RELATED LINKS

Hiding/Showing zones on page 43 Zooming in/out of the music area on page 431 Moving the view in the music area on page 430 Hiding/Showing status bar tools on page 39

Switching to galley/page view

You can switch between different view types in the music area in Setup mode and Write mode. For example, if a flute player in your project is doubling piccolo, you can switch to galley view to see the piccolo staff in addition to the flute staff.

NOTE

In Engrave mode, layouts always appear in page view.

PROCEDURE

- 1. Switch to galley or page view in any of the following ways:
 - To switch to galley view, press Ctrl/Cmd-Alt/Opt-2 or choose Galley View in the status bar.
 - To switch to page view, press **Ctrl/Cmd-Alt/Opt-1** or choose **Page View** in the status bar.
- **2.** Optional: If you selected **Page View**, choose one of the available page arrangements in the status bar.

 - To display pages in pairs as two-page spreads, with each pair laid out from top to bottom in a column, choose **Spreads Vertically** ...
 - To display individual pages laid out from left to right, choose Single Pages Horizontally
 - To display individual pages laid out from top to bottom, choose **Single Pages Vertically**

RESULT

The view type in the music area is changed.

- In page view, only staves containing notes or items are shown by default. For players holding multiple empty instruments, only the top instrument is shown in full scores.
- In galley view, all staves in the project are shown. By default, guide bar numbers are shown above each staff and guide instrument labels are shown above each instrument. For players holding multiple instruments, the player name is also shown in guide instrument labels.

NOTE

- Note spacing is unjustified in galley view and there is no automatic vertical collision avoidance, so notes and items might overlap. You can change the default gaps between staves in galley view for each layout independently.
- The view type is reset to your default setting when you switch layouts.
- You can change the default view type used for all projects in Preferences > General > View.

- You can assign a key command for **Toggle View Type** on the **Key Commands** page in **Preferences**. This command switches between galley view and page view.
- You can assign a key command for Center Selection on the Key Commands page in Preferences. This command automatically brings the selection into view.

AFTER COMPLETING THIS TASK

In galley view, you can use instrument filters to show only specific staves.

RELATED LINKS

Switching between layouts on page 42

Status bar on page 37

Changing the staff spacing in galley view on page 607

Preferences dialog on page 57

Hiding/Showing guide bar numbers on page 811

Renaming players on page 177

Instrument filters on page 433

Changing your preferred unit of measurement

You can change your default preferred unit of measurement to be used throughout Dorico Elements for options that use absolute measurements, such as the size of page margins in **Layout Options**. It does not affect options that are relative to the size of staves, such as options in **Notation Options**.

PROCEDURE

- 1. Press Ctrl/Cmd-, to open Preferences.
- **2.** In the category list, click **General**.
- 3. In the **General** section, select one of the following options from the **Preferred unit of** measurement menu:
 - Points (pt)
 - Millimeters (mm)
 - Inches (in)
 - Centimeters (cm)
- 4. Click Apply, then Close.

Changing the middle C numbering convention

You can change the numbering convention used for middle C (MIDI note 60) throughout Dorico Elements, including in the piano roll editor, Keyboard panel, and status bar display. By default, MIDI note 60 is numbered as C4 in Dorico Elements.

- 1. Press Ctrl/Cmd-, to open Preferences.
- 2. In the category list, click **General**.
- 3. In the General section, choose one of the following options for Middle C (note 60):
 - C3
 - C4

C5

4. Click Apply, then Close.

RELATED LINKS

Status bar on page 37 Piano roll editor on page 661 Keyboard panel on page 202

Color setup

Dorico Elements allows you to change the colors used in different contexts, including for project windows and pages in each type of layout.

RELATED LINKS

Annotations on page 581

View options for notes and rests on page 1044

Changing the window color theme

You can change the color theme used throughout Dorico Elements; for example, you might switch to the light theme if you prefer to read dark text on a light background. By default, Dorico Elements uses the dark theme, which shows light text on a dark background.

PROCEDURE

- 1. Press Ctrl/Cmd-, to open Preferences.
- 2. In the category list, click **General**.
- 3. In the **Window** section, select one of the following options from the **Theme** menu:
 - Dark
 - Light
- 4. Click Apply, then Close.

RESULT

The color theme used in Dorico Elements is changed. This affects the current project immediately and all future projects you open, until you next change your setting.

EXAMPLE







Light theme

Changing the page color

You can change the color of pages in each of the different layout types; for example, to help you identify whether you are in a part layout or full score layout, or to make reading the music easier or more comfortable.

By default, full score and custom score layouts have white pages, while part layouts have cream pages.

PROCEDURE

- 1. Press Ctrl/Cmd-, to open Preferences.
- 2. In the category list, click Colors.
- **3.** In the **Page Colors** section, change the page color for **Full score layouts**, **Part layouts**, and/or **Custom score layouts** in any of the following ways:
 - Click the corresponding color preview and select a color in the dialog that opens.
 - Enter a color code into the corresponding value field.
- 4. Click Apply, then Close.

RESULT

The page color in layouts of the corresponding type is changed in the current project and all future projects you open. This does not affect the resulting page color when exporting or printing layouts.

TIP

You can reset page colors back to the default factory settings by clicking **Reset** of for each layout type.

RELATED LINKS

Layouts on page 170

Printing layouts on page 566

Exporting layouts as graphics files on page 570

Changing the background color

You can change the background color of the music area. The background can be a gradient of up to four colors or a single block color. You can also change the background color for Write mode and Engrave mode independently of each other; for example, to help you identify which mode you are in.

- 1. Press Ctrl/Cmd-, to open Preferences.
- **2.** In the category list, click **Colors**.
- 3. In the Background Colors section, choose one of the following options for Use for Write mode and/or Engrave mode:
 - Gradient
 - Single Color
- **4.** Change the background color in one of the following ways:

- If you chose **Gradient** and want to use a preset selection of colors, select it from the **Preset** menu.
- If you chose **Gradient** and want to use a custom selection of colors, either click each color preview and select a color in the dialog that opens, or enter color codes into the value fields.
- If you chose **Single Color**, either click the **Stop 1** color preview and select a color in the dialog that opens, or enter a color code into the value field.

RESULT

The background color is changed in the current project and all future projects you open.

TIP

- The background color set for Write mode is also used in Setup mode.
- You can reset background colors back to the default factory settings by clicking **Reset 3**.

Changing music area colors

You can change the colors used for various purposes in the music area, including the first eight voice colors on each staff and the color of selected items. For example, if you find specific color combinations easier to read than others.

PROCEDURE

- 1. Press Ctrl/Cmd-, to open Preferences.
- **2.** In the category list, click **Colors**.
- 3. In the Voice Colors section, change the color for each voice in any of the following ways:
 - Click the corresponding color preview and select a color in the dialog that opens.
 - Enter a color code into the corresponding value field.
- **4.** In the **Other Colors** section, change the color for each item in any of the following ways:
 - Click the corresponding color preview and select a color in the dialog that opens.
 - Enter a color code into the corresponding value field.
- 5. Click Apply, then Close.

RESULT

The color of the corresponding voices and items is changed in the current project and all future projects you open.

TIP

You can reset colors back to the default factory settings by clicking **Reset** of for each voice or item.

RELATED LINKS

Preferences dialog on page 57
Annotations on page 581
View options for notes and rests on page 1044
Selecting notes/items on page 410
Caret on page 214

MIDI recording on page 258 Playhead on page 523 Tablature on page 1308 Linked dynamics on page 931 Linked slurs on page 1275

Inverting colors

You can invert the colors used for music and pages in Dorico Elements, which by default shows white music on black pages. You can then customize the inverted page color; for example, to show white music on a blue background.

PROCEDURE

- 1. Press Ctrl/Cmd-, to open Preferences.
- **2.** In the category list, click **Colors**.
- 3. In the Page Colors section, activate Invert colors for music (white on black).
- 4. Change the inverted page color in any of the following ways:
 - Click the corresponding color preview and select a color in the dialog that opens.
 - Enter a color code into the corresponding value field.
- 5. Click Apply, then Close.

RESULT

The colors for music and pages are inverted in the current project and all future projects you open. Music always appears white, while pages use the inverted page color you set. This does not affect the resulting colors when exporting or printing layouts.

Deactivating **Invert colors for music (white on black)** returns music/page colors to their non-inverted configuration.

TIP

You can reset the inverted page color back to the default factory setting by clicking **Reset** 3.

Changing the color of items

You can change the color of individual notes and items; for example, to distinguish specific items when creating educational worksheets. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing ?** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

- **1.** Select the items whose color you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Color** in the **Common** group.

- 3. Click the color preview to open the Select Color (Windows)/Colors (macOS) dialog.
- **4.** Select or create the color you want.
- **5.** Click **OK** to save your changes and close the dialog.

RESULT

The color of the selected items is changed. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

TIP

You can change the default color of many items, such as by editing the paragraph style of text-based notations.

RELATED LINKS

Engrave toolbox on page 490

Changing the property scope on page 648

Copying property settings to other layouts/frame chains on page 629

Paragraph Styles dialog on page 739

Lyrics paragraph styles on page 1022

Staff label paragraph styles on page 1296

Language setup

Dorico Elements allows you to change the language used in different contexts, including for the application itself and for instrument names in staff labels.

RELATED LINKS

Changing the keyboard language on page 63

Instrument transpositions in staff labels on page 1292

Changing the application language

You can change the language used for the user interface in the current project and all future projects you open; for example, if your operating system language is different to the language you want to use in Dorico Elements.

NOTE

Changing the application language does not affect the language used for instrument names or date and time tokens.

- 1. Press Ctrl/Cmd-, to open Preferences.
- 2. In the category list, click **General**.
- 3. In the **General** section, select the language you want to use from the **Language** menu.
- 4. Click Apply, then Close.

RESULT

The language used for the user interface in the current project and all future projects is changed. If your keyboard language is set to **Default**, the keyboard language is also changed.

RELATED LINKS

Preferences dialog on page 57 Changing the keyboard language on page 63

Changing the language for instrument names

You can change the language used for instrument names; for example, if you want to recreate a French score. This affects staff labels and instrument change labels.

PROCEDURE

- 1. Choose **Library** > **Project Language** to open the **Project Language** dialog.
- 2. Select the language you want to use from the **Instrument names language** menu.
- 3. Activate/Deactivate Reset instrument names.
- **4.** Click **OK** to save your changes and close the dialog.

RESULT

The language for all instrument names and prefixes for instrument change labels is changed project-wide. Future instruments you add to the project use your new language setting.

- If you activated **Reset instrument names**, the names of existing instruments in the project are reset to follow your new language setting.
- If you deactivated **Reset instrument names**, the names of existing instruments in the project are not reset and continue to use their existing language.

TIP

You can change the default language used for instrument names in all future projects on the **General** page in **Preferences**.

RELATED LINKS

Adding players on page 122 Adding instruments to players on page 131 Instrument changes on page 134 Staff labels on page 1287

Showing instrument/player names in staff labels on page 1291 Instrument transpositions in staff labels on page 1292 Changing the default font family on page 743

Changing the language for date and time tokens

You can change the language used for all date and time tokens project-wide; for example, if you want to display the date and time using a different language convention to your operating system.

- 1. Choose Library > Project Language to open the Project Language dialog.
- 2. Select the language you want to use from the **Date and time language** menu.

3. Click **OK** to save your changes and close the dialog.

RELATED LINKS

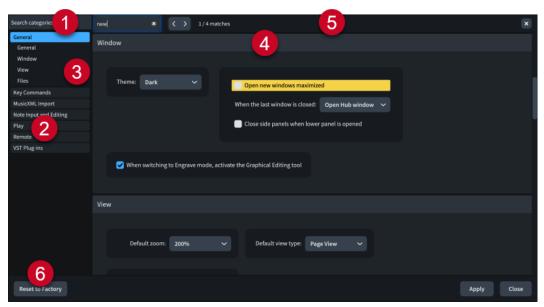
Tokens on page 638

Preferences dialog

The **Preferences** dialog allows you to change how Dorico Elements functions by default across all projects.

You can open **Preferences** in any of the following ways:

- Press Ctrl/Cmd-,.
- Choose Edit > Preferences (Windows) or Dorico > Preferences (macOS).



The **Preferences** dialog contains the following:

1 Search categories field

Allows you to filter categories and section titles according to your entry.

TIP

You can set the focus to the **Search categories** field by pressing **Ctrl/Cmd-L**. You can set the focus away by pressing **Tab**.

2 Category list

Contains the categories of options that you can view and change in the dialog. When you click a category in this list, any applicable section titles appear below the category in the list, and its options appear as a page in the main body of the dialog.

3 Section titles

Shows the titles of any sections on the selected category's page. You can click these section titles to navigate directly to that section of the page.

4 Section

Pages are divided into sections, which can contain multiple options. Sections that contain many options are divided into subsections. For options that have multiple possible settings, the active setting is highlighted.

NOTE

The arrangement of options on the **Key Commands** page is significantly different to other pages in the **Preferences** dialog. This page is described separately in further detail.

5 Search pages bar

Allows you to search section titles and options on the currently selected page according to your entry and navigate through matches. The number of matches is displayed in the bar. Matches appear highlighted on the page, and the current option appears with a brighter highlight.

You can show the **Search pages** bar by pressing **Ctrl/Cmd-F**.

The bar contains the following options:

- **Search pages field**: Allows you to enter the term you want to search for. You can set the focus to the **Search pages** field by pressing **Ctrl/Cmd-F**.
- **Previous match** : Allows you to navigate to the previous match on the page. You can also navigate to the previous match by pressing **Ctrl/Cmd-Shift-G**.
- **Next match** : Allows you to navigate to the next match on the page. You can also navigate to the next match by pressing **Ctrl/Cmd-G**.
- Close X: Closes the bar and removes all match highlights. You can also close the bar by pressing Esc.

6 Reset to Factory

Resets all the options in the dialog back to the default factory settings.

RELATED LINKS

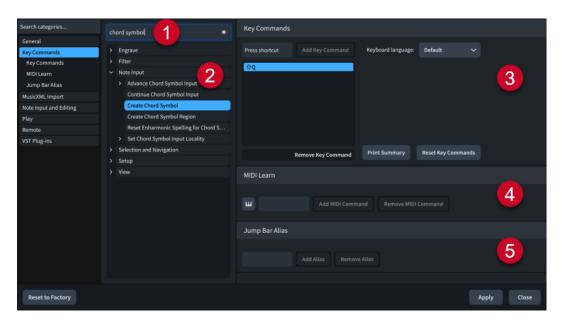
Changing your preferred unit of measurement on page 50 Changing values in numeric value fields on page 649

Key Commands page in the Preferences dialog

The **Key Commands** page in the **Preferences** dialog allows you to view all the functions to which you can assign key commands, change existing key commands, and assign new key commands to functions that have no key command assigned by default.

Assigning your own key commands can be helpful for items or actions that you find yourself performing regularly, such as setting specific rhythmic grid resolutions or exporting all layouts to PDF.

• You can find the **Key Commands** page by opening the **Preferences** dialog, then clicking **Key Commands** in the category list.



The **Key Commands** page comprises the following:

1 Search field

Allows you to search for functions to view, change, or add key commands. Because there are multiple levels of disclosure arrows before you reach many functions, this is often the quickest way to find what you are looking for.

2 Functions list

Displays the functions that can be assigned key commands. The list can be filtered using the **Search** field. Disclosure arrows beside options indicate that further options are available when the option is expanded.

Hovering over functions shows a tool tip, which is helpful for some functions with particularly long names.

3 Key Commands section

Displays any existing key commands set in the current keyboard language for the function selected in the list of assigned key commands, and allows you to assign new key commands.

- **Keyboard language**: Allows you to change the keyboard language used for key commands.
- Add Key Command: Adds the key command you pressed to the selected function.

NOTE

- You can assign multiple key commands to the same function.
- If you enter a key command that is already assigned to another function, a warning is shown.
- **Remove Key Command**: Removes the selected key command from the selected function.
- **Print Summary**: Directs you to an offline page in a web browser that displays your key commands on an interactive keyboard.
- Reset Key Commands: Resets all of your key commands to their defaults.

4 MIDI Learn section

Allows you to assign MIDI controllers, notes, and combinations of notes to control functions.

- **MIDI Learn** : Prepares Dorico Elements to receive the MIDI input data that you want to save as a command.
- Add MIDI Command: Adds the MIDI controllers or notes you changed or pressed to the selected function.
- **Remove MIDI Command**: Removes the MIDI command from the selected function.

5 Jump Bar Alias section

Allows you to assign aliases that you can enter into the jump bar to perform the corresponding function.

- **Alias field**: Allows you to enter a jump bar alias for the selected function.
- Add Alias: Adds the characters you entered as the jump bar alias for the selected function.
- Remove Alias: Removes the existing jump bar alias from the selected function.

RELATED LINKS

Changing the keyboard language on page 63
Changing the application language on page 55
Jump bar on page 64
Assigning key commands for custom zoom levels on page 432
Key commands in Dorico on page 25

Interactive Dorico key commands map

The interactive **Dorico Key Commands** map shows a virtual computer keyboard, with keys that have been assigned key commands highlighted in different colors according to the modifier keys they contain. All key commands for the selected keyboard language layout are listed below, divided into global and mode-specific groups.

You can open the **Dorico Key Commands** map in any of the following ways:

- Choose **Help** > **Key Commands**.
- In the **Preferences** dialog, click **Key Commands** in the category list, then click **Print Summary** in the **Key Commands** section.



The interactive key commands map as it appears when US English is selected

The **Dorico Key Commands** map opens in a web browser. It allows you to do any of the following:

- To see the available key commands, select a context. The context of a key command is the mode in which it can be used. Key commands that have a global context work in all modes.
- To highlight the keys that you can press in combination with modifier keys to form a key command, press one or more modifier keys on your computer keyboard, such as **Shift** or **Ctrl/Cmd Alt/Opt**, or click a modifier key on the virtual keyboard. The virtual computer keyboard highlights the pressed/clicked keys and displays the assigned functions on each key.
- To search for a specific key command, enter one or multiple words in the search field.
- To get an overview of all available key commands, browse the key commands that are listed below the virtual keyboard. The key commands are listed according to the context in which they can be used.

RELATED LINKS

Changing the keyboard language on page 63

Searching for the key commands of functions

You can search for key commands that are assigned to functions or menu items in Dorico Elements.

- 1. Press Ctrl/Cmd-, to open Preferences.
- **2.** In the category list, click **Key Commands**.
- **3.** Enter the name of a function in the **Search** field.

 The entries that are listed below are filtered according to the words that you enter.
- 4. Expand an entry and select the function for which you want to see the key command.

For particularly long names, you can hover over them to see a tool tip.

RESULT

If the function has a key command, it is shown in the list of assigned key commands.

TIP

You can also search for functions in the interactive key commands map.

Assigning key commands

You can assign key commands to many functions; for example, for functions you use frequently but that do not have a key command assigned by default. You can also change existing key commands.

PROCEDURE

- 1. Press Ctrl/Cmd-, to open Preferences.
- 2. In the category list, click **Key Commands**.
- **3.** Search for the name of a function and select it. For particularly long names, you can hover over them to see a tool tip.
- **4.** Optional: If the function already has an assigned key command, click **Remove Key Command** in the **Key Commands** section.

If you assign a new key command without removing an existing one, you can use either key command.

- 5. Click the **Press shortcut** input field.
- **6.** On your computer keyboard, press the key command that you want to assign.
- Click Add Key Command.If the key command you pressed is already used by another function, a warning is displayed.
- 8. Click Apply, then Close.

RESULT

The key command you pressed is added to the list of assigned key commands for the selected menu item or function. You can use it immediately.

RELATED LINKS

Assigning key commands for custom zoom levels on page 432

Assigning MIDI commands

You can assign specific keys or buttons on your MIDI keyboard to perform functions and access menu items. For example, if you want to navigate using MIDI keys during chord symbol input.

- 1. Press Ctrl/Cmd-, to open Preferences.
- 2. In the category list, click **Key Commands**.
- **3.** Select the menu item or function to which you want to assign MIDI commands. For particularly long names, you can hover over them to see a tool tip.

- 4. In the MIDI Learn section, click MIDI Learn W.
- **5.** Press the key or button on your MIDI keyboard that you want to assign to the selected parameter.
- 6. Click Add MIDI Command.
- 7. Click Apply, then Close.

Changing the keyboard language

You can change the keyboard language used for key commands in Dorico Elements; for example, if the application language is set to German, but you are using an English keyboard and want to use English key commands.

PROCEDURE

- 1. Press Ctrl/Cmd-, to open Preferences.
- 2. In the category list, click **Key Commands**.
- Select the keyboard language you want to use for key commands from the Keyboard language menu.

NOTE

Default follows the application language.

4. Click Apply, then Close.

RESULT

The keyboard language used for key commands in the current project and all future projects is changed.

RELATED LINKS

Changing the application language on page 55

Removing key commands

You can remove individual key commands from a function.

PROCEDURE

- 1. Press Ctrl/Cmd-, to open Preferences.
- 2. In the category list, click **Key Commands**.
- 3. Search for the name of a function and select it.
- 4. In the Key Commands section, click Remove Key Command.
- 5. Click Apply, then Close.

RESULT

The key command is removed from the selected function.

RELATED LINKS

Removing jump bar aliases on page 67

Resetting key commands

You can reset all the key commands in your project to their defaults.

PROCEDURE

- 1. Press Ctrl/Cmd-, to open Preferences.
- 2. In the category list, click **Key Commands**.
- 3. In the **Key Commands** section, click **Reset Key Commands**.
- 4. Click Apply, then Close.

RESULT

All custom key commands are deleted and the default key commands are reinstated.

Jump bar

The jump bar is a temporary value field that allows you to perform commands and go to locations in the current layout using only your computer keyboard.

• You can show the jump bar in Setup, Write, Engrave, and Play modes by pressing J.

TIP

You can assign key commands for showing the jump bar in Commands mode and Go To mode on the **Key Commands** page in **Preferences**.



Jump bar in Commands mode with an example entry

Commands

In Commands mode, you can use the jump bar to perform commands, such as opening the **Layout Options** dialog with the specified page already selected.

 You can switch the jump bar to Commands mode by pressing Alt-C (Windows) or Ctrl-1 (macOS).

When you start entering text into the jump bar in Commands mode, a menu appears that shows valid commands containing the letters/words you enter.

If you show the jump bar in Commands mode after performing a command, your previous entry is shown with its text selected.

You can press **Down Arrow** to show a list of up to five commands that you perform most frequently.

NOTE

- You can only perform commands using the jump bar in the same contexts as you can
 perform the corresponding action. For example, you can only perform Setup mode-specific
 actions in Setup mode.
- You can assign jump bar aliases to specific commands; for example, so you can use shorter entries for your favorite commands.
- If commands have a corresponding key command or jump bar alias, they are shown in the menu of valid commands.

Go To

In Go To mode, you can use the jump bar to go to bars, rehearsal marks, pages, and flows.

• You can switch the jump bar to Go To mode by pressing **Alt-G (Windows) or Ctrl-2 (macOS)**.

Example move	Jump bar entry
Go to bar number [n]; for example, bar number 32	b[n] ; for example, b32 or b+32
Go to rehearsal mark [n]; for example, rehearsal mark K	r[n] ; for example, rK or rk
Go to page number [n]; for example, page 6	p[n] ; for example, p6 or p+6
Go to flow number [n]; for example, flow 3	f[n]; for example, f3 or f+3
Go to the next flow	fn
Go to the previous flow	fp

EXAMPLE

To go to bar 20 in flow 3, enter **f3b20**.

RELATED LINKS

Navigation on page 427

Key Commands page in the Preferences dialog on page 58

Properties panel on page 646

Popovers on page 22

Notations input on page 266

Options dialogs in Dorico Elements on page 26

Going to locations with the jump bar

You can use the jump bar to go to bars, rehearsal marks, pages, and flows in Setup, Write, Engrave, and Play modes.

PROCEDURE

- **1.** Press **J** to show the jump bar.
- 2. Optional: Press Alt-G (Windows) or Ctrl-2 (macOS) to switch to Go To mode.
- **3.** Enter the appropriate entry for the location to which you want to go. For example, enter **f3b20** to go to bar 20 in flow 3.
- 4. Press Return.

Performing commands with the jump bar

You can use the jump bar to perform commands, such as opening the **Layout Options** dialog with the specified page already selected, in Setup, Write, Engrave, and Play modes.

PREREQUISITE

If you want to perform mode-specific commands, you are in the corresponding mode.

PROCEDURE

- **1.** Press **J** to show the jump bar.
- 2. Optional: Press Alt-C (Windows) or Ctrl-1 (macOS) to switch to Commands mode.
- **3.** Select the command you want to perform in any of the following ways:
 - Enter relevant text into the jump bar.
 - When you start entering text into the jump bar in Commands mode, a menu appears that shows valid commands containing the letters/words you enter, which you can select by pressing **Up Arrow/Down Arrow**.
 - Enter the appropriate jump bar alias into the jump bar.
 - To show a list of up to five commands that you perform most frequently, press **Down Arrow**, then press **Up Arrow**/**Down Arrow** to select a command.
- 4. Press Return.

Assigning jump bar aliases

You can assign jump bar aliases to specific commands; for example, so you can use shorter entries for your favorite commands.

PROCEDURE

- **1.** Press **J** to show the jump bar.
- 2. Optional: Press Alt-C (Windows) or Ctrl-1 (macOS) to switch to Commands mode.
- 3. Enter the command to which you want to assign an alias into the jump bar.

TIP

To ensure the command is entered correctly, select it from the menu of valid commands by pressing **Up Arrow/Down Arrow**.

4. Immediately after the command, enter = followed by the characters you want to use as the jump bar alias.

For example, to assign the jump bar alias **rr** to the **Remove Rests** command, enter **Remove Rests=rr**.

- **5.** Do one of the following:
 - To perform the command and assign the jump bar alias, press Return.
 - To assign the jump bar alias only, without performing the command, press **Alt/Opt-Return**.

RESULT

The characters you entered after the = are assigned as the jump bar alias for the specified command.

TIP

You can also assign jump bar aliases on the **Key Commands** page in **Preferences**.

RELATED LINKS

Key Commands page in the Preferences dialog on page 58

Removing jump bar aliases

You can remove jump bar aliases you have assigned to specific commands.

PROCEDURE

- 1. Press Ctrl/Cmd-, to open Preferences.
- 2. In the category list, click **Key Commands**.
- **3.** Search for the name of a function and select it.
- 4. In the Jump Bar Alias section, click Remove Alias.
- 5. Click Apply, then Close.

RESULT

The jump bar alias is removed from the selected function.

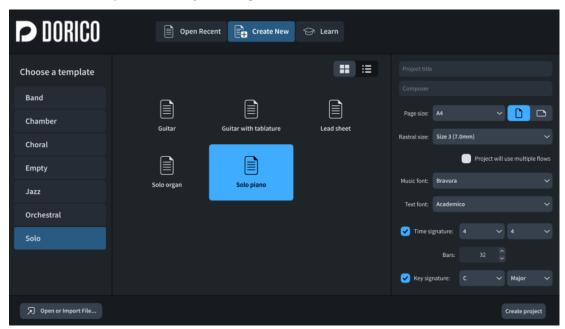
Project and file handling

In addition to opening and importing/exporting projects and other file formats, project and file handling also includes auto-save and project backups.

Hub

The Hub allows you to access recent projects, start new projects, and keep up-to-date with learning materials including tutorials, videos, and blog updates. The Hub opens automatically when you start Dorico Elements.

• You can also open the Hub by choosing **Window** > **Hub**.



The Hub contains the following pages:

Open Recent

Allows you quick access to the projects that you worked on last. You can scroll through the list to access recent projects out of view. You can navigate through recent projects by pressing **Up Arrow**/**Down Arrow**.

Double-clicking a recent project, or selecting it and pressing $\ensuremath{\text{\textbf{Return}}}$, opens the project.

You can choose one of the following view types for recent projects:

- Grid view ⊞
- List view

When recent projects are shown in the grid view, you can click the menu button **f** for each project to access the following options:

• **Remove from Recent Projects**: Removes the project from the **Recent Projects** page.

• **Open Enclosing Folder**: Opens the File Explorer/macOS Finder and shows the folder where the project is saved.

Create New

Allows you to start new projects from project templates or choose an empty project.

The **Choose a template** list on the left allows you to select a project template category, with available project templates in the selected category listed in the middle. The **Empty** project template creates a project with no players or flows.

You can choose one of the following view types for project templates:

- Grid view ⊞
- List view

On the right, the Project Options section provides the following options:

- **Project title**: Allows you to enter the project title.
- **Composer**: Allows you to enter the project composer.
- **Page size**: Allows you to select the page size for the full score layout.
- **Page orientation**: Allows you to choose whether the page orientation in the full score layout is **Portrait** or **Landscape**.
- **Rastral size**: Allows you to select the staff size for the full score layout.
- **Project will use multiple flows**: When activated, flow headings are shown in all layouts, and flow titles are shown in running headers in score layouts. When deactivated, flow headings are hidden in all layouts, and the project title is shown in running headers in score layouts.
- **Music font**: Allows you to select the music font used in the project.
- **Text font**: Allows you to select the font family used throughout the project by default.
- **Time signature**: Allows you to specify a time signature for the project. When deactivated, the project starts with no time signature, which is treated as open.
- **Bars**: Allows you to set the number of bars you want the project to contain.
- **Key signature**: Allows you to specify a key signature for the project. When deactivated, the project starts with no key signature, which is treated as atonal.

At the bottom of the Hub, **Create project** creates a new project using the selected project template and project options. You can also double-click project templates to start a new project.

Learn

Provides access to learning materials. Dorico Elements displays a notification when new materials are available.

- **Hands-on tutorials**: Displays available practical tutorials that introduce you to common operations directly in Dorico demo projects.
- Videos: Displays recent Dorico video tutorials. Double-clicking a video tutorial, or selecting it and clicking Watch Now, opens it in a web browser.
 - You can find more tutorial videos and information about new features on the Dorico YouTube channel.
- **Forum**: Links you to the Steinberg user forum.
- Manual: Links you to the documentation.
- **Dorico Blog**: Displays recent entries in the Dorico blog. Clicking a blog entry opens it in a web browser.

At the bottom of the Hub, **Open or Import File** allows you to search for and open MusicXML, MIDI, and Dorico project files.

RELATED LINKS

Toolbar on page 29
Project templates on page 76
Project Info dialog on page 74
Staff size on page 601

Starting new projects

You can start new projects from project templates, such as for orchestra or a vocal ensemble. You can also start empty projects.

PROCEDURE

- 1. Optional: If the Hub is not open, choose **Window** > **Hub** to open the Hub.
- 2. In the Hub, click **Create New** to show the **Create New** page.
- 3. Choose one of the following project template categories:
 - Band
 - Chamber
 - Choral
 - Empty
 - Jazz
 - Orchestral
 - Solo
- **4.** Choose a project template.
- **5.** In the Project Options section, add or change information and settings as required.

NOTE

The Project Options section does not affect **Empty** project templates.

- **6.** Create a new project in any of the following ways:
 - Click Create project.
 - Double-click the project template.

RESULT

A new project is created using the selected project template.

TIP

- You can start a new, empty project at any time by pressing Ctrl/Cmd-N or choosing File > New.
- You can also start a new project from a project template by choosing File > New From Project Template > [Project template category] > [Project template].

AFTER COMPLETING THIS TASK

You can customize your project, such as by adding or deleting players/instruments.

RELATED LINKS

Brackets according to ensemble type on page 847 Adding players on page 122 Deleting players on page 125 Adding titles on page 978

Opening projects/files

You can open Dorico projects at any time and in addition to other open projects; for example, if the project you want to open is not listed as a recent project in the list in the Hub. You can also open MusicXML and MIDI files.

PROCEDURE

- 1. Open the File Explorer/macOS Finder in any of the following ways:
 - In the Hub, click Open or Import File.
 - Choose File > Open.
 - Choose File > Open Recent > [Project file name].
- 2. Locate and select the files you want to open.
- 3. Click Open.
- **4.** Optional: If you opened a MIDI file, change the settings as required in the **MIDI Import Options** dialog that opens.

RESULT

The selected files are opened.

If you opened MusicXML or MIDI files, Dorico Elements creates new project files from the MusicXML or MIDI content, which you can save as default Dorico projects.

If MusicXML files include page size, margin, and staff size settings, Dorico Elements imports those values. If they are not included, Dorico Elements creates suitable settings according to the number of instruments in the file.

TIP

- You can also import MusicXML and MIDI files as new flows in existing projects, rather than opening them as separate projects.
- You can hide/show complete paths for recent files in the menu in Preferences > General >
 Files.

RELATED LINKS

Hub on page 68
Preferences dialog on page 57
Importing MusicXML files on page 81
Importing MIDI on page 84

Opening recent projects from the Hub

You can open projects you have recently worked on from the Hub.

PROCEDURE

1. Optional: If the Hub is not open, choose **Window** > **Hub** to open the Hub.

- 2. In the Hub, click **Open Recent** to show the **Open Recent** page.
- 3. Double-click the recent project you want to open.

RESULT

The selected Dorico project is opened.

Projects from different versions of Dorico

You can open projects that were last saved in other versions of Dorico than the one you have. In such cases, Dorico Elements shows a warning message to make you aware of any implications.

The contents of the warning message vary according to the version of Dorico in which the project was last saved:

- When opening a project last saved in an older version, it shows the version number the project was last saved in and informs you that the project will be updated to your current version.
- When opening a project last saved in a newer version, it shows only that the project is from a newer version. It also informs you that items and notations from that version might not appear and will be deleted if you save the project in your current version.

In both cases, opening the project is non-destructive. This means that its contents and formatting are unaffected if you do not save it.

You can prevent Dorico Elements from showing you warnings about projects from different versions in **Preferences** > **General** > **Files**. In the same section, you can also tell Dorico Elements to prompt you to choose a new location for projects from different versions when you save them. This reduces the risk of you overwriting them by mistake.

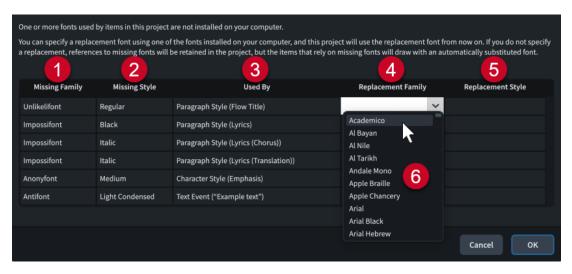
RELATED LINKS

Preferences dialog on page 57

Missing Fonts dialog

The **Missing Fonts** dialog appears when you open a project that contains a font that you do not have installed on your computer. It allows you to select replacement fonts that are installed on your computer as substitutes.

The **Missing Fonts** dialog displays a table with multiple columns that identify the specific font families and styles that are missing for font, character, and paragraph styles and text items. Every place in the project where a font is missing has its own row. For example, if the bold style of a font family is used in three different paragraph styles, three rows are shown in the dialog, one for each paragraph style.



The **Missing Fonts** dialog comprises the following:

1 Missing Family

Contains a list of font families included in the project but missing on your computer.

2 Missing Style

Contains a list of the specific styles within the corresponding font families that are included in the project but missing on your computer.

3 Used By

Contains a list of the places in the project where the corresponding font is used.

4 Replacement Family

Allows you to select replacement font families. You can select replacement font families by double-clicking entries, then either entering the font family you want or clicking the arrow vand selecting a font family from the menu. Once selected, their names are displayed in the corresponding entry.

5 Replacement Style

Allows you to select any of the available styles within the corresponding replacement font families. You can select replacement font styles by double-clicking entries, then either entering the font style you want or clicking the arrow vand selecting a font style from the menu. Once selected, the styles are displayed in the corresponding entry.

6 Fonts

Contains a list of all the available fonts installed on your computer. You can access the menu in the **Replacement Family** and **Replacement Style** columns by double-clicking any entry.

TIP

- You can choose whether or not the Missing Fonts dialog appears when you open a project containing fonts not installed on your computer on the General page in Preferences.
- You can change the width of columns in the Missing Fonts dialog by dragging between column headings. Their widths are remembered in future projects.

RELATED LINKS

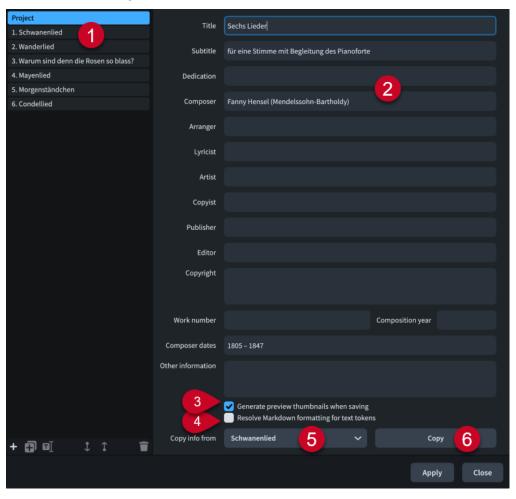
Preferences dialog on page 57 Text formatting on page 736

Project Info dialog

The **Project Info** dialog allows you to specify information about the whole project and each flow within it separately, such as the title, composer, and lyricist, as these might be different for different flows. You can then refer to these entries using tokens in text frames.

You can open the **Project Info** dialog in any mode in any of the following ways:

- Press Ctrl/Cmd-I.
- Choose File > Project Info.



The **Project Info** dialog comprises the following:

1 Flows list

Contains all the flows in the project, with a separate entry for the project as a whole at the top. You can select individual or multiple flows in the flows list.

NOTE

The flows list uses the names of flows as shown in the **Flows** panel in Setup mode, which can be different to their entry in the **Title** field if you have changed their flow title.

The action bar at the bottom of the list contains the following options:

- New Flow T: Creates a new flow with no information. Its default name is New Flow.
- **Duplicate Flow** : Creates a new flow with all the information of the selected flow. Its default name is **Copy of [selected flow]**.

• **Rename Flow 1**: Opens the **Rename Flow** dialog, which allows you to change the name of the flow.

NOTE

If you have already manually changed the flow title, changing the name of the flow does not automatically change the flow title.

- **Move Down** : Moves the selected flows down the flows list, which changes their order in the project.
- **Move Up** : Moves the selected flows up the flows list, which changes their order in the project.
- **Delete Flow** : Deletes the selected flows.

2 Information fields

Allow you to enter information about the currently selected flows or the whole project in the corresponding field, such as **Composer** and **Lyricist**.

If you have selected multiple flows with different entries in the same fields, such as flows with different composers, those fields display **Mixed**.

You can change the font style of specific characters within information fields using the following Markdown formatting:

- To make characters appear in italics, enclose them inside single asterisks, such as *Allegro*.
- To make characters appear bold, enclose them inside double asterisks, such as
 Chaminade.
- To make characters appear bold and italic, enclose them inside triple asterisks, such as
 28.

TIP

If you want entire information fields to appear with the same formatting, such as all in italics, we recommend that you edit the corresponding paragraph styles.

3 Generate preview thumbnails when saving

When activated, Dorico Elements generates the following preview images of the layout open in the music area when you save the project:

- PNG file of the first page. This is displayed on the Open Recent page in the Hub.
- PDF file of the whole layout.

When deactivated, Dorico Elements does not generate preview images. This reduces the file size and can make saving large projects quicker.

4 Resolve Markdown formatting for text tokens

Allows you to enable/disable the resolution of Markdown formatting in information fields.

5 Copy info from menu

Allows you to select another flow or the whole project whose information you want to copy; for example, for a project containing multiple flows that all have the same composer and lyricist.

6 Сору

Copies all the information from the specified flow/project to the selected flows/project.

NOTE

- The information you add in **Project Info** only appears on pages where the corresponding tokens exist. For example, if you want to display a dedication above the project title, you must add the dedication token to the **First** page template.
- You cannot specify line breaks in single-line fields. However, you can enter line breaks in larger fields, namely **Copyright** and **Other information**, which you can then copy into single-line fields.
- By default, **First** page templates have tokens that refer to project information. If you only enter information for individual flows in the **Project Info** dialog, that information does not automatically appear on pages that use the **First** page template.

Similarly, if you started a new project from the Hub and deactivated **Project will use multiple flows**, running headers in score layouts display the project title instead of the flow title.

RELATED LINKS

Tokens on page 638
Types of page templates on page 631
Flow names and flow titles on page 183
Hiding/Showing flow headings on page 595
Paragraph Styles dialog on page 739
Hub on page 68

Project templates

Project templates allow you to start new projects that already contain a particular set of players and project library settings. For example, full score layouts in orchestral project templates have larger page sizes than in chamber ensemble project templates.

Dorico Elements provides the following project template categories:

Band

Ensembles containing mostly woodwind and brass instruments, such as brass band or pit band.

Chamber

Typically small ensembles containing only a few players, such as string quartet.

Choral

Ensembles containing voices, including popular choir arrangements, such as SATB unaccompanied.

Empty

An empty project template.

Jazz

Popular ensembles commonly used to perform jazz, such as big band or jazz trio.

Orchestral

Large ensembles containing most Western instruments, including strings, woodwinds, brass, and percussion.

Solo

Ensembles containing only a single player/instrument, such as a solo organ, guitar with tablature, or lead sheet.

RELATED LINKS

Brackets according to ensemble type on page 847 Starting new projects on page 70 Page formatting on page 583 Page templates on page 630

File import and export

External files are files in different formats than Dorico projects, such as MIDI, MusicXML, or tempo tracks. It is possible in Dorico Elements both to import and export different types of files.

This can be useful if, for example, you want to share your project with others who use a different notation software, or to convert the notes, audio, or time signatures and tempo information in your project into other formats.

RELATED LINKS

Exporting lyrics on page 1015
Exporting comments on page 486
Exporting layouts as graphics files on page 570
Printing layouts on page 566
Exporting project statistics on page 106

Importing flows

You can import individual flows into existing projects; for example, if you want to bring together multiple existing pieces into one project for publishing, or if you have an empty project file with your preferred settings saved and want to reuse those settings.

PROCEDURE

- 1. Choose **File** > **Import** > **Flows** to open the File Explorer/macOS Finder.
- 2. Locate and select the project files of the flows you want to import.
- 3. Click Open to open the Flow Import Options dialog for the first selected project.
- 4. In the Flow Import Options dialog, choose one of the following options for Player handling:
 - Create All New Players
 - Merge with Existing Players Where Possible
- **5.** In the **Import flows** list, activate the checkbox for each flow you want to import. You can also click **Select All** or **Select None** at the bottom of the list.
- **6.** Click **OK** to import the selected flows and close the dialog.
- **7.** Optional: If you selected multiple projects from which to import flows, repeat steps 4 to 6 for each project. The **Flow Import Options** dialog reopens automatically for each project.

RESULT

The selected flows are imported into the project.

- If you chose Create All New Players, new players are added as required for each flow.
- If you chose Merge with Existing Players Where Possible, any players that the imported
 flows and existing project have in common are merged; for example, if you imported a flow
 containing one piano into a project containing a piano and viola, the imported flow is added
 to the existing piano player.

NOTE

- Players are not automatically added to flows that you imported into the project.
- You can also open flows directly if you want them to be separate projects, rather than new flows in existing projects.

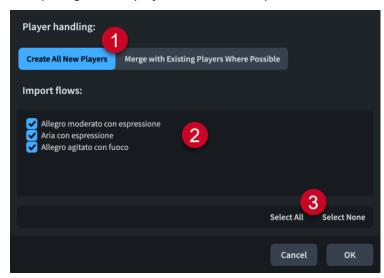
RELATED LINKS

Opening projects/files on page 71 Flows on page 167 Adding players on page 122 Assigning players to flows on page 169

Flow Import Options dialog

The **Flow Import Options** dialog allows you to determine whether players in imported flows are merged with existing players in the project and which flows from within other projects you want to import.

• You can open the **Flow Import Options** dialog by choosing **File > Import > Flows** and opening a Dorico project from the File Explorer/macOS Finder.



The **Flow Import Options** dialog comprises the following:

1 Player handling

Allows you to determine how imported flows are assigned to players.

- Create All New Players adds separate players for each imported flow.
- **Merge with Existing Players Where Possible** merges players from imported flows with any existing compatible players in the project.

2 Import flows

Contains a list of all the flows in the selected project. Flows are included in the import when their checkbox is activated.

3 Selection options

Allow you to select/deselect all the flows in the project. For example, you can deselect all flows and then activate the checkbox of a single flow you want to import.

Exporting flows

You can export individual flows from projects; for example, to save small excerpts of large projects separately.

NOTE

These steps export flows as separate Dorico projects. If you want to export flows as other file formats, such as MusicXML or MP3, there are different methods.

PREREQUISITE

If you want the exported flows to include all players and layouts in the project, including players with no music, you have deactivated **Omit excluded players and layouts when exporting flows** in **Preferences** > **General** > **Files**.

PROCEDURE

- 1. Choose **File** > **Export** > **Flows** to open the **Export Flows** dialog.
- 2. Activate/Deactivate Export each selected flow as a separate file.
- **3.** In the **Select flows to export** list, activate the checkbox for each flow you want to export. You can also click **Select All** or **Select None** at the bottom of the list.
- 4. Activate/Deactivate Export layouts as separate files.
- **5.** Optional: If you activated **Export layouts as separate files**, activate the checkbox for each layout you want to export in the **Select layouts to export** list.
 - You can also click **Select All** or **Select None** at the bottom of the list.
- **6.** Click **Choose Folder** beside the **Export to** field to open the File Explorer/macOS Finder.
- **7.** Locate and select the destination folder you want.
- **8.** Click **Choose** to insert the new path in the **Export to** field.
- 9. Activate/Deactivate Create folder for exported files.
- **10.** Click **OK** to export the selected flows and layouts and close the dialog.

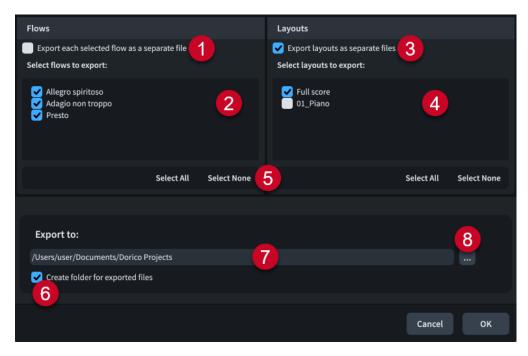
RELATED LINKS

Flows on page 167
Exporting MusicXML files on page 82
Exporting audio on page 98

Export Flows dialog

The **Export Flows** dialog allows you to save individual flows and layouts as separate Dorico files.

• You can open the **Export Flows** dialog by choosing **File** > **Export** > **Flows**.



The **Export Flows** dialog contains the following options and lists:

1 Export each selected flow as a separate file

Allows you to export each flow as a separate file instead of all the selected flows as a single file.

2 Select flows to export

Contains a list of all the flows in the project. Flows are included in the export when their checkbox is activated.

3 Export layouts as separate files

Allows you to export each layout in the project as a separate file instead of as a single file.

4 Select layouts to export

Contains a list of all the layouts in the project. Layouts are included in the export when their checkbox is activated. Only available if you have activated **Export layouts as separate files**.

5 Selection options

Allow you to select/deselect all the flows/layouts in the corresponding list. For example, you can deselect all flows and then activate the checkbox of a single flow you want to export.

6 Create folder for exported files

Controls whether or not Dorico Elements generates a new folder for the selected flows within the selected export path. The automatic folder name is "Flows from" followed by the project file name; for example, "Flows from Smyth - String Quintet".

7 Export to field

Displays the export path where exported flows will be saved.

8 Choose Folder

Opens the File Explorer/macOS Finder and allows you to change the export path.

Importing MusicXML files

You can import MusicXML files into existing Dorico Elements projects as separate flows; for example, to continue work on a piece started in a different notation software.

PREREQUISITE

You have set your preferences for importing MusicXML files as appropriate for the file on the **MusicXML Import** page in **Preferences**.

PROCEDURE

- 1. Choose **File** > **Import** > **MusicXML** to open the File Explorer/macOS Finder.
- 2. Locate and select the MusicXML files you want to import.
- 3. Click Open to open the Flow Import Options dialog for the first selected MusicXML file.
- **4.** In the **Flow Import Options** dialog, choose one of the following options for **Player** handling:
 - Create All New Players
 - Merge with Existing Players Where Possible
- 5. Click **OK** to import the selected flows and close the dialog.
- **6.** Optional: If you selected multiple MusicXML files, repeat steps 4 and 5 for each file. The **Flow Import Options** dialog reopens automatically for each file.

RESULT

The selected MusicXML files are imported into the project as new flows.

- If MusicXML files include page size, margin, and staff size settings, Dorico Elements imports those values. If they are not included, Dorico Elements creates suitable settings according to the number of instruments in the file.
- If you chose Create All New Players, new players are added as required for each MusicXML file.
- If you chose **Merge with Existing Players Where Possible**, any players that the imported MusicXML files and existing project have in common are merged; for example, if you imported a MusicXML file containing one piano into a project containing a piano and viola, the imported MusicXML file is added to the existing piano player.

TIP

You can also open MusicXML files directly if you want them to be separate projects, rather than new flows in existing projects.

RELATED LINKS

Flow Import Options dialog on page 78 Opening projects/files on page 71 Preferences dialog on page 57 Assigning players to flows on page 169

Unpitched percussion imported from MusicXML files

Unpitched percussion music can be expressed in a number of ways in MusicXML. Scoring applications take different approaches to what data is exported and how it is encoded. Therefore, the results of importing MusicXML into Dorico Elements vary considerably.

Dorico Elements identifies each instrument in kits explicitly and then combines them dynamically onto five-line staves. Other scoring applications and MusicXML have a different approach to how unpitched percussion music is represented. For example, a drum set may be effectively notated as pitched notes on a five-line staff and annotated with additional information to help identify which instrument corresponds to each staff position.

Because of these different approaches, mapping information between the MusicXML representation and the Dorico Elements representation can be challenging, so Dorico Elements employs heuristics to improve the quality of results.

Typically, drum set instruments in MusicXML files exported from both Sibelius and Finale are imported quite cleanly into Dorico Elements.

Results are particularly good, and more likely to be imported correctly, if the voicing of the drum set is consistent, such as consistently notating the snare drum in a down-stem voice. If the voicing changes from bar to bar, it is possible that some notes are either identified incorrectly or not imported at all.

Other kinds of percussion that are notated on five-line staves produce more variable results. In most cases, Finale includes information about which percussion instrument maps onto each staff position, but Sibelius does not. As a result, you might find that Dorico Elements chooses different instruments than you expected, but you can change instruments using the **Edit Percussion Kit** dialog.

RELATED LINKS

Edit Percussion Kit dialog on page 140 Percussion editor on page 663 Importing MIDI on page 84

Exporting MusicXML files

You can export flows and layouts as separate MusicXML files; for example, if you want to export just the soloist's layout containing the first flow.

PROCEDURE

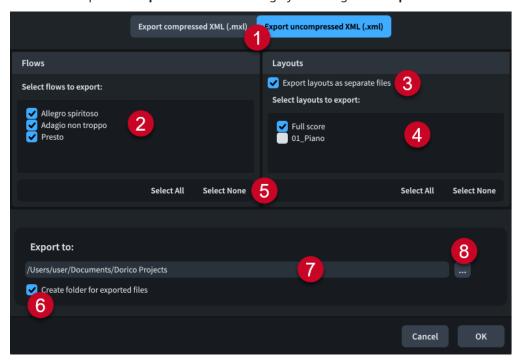
- 1. Choose File > Export > MusicXML to open the Export MusicXML dialog.
- **2.** Choose one of the following file format options:
 - Export compressed XML (.mxl)
 - Export uncompressed XML (.xml)
- **3.** In the **Select flows to export** list, activate the checkbox for each flow you want to export. You can also click **Select All** or **Select None** at the bottom of the list.
- **4.** Activate/Deactivate **Export layouts as separate files**.
- **5.** Optional: If you activated **Export layouts as separate files**, activate the checkbox for each layout you want to export in the **Select layouts to export** list.
 - You can also click **Select All** or **Select None** at the bottom of the list.
- **6.** Click **Choose Folder** beside the **Export to** field to open the File Explorer/macOS Finder.
- **7.** Locate and select the destination folder you want.

- 8. Click **Choose** to insert the new path in the **Export to** field.
- 9. Activate/Deactivate Create folder for exported files.
- 10. Click OK to export the selected flows/layouts as MusicXML files and close the dialog.

Export MusicXML dialog

The **Export MusicXML** dialog allows you to save individual flows and layouts as separate MusicXML files.

• You can open the **Export MusicXML** dialog by choosing **File > Export > MusicXML**.



The **Export MusicXML** dialog contains the following options and lists:

1 File format options

Allows you to choose the MusicXML file format you want to export. Compressed MusicXML files contain the same information as uncompressed MusicXML files but have a smaller file size

2 Select flows to export

Contains a list of all the flows in the project. Flows are included in the export when their checkbox is activated.

3 Export layouts as separate files

Allows you to export each layout in the project as a separate file instead of as a single file.

4 Select layouts to export

Contains a list of all the layouts in the project. Layouts are included in the export when their checkbox is activated. Only available if you have activated **Export layouts as separate files**.

5 Selection options

Allow you to select/deselect all the flows/layouts in the corresponding list. For example, you can deselect all flows and then activate the checkbox of a single flow you want to export.

6 Create folder for exported files

Controls whether or not Dorico Elements generates a new folder for the selected flows within the selected export path. The automatic folder name is "Flows from" followed by the project file name; for example, "Flows from Smyth - String Quintet".

7 Export to field

Displays the export path where exported files will be saved.

8 Choose Folder

Opens the File Explorer/macOS Finder and allows you to change the export path.

Importing MIDI

You can import MIDI files into existing Dorico Elements projects, as either separate flows or into existing flows; for example, to work on a different version of a section of a piece.

PROCEDURE

- 1. Choose **File** > **Import** > **MIDI** to open the File Explorer/macOS Finder.
- 2. Locate and select the MIDI files you want to import.
- 3. Click Open to open the MIDI Import Options dialog for the first selected MIDI file.
- **4.** Change the settings as required. For example, you can change the playing techniques of tracks, assign tracks to specific players, and customize quantization options.
- 5. Click **OK** to close the **MIDI Import Options** dialog and import the first selected MIDI file.
- **6.** Optional: If you selected multiple MIDI files, repeat steps 4 to 5 for each file. The **MIDI Import Options** dialog reopens automatically for each file.

RESULT

The selected MIDI files are imported into the project according to your settings. Dorico Elements uses an algorithm on imported MIDI notes to produce the correct enharmonic spelling.

If the MIDI files contained markers, they are also imported. If they have SMPTE offset values defined, Dorico Elements uses them to set the timecode position for the start of the flow.

TIP

You can also open MIDI files directly if you want them to be separate projects, rather than new flows in existing projects.

RELATED LINKS

Opening projects/files on page 71

Requantizing notes on page 261

Changing the sustain pedal controller settings for MIDI recording/import on page 265 Assigning players to flows on page 169

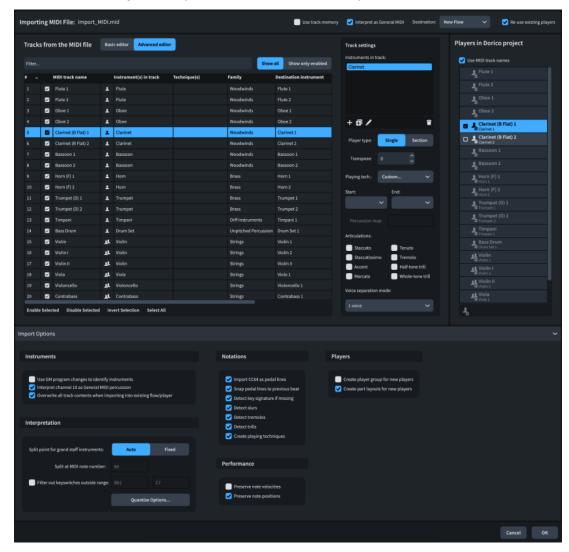
MIDI Import Options dialog

The **MIDI Import Options** dialog allows you to customize the settings Dorico Elements uses to translate MIDI data into a Dorico project when importing and opening MIDI files.

Your MIDI import settings are stored to the track memory, allowing you to reuse settings automatically the next time you open or import MIDI files with similar tracks.

You can open the MIDI Import Options dialog in any of the following ways:

- Choose File > Import > MIDI and import a MIDI file from the File Explorer/macOS Finder.
- Choose File > Open and open a MIDI file from the File Explorer/macOS Finder.



At the top of the **MIDI Import Options** dialog, there are the following options:

Importing MIDI File

Displays the file name of the MIDI file you are importing or opening.

Use track memory

Allows you both to apply settings from the track memory to the current MIDI file, and to save the settings for the current MIDI file to the track memory for reuse in future when importing or opening MIDI files with identical track names.

Interpret as General MIDI

Allows Dorico Elements to use MIDI program changes at the start of tracks to determine instrument types, including identifying tracks using channel 10 as containing unpitched percussion using the General MIDI drum set.

We recommend deactivating this option for MIDI files that do not conform to General MIDI conventions.

Destination

Allows you to select the flow into which you want to import the MIDI file. You can import MIDI as a new flow or into an existing flow in the project; for example, if you

want to overwrite specific tracks in an existing flow. Only available when importing MIDI files.

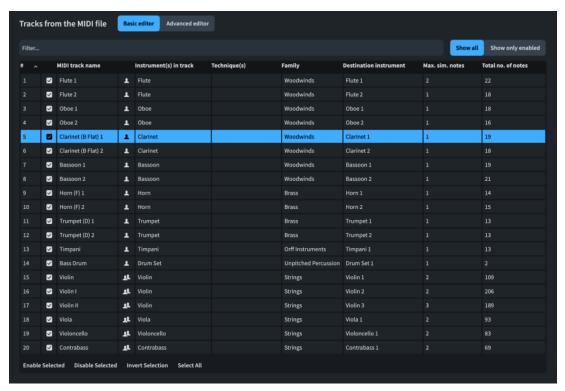
Re-use existing players

Allows you to determine the players to which tracks in the MIDI file are assigned. Only available when importing MIDI files.

- When activated, tracks from the imported MIDI file are either merged with existing
 players in the project or overwrite them, depending on your setting for Overwrite
 all track contents when importing into existing flow/player in the Import
 Options section.
- When deactivated, tracks are imported as new players.

Tracks from the MIDI file

Displays all the tracks from the imported or opened MIDI file in a table. Allows you to enable/ disable tracks for import and change their player type, instrument, and playing techniques.



At the top of the table, there are the following filter controls:

- Filter field: Allows you to filter tracks by name, instrument, or family.
- Track visibility: Allows you to show either all tracks or only tracks enabled for import.

The table contains the following columns:

- #: Displays the number of the track.
- Enable: Allows you to enable/disable the track for import.
- MIDI track name: Displays the name of the track in the MIDI file.
- **Player type**: Displays the player type for the track. You can change the player type by double-clicking the icon. Icons show the current player type from the following options:
 - Single player
 - Section player

- **Instrument(s) in track**: Displays the instruments identified for the track. You can change the instrument by double-clicking the field and selecting an instrument in the instrument picker that opens. If a single track requires multiple instruments, you must use the advanced editor options.
- Technique(s): Displays the playing techniques identified for the track. You can change the
 playing technique by double-clicking the field and selecting a playing technique from the
 menu. If a single track requires multiple playing techniques, you must use the advanced
 editor options.

TIP

- It is not necessary to specify natural or legato playing techniques, as Dorico Elements automatically creates slurs if **Detect slurs** is activated in the **Import Options** section.
- Dorico Elements inputs the corresponding playing techniques at the required positions in the music if **Create playing techniques** is activated in the **Import Options** section.
- **Family**: Displays the instrument family of the track. For tracks with multiple instruments, the family of the first instrument is displayed.
- **Destination Instrument**: Displays the instrument in the project to which the track will be assigned. You can change the destination instrument by double-clicking the field and selecting an instrument from the menu. For example, if you want to assign multiple tracks to the same destination instrument.
- **Max. sim. notes**: Displays the number of notes played simultaneously in the track. This can help you identify whether tracks represent single, multiple, or grand staff instruments.
- **Total no. of notes**: Displays the total number of notes in the track. Tracks containing no notes might be unnecessary to import.

TIP

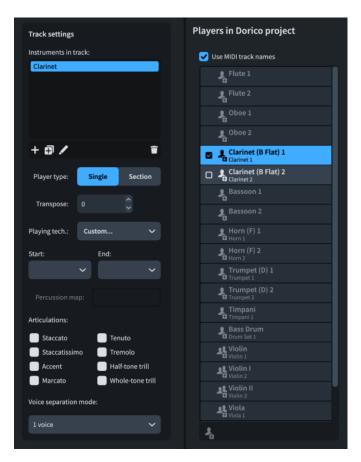
You can click each column's header to change its sort order.

The action bar at the bottom of the table contains the following options:

- **Enable Selected**: Enables the selected tracks for import.
- **Disable Selected**: Disables the selected tracks for import.
- **Invert Selection**: Switches your selection to include all tracks not previously selected.
- Select All: Selects all tracks.

Advanced editor options

Contains advanced options that allow you to control how the selected track is mapped to players in the project.



The **Advanced editor** options are divided into the following sections:

Track settings

Contains a list of instruments in the track selected in the **Tracks from the MIDI file** table and allows you to view and change details of how Dorico Elements will interpret the track.

Instruments in track list: Contains all the instruments in the selected track and
allows you to change them. For example, you might add enough horn instruments
to match the Max. sim. notes in a horn ensemble track, and therefore ensure each
instrument only plays a single note at a time.

Chords are split between instruments in tracks in pitch order; for example, piccolos receive higher notes than flutes.

The action bar at the bottom of the list contains the following options:

- Add Instrument +: Opens the instrument picker and allows you to add a new instrument to the track.
- **Duplicate Instrument 1**: Duplicates the selected instrument.
- **Change Instrument ∠**: Opens the instrument picker and allows you to change the selected instrument.
- **Delete Instrument :** Deletes the selected instrument.
- **Player type**: Allows you to choose the player type for the track.
- **Transpose**: Allows you to transpose the track by the specified number of half-steps (semitones).
- **Playing tech.**: Allows you to select the playing techniques for the track; for example, when assigning multiple tracks that represent different playing techniques to the same player.

- **Start**: The playing technique used at the start of the track.
- **End**: The playing technique used at the end of the track.

For example, for a violin part that switches between *pizzicato* and *arco*, using two tracks in the MIDI file, selecting **Pizzicato/Arco** instructs Dorico Elements to input *pizz*. and *arco* playing techniques at the appropriate positions.

- **Percussion map**: Allows you to select a percussion map for the track. Only available for percussion kits.
- **Articulations**: Allows you to select articulations you want to input on all notes in the track.
- **Voice separation mode**: Allows you to select a voice approach for chords. Only available when mapping a track to a single instrument. When mapping one track to multiple instruments or multiple tracks to one player, Dorico Elements automatically distributes notes to voices.
 - 1 voice: All music in the track is assigned to the same voice.
 - **2 voice (auto)**: Music in the track is assigned to two voices on the same staff.
 - **2 voice (fixed split point)**: Music in the track is assigned to two voices, each on its own staff, using the split point set in the **Import Options** section.
 - **2 voice (explode)**: Music in the track is assigned to two voices, each on its own staff. This option can be useful for fretted instruments.
 - 4 voice keyboard (auto): Music in the track is assigned to four voices, spread across two staves. We recommend using this option for grand staff instruments, as it can automatically detect common keyboard textures, such as bass and melody with inner chords.

Players in Dorico project

Contains a list of the players in the project to which tracks will be assigned, including existing players in the project and any new players required by the imported MIDI file. Icons for each player indicate if it is new and its type from the following options:

- Single player
- Section player

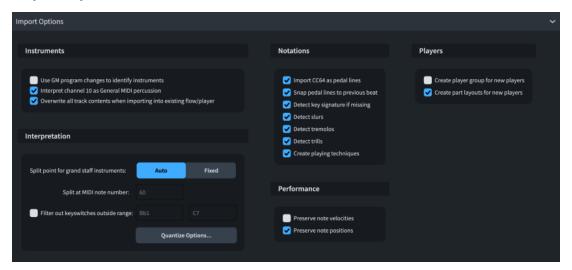
When you select an instrument in the **Instruments in track** list in the **Track settings** section, its current assigned player appears highlighted in the **Players in Dorico project** list.

You can assign instruments to other players by clicking an available player in the list. Only players of the same type and with the same instrument are available. For example, if multiple tracks represent different techniques played by the same instrument, you can assign them all to the same player.

If no instruments are assigned to a new player, it is automatically deleted.

- Use MIDI track names allows you to use MIDI track names for player names.
- Add new player for track \[\] allows you to assign the selected instrument to a new player. Only available when you have assigned more than one instrument to the same player.

Import Options



The **Import Options** section contains the following subsections:

Instruments

Contains options that determine how Dorico Elements identifies and handles instruments from the imported MIDI file.

- Use GM program changes to identify instruments: Allows you to set whether Dorico Elements uses MIDI program changes or track names to identify instruments.
- Interpret channel 10 as General MIDI percussion: Allows you to set whether Dorico Elements interprets tracks using channel 10 as conforming to the General MIDI drum set standard.
- Overwrite all track contents when importing into existing flow/player: When
 activated, imported tracks overwrite all existing music belonging to destination
 players. When deactivated, imported tracks merge with existing music belonging
 to destination players. Only applies when importing MIDI into an existing flow.

Interpretation

Contains options that determine how Dorico Elements interprets key switches and keyboard music from the imported MIDI file.

- **Split point for grand staff instruments**: Allows you to change how notes are assigned to each staff for grand staff instruments.
 - Auto: Dorico Elements automatically determines split points according to the musical context.
 - Fixed: Dorico Elements uses the set split point.
- Split at MIDI note number: Allows you set a MIDI note number at which notes are split between staves. Only available when Fixed is chosen for Split point for grand staff instruments.
- **Filter out key switches outside range**: Allows you to set the range of pitches used for notes in the MIDI file. Notes higher/lower than the set range are omitted.
- **Quantize Options**: Opens the **MIDI Quantize Options** dialog, which allows you to customize the quantization options.

NOTE

Quantization options are linked between **Preferences** > **Play** > **Quantization** and the **MIDI Import Options** dialog.

Notations

Contains options that determine the handling and detection of notations from the imported MIDI file, such as pedal lines and slurs.

NOTE

- Notation settings are linked between Preferences > Play > Recording and the MIDI Import Options dialog.
- When Detect key signature if missing is activated, Dorico Elements creates a single key signature at the start of the flow. This option works best for music with a strong tonal center that does not modulate.

Performance

Contains options that determine how much of the original performance in the MIDI file is preserved for playback purposes. They do not affect how the imported MIDI notes are notated, as this is controlled by quantization options.

NOTE

Performance settings are linked between **Preferences** > **Play** > **Recording** and the **MIDI Import Options** dialog.

Players

Contains options that determine the handling of players and layouts.

For example, if you are importing a MIDI file into an existing project in order to orchestrate, you might want to import players into their own player group without creating any extra part layouts for them.

RELATED LINKS

Changing the sustain pedal controller settings for MIDI recording/import on page 265 Unpitched percussion imported from MusicXML files on page 82

Types of actions on page 758

Player groups on page 163

Instrument picker on page 110

Quantization options

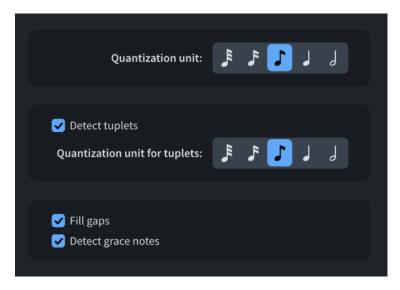
Quantization options allow you to customize the quantization you want to apply to notes when importing MIDI files, inputting notes using MIDI recording, or requantizing notes.

You can access the available quantization options in any of the following ways:

- In Preferences > Play > Quantization.
- In the MIDI Import Options dialog, click Quantize Options in the Import Options section.
- When at least one note is selected in the music area, choose Edit > Requantize.

NOTE

Quantization options are linked between **Preferences** > **Play** > **Quantization** and the **MIDI Import Options** dialog.



The following quantization options are available:

Quantization unit

Allows you to set the smallest beat unit to which you want notes to be quantized. For example, if the smallest intentional note duration in your imported file is an eighth note, set **Quantization unit** to eighth notes.

Detect tuplets

Allows you to control whether off-beat notes can be considered tuplets. If you know there are no intentional tuplets in your imported MIDI file, deactivating **Detect tuplets** ensures no notes are imported as tuplets.

Quantization unit for tuplets

Allows you to set the smallest beat unit to which you want tuplet notes to be quantized. For example, if the smallest intentional tuplet note duration in your imported file is a quarter note, set **Quantization unit for tuplets** to quarter notes.

Fill gaps

Allows you to determine whether Dorico Elements fills in gaps between short notes. If you are importing already precisely quantized music, we recommend that you deactivate **Fill gaps** to ensure that note and rest durations are notated exactly as quantized.

Detect grace notes

Allows you to determine whether Dorico Elements interprets grace notes. When deactivated, Dorico Elements turns grace notes into normal notes.

RELATED LINKS

MIDI recording on page 258 Requantizing notes on page 261 Tuplets on page 1386 Grace notes on page 983

Importing drum set patterns from Groove Agent SE

You can import Groove Agent SE patterns into drum set tracks and show them as notes; for example, if you want to include patterns in notated part layouts.

PREREQUISITE

- You have added a drum set to your project.
- The drum set is assigned to a Groove Agent SE endpoint.
 You can apply playback templates that load Groove Agent SE for drum sets automatically, or load Groove Agent SE manually and assign the drum set to the required endpoint.

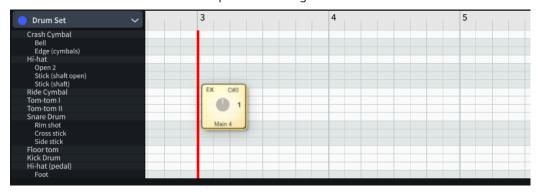
PROCEDURE

- 1. In Play mode, select the drum set track in the track overview.
- 2. In the Track Inspector, in the **Routing** section, click **Edit Instrument** <a>☑ to open the Groove Agent SE window.
- 3. At the top of the pad section, choose **Pattern** to show pattern pads.
- 4. Click and drag the pattern you want to use into one of the following places:
 - Track overview in Play mode
 - Percussion editor in the Key Editor

TIP

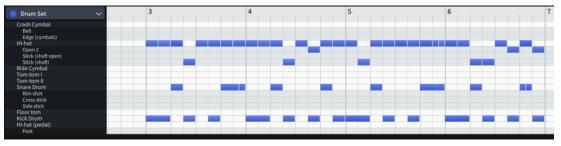
You can click and hold pattern pads to preview them.

An insertion line indicates where the pattern will begin.



RESULT

Notes in the selected pattern are imported into the corresponding drum set. They appear in the track overview, percussion editor, and notation staves in the same ways as normal notes.



TIP

For more information about Groove Agent SE, see the Groove Agent SE user manual.

RELATED LINKS

Percussion kits and drum sets on page 140
Project window in Play mode on page 505
Percussion editor on page 663
Playback templates on page 543

Playback templates on page 543

Loading VST/MIDI instruments manually on page 513

MIDI trigger regions on page 559

Changing the middle C numbering convention on page 50

Exporting MIDI

You can export flows as separate MIDI files; for example, if you want to edit the audio in further detail in a DAW. MIDI files exported from Dorico Elements contain any markers in the project by default.

PREREQUISITE

- You have opened a layout in the music area that contains the players whose MIDI you want to export.
- Playback is activated in the current project.

PROCEDURE

- 1. Choose **File** > **Export** > **MIDI** to open the **Export MIDI** dialog.
- 2. In the **Select flows to export** list, activate the checkbox for each flow you want to export. You can also click **Select All** or **Select None** at the bottom of the list.
- 3. Click Choose Folder ... beside the Export to field to open the File Explorer/macOS Finder.
- **4.** Locate and select the destination folder you want.
- 5. Click **Choose** to insert the new path in the **Export to** field.
- 6. Activate/Deactivate Create folder for exported files.
- 7. Click **OK** to export the selected flows as MIDI files and close the dialog.

RESULT

The selected flows are exported as MIDI files. They contain the MIDI of all the players assigned to the layout open in the music area.

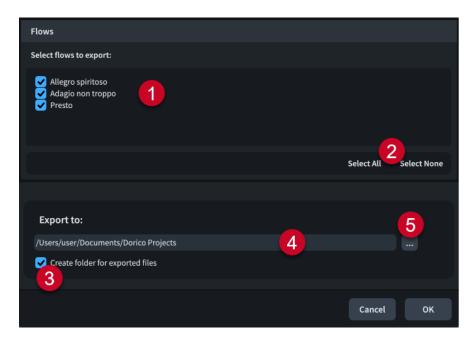
RELATED LINKS

Activating/Deactivating playback on page 527 Switching between layouts on page 42 Assigning players to layouts on page 172

Export MIDI dialog

The **Export MIDI** dialog allows you to save individual flows as separate MIDI files.

• You can open the **Export MIDI** dialog by choosing **File** > **Export** > **MIDI**.



The **Export MIDI** dialog comprises the following:

1 Select flows to export

Contains a list of all the flows in the project. Flows are included in the export when their checkbox is activated.

2 Selection options

Allow you to select/deselect all the flows in the project. For example, you can deselect all flows and then activate the checkbox of a single flow you want to export.

3 Create folder for exported files

Controls whether or not Dorico Elements generates a new folder for the selected flows within the selected export path. The automatic folder name is "Flows from" followed by the project file name; for example, "Flows from Smyth - String Quintet".

4 Export to field

Displays the export path where exported files will be saved.

5 Choose Folder

Opens the File Explorer/macOS Finder and allows you to change the export path.

Importing tempo tracks

You can import tempo tracks into individual flows and new flows in existing projects; for example, if you are writing music for a film and changes to the footage require tempo and time signature changes. This does not overwrite the notes and notations in the flow.

PROCEDURE

- 1. Choose **File** > **Import** > **Tempo Track** to open the File Explorer/macOS Finder.
- 2. Locate and select the MIDI file whose tempo track you want to import.
- 3. Click **Open** to open the **Import Tempo Track** dialog.
- **4.** In the **Import into flow** list, select the flow into which you want to import the tempo track.
- **5.** In the **Import and replace** section, activate the checkbox for each tempo track aspect you want to include.
- **6.** Optional: If you activated the checkbox for **Markers as**, choose one of the following options:

- Markers
- System-attached Text
- Optional: If you chose System Text for Markers as, activate/deactivate Show border around system-attached text markers.
- **8.** Click **OK** to import the tempo track and close the dialog.

RESULT

The tempo track is imported into the selected flow. If you selected **New Flow** in the **Import into flow** list, a new flow is added to the project. All selected aspects are applied to the existing music or the new flow, and notes and tempo marks are adjusted as required.

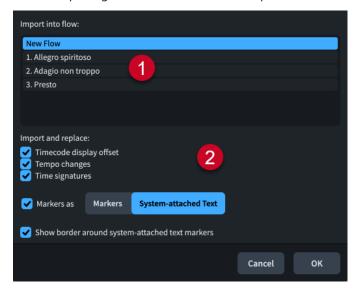
RELATED LINKS

Flows on page 167

Import Tempo Track dialog

The **Import Tempo Track** dialog allows you to import tempo tracks to individual flows within projects and to control which aspects of the tempo track you want to apply to the flow.

• You can open the **Import Tempo Track** dialog by choosing **File** > **Import** > **Tempo Track** and opening a MIDI file from the File Explorer/macOS Finder.



The **Import Tempo Track** dialog comprises the following:

1 Import into flow

Contains a list of all the flows in the project. The currently selected flow is highlighted.

NOTE

You can only import tempo tracks into a single flow at a time.

2 Import and replace

Allows you to control which tempo track aspects you want to include in your import and apply to the selected flow.

- **Timecode display offset** sets the initial timecode position at the start of the flow.
- **Tempo changes** replaces all immediate and gradual tempo changes in the flow with the tempo changes from the MIDI file.

- Time signatures replaces all time signatures in the flow with time signatures from the MIDI file
- Markers as adds any markers from the MIDI file to the flow as either Markers or System-attached Text.
 - Importing markers as **Markers** replaces any existing markers in the flow with markers from the MIDI file, while importing markers as **System-attached Text** does not replace any existing markers or system-attached text items.
- Show border around system-attached text markers adds borders to markers imported as system-attached text items when activated. Only available if you have chosen System-attached Text for Markers as.

Exporting tempo tracks

You can export flows as separate tempo tracks; for example, if you want to apply the tempo marks and time signatures of one flow to a different flow, which can be in the same project.

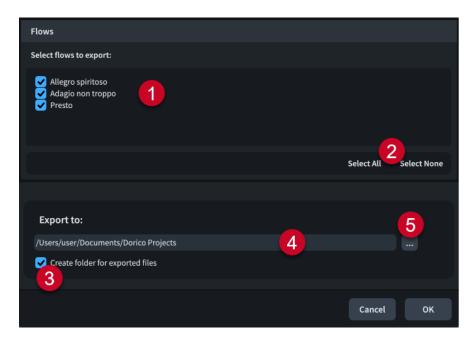
PROCEDURE

- 1. Choose File > Export > Tempo Track to open the Export Tempo Track dialog.
- Activate the checkbox for each flow you want to export as a tempo track.You can also click Select All or Select None at the bottom of the list.
- 3. Click Choose Folder beside the Export to field to open the File Explorer/macOS Finder.
- **4.** Locate and select the destination folder you want.
- 5. Click **Choose** to insert the new path in the **Export to** field.
- 6. Activate/Deactivate Create folder for exported files.
- **7.** Click **OK** to export the selected flows as tempo tracks and close the dialog.

Export Tempo Track dialog

The **Export Tempo Track** dialog allows you to save individual flows as separate tempo tracks in the format of MIDI files.

• You can open the **Export Tempo Track** dialog by choosing **File** > **Export** > **Tempo Track**.



The **Export Tempo Track** dialog comprises the following:

1 Select flows to export

Contains a list of all the flows in the project. Flows are included in the export when their checkbox is activated.

2 Selection options

Allow you to select/deselect all the flows in the project. For example, you can deselect all flows and then activate the checkbox of a single flow you want to export.

3 Create folder for exported files

Controls whether or not Dorico Elements generates a new folder for the selected flows within the selected export path. The automatic folder name is "Flows from" followed by the project file name; for example, "Flows from Smyth - String Quintet".

4 Export to field

Displays the export path where exported files will be saved.

5 Choose Folder

Opens the File Explorer/macOS Finder and allows you to change the export path.

Exporting audio

You can export projects as audio files in MP3, FLAC, or WAV formats, including exporting flows and players as separate files. For example, if you want to share an audio mock-up of only the soloist's part in the second flow.

PREREQUISITE

- You have opened a layout in the music area that contains the players whose audio you want to export.
- Playback is activated in the current project.

PROCEDURE

- 1. Choose **File** > **Export** > **Audio** to open the **Export Audio** dialog.
- 2. Activate/Deactivate Export each selected flow as a separate file.

3. In the **Select flows to export** list, activate the checkbox for each flow you want to export as audio

You can also click **Select All** or **Select None** at the bottom of the list.

- 4. Activate/Deactivate Export players as separate files.
- **5.** Optional: If you activated **Export players as separate files**, activate the checkbox for each player you want to export in the **Select players to export** list.

You can also click **Select All** or **Select None** at the bottom of the list.

- **6.** Click **Choose Folder** beside the **Export to** field to open the File Explorer/macOS Finder.
- 7. Locate and select the destination folder you want.
- **8.** Click **Choose** to insert the new path in the **Export to** field.
- 9. In the Audio Export Options section, choose one of the following audio file formats:
 - MP3 (.mp3)
 - FLAC (.flac)
 - WAV (.wav)
- 10. Optional: If you chose FLAC (.flac) or WAV (.wav), choose one of the following bit depths:
 - 16-bit
 - 24-bit
 - 32-bit (WAV files only)
- 11. Optional: If you chose WAV (.wav), activate/deactivate Broadcast WAVE.
- 12. Change the reverb tail duration by changing the value in the Reverb tail (s) value field.
- **13.** Click **OK** to export the selected flows/players with the set audio export options and close the dialog.

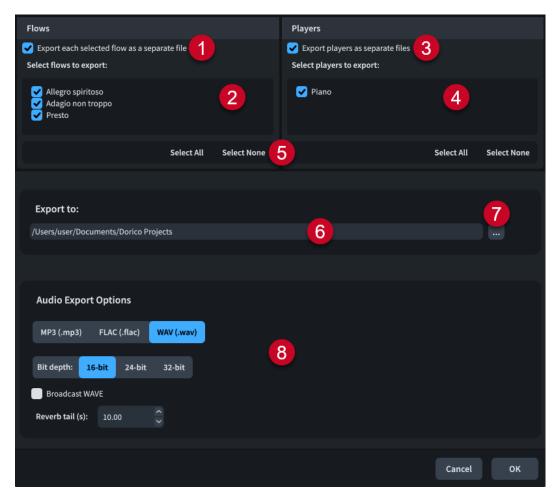
RELATED LINKS

Activating/Deactivating playback on page 527 Switching between layouts on page 42 Assigning players to layouts on page 172

Export Audio dialog

The **Export Audio** dialog allows you to export projects as audio files in MP3, FLAC, or WAV formats, including exporting flows and players as separate files.

You can open the Export Audio dialog by choosing File > Export > Audio.



The **Export Audio** dialog contains the following options and lists:

1 Export each selected flow as a separate file

Allows you to export each flow in the project as a separate audio file instead of as a single audio file.

2 Select flows to export

Contains a list of all the flows in the project. Flows are included in the export when their checkbox is activated.

3 Export players as separate files

Allows you to export each player in the project as a separate audio file instead of all players in a single audio file.

4 Select players to export

Contains a list of all the players in the project. Players are included in the export when their checkbox is activated. Only available if you have activated **Export players as separate files**.

5 Selection options

Allow you to select/deselect all the flows/players in the corresponding list. For example, you can deselect all flows and then activate the checkbox of a single flow you want to export.

6 Export to field

Displays the export path where exported audio files will be saved.

7 Choose Folder

Opens the File Explorer/macOS Finder and allows you to change the export path.

8 Audio Export Options

Contains the following options that allow you to control the audio file format and export:

- File format: Allows you to export audio as an MP3 (.mp3), FLAC (.flac) or WAV (.wav) file.
- **Bit depth**: Allows you to export FLAC files as **16-bit** or **24-bit**, and WAV files as **16-bit**, **24-bit**, or **32-bit**.
- Broadcast WAVE: Allows you to export audio in Broadcast WAVE format, which includes start timecodes and markers.
- **Reverb tail (s)**: Allows you to change the duration of time added to the end of the exported audio to accommodate reverb effects.

Exporting text

You can export all visible text in the project to a CSV file; for example, to populate catalog databases, or to proof-read text across the project.

Text exports include all fields in the **Project Info** dialog, text in text frames, text items, lyrics, tempo marks, dynamics, and so on.

PREREQUISITE

You have opened a layout in the music area that contains the visible text that you want to export.

PROCEDURE

- 1. Choose File > Export > Text to open the File Explorer/macOS Finder.
- 2. Specify a name and location for the CSV file.
- 3. Click Save.

RESULT

All visible text in the layout currently open in the music area is exported and saved in the selected location as a CSV file. By default, the CSV file opens automatically in your default application for CSV files.

TIP

You can change whether exported text CSV files open automatically in **Preferences** > **General** > **Files**.

RELATED LINKS

Switching between layouts on page 42 Preferences dialog on page 57 Project Info dialog on page 74 Exporting lyrics on page 1015 Exporting comments on page 486

Auto-save

The auto-save function stores a version of the currently active project at regular intervals, including new projects you have not explicitly saved yet. This reduces the chances of losing

significant amounts of work if you accidentally close a project without saving or in the unlikely event that Dorico Elements or your computer crashes.

Dorico Elements saves auto-saved projects in an **AutoSave** folder inside the application data folder for your user account. You cannot change this location.

NOTE

- Dorico Elements might become less responsive briefly in order to perform auto-saves, particularly for larger projects.
- Dorico Elements does not generate preview images when auto-saving.

Auto-save with multiple projects open

Only the currently activated project is auto-saved at each auto-save interval if you have multiple projects open. This is because only a single project at a time can be activated for playback. If you are switching between multiple projects frequently, we recommend that you set a smaller auto-save interval.

Removal of auto-save files

All files in the **AutoSave** folder are automatically deleted when you close their corresponding projects and also when you quit Dorico Elements. You can find deleted auto-saved projects in the bin on your computer. Dorico Elements automatically adds "[AutoSave]" to the end of auto-saved project file names so you can identify them.

IMPORTANT

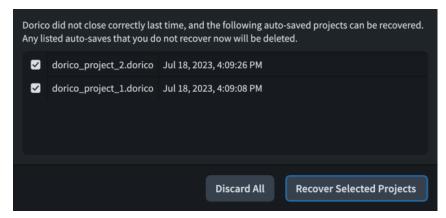
When Dorico Elements deletes files from the **AutoSave** folder, this includes any files in the folder, not just auto-saved Dorico projects. Therefore, it is important that you do not manually save anything in the **AutoSave** folder.

TIP

If you want to access earlier versions of projects, you can use project backups.

Recover Auto-saved Projects dialog

The **Recover Auto-saved Projects** dialog allows you to recover individual auto-saved projects; for example, if you accidentally closed a project without saving, or if Dorico Elements or your computer crashed.



The **Recover Auto-saved Projects** dialog contains the following:

Auto-saved projects list

Contains all the auto-saved projects that are available for recovery. Displays the file name of each project and the date and time of the auto-save.

You can activate the checkbox for each project you want to recover.

Discard All

Deletes all auto-saved projects in the list and moves them to the bin on your computer.

Recover Selected Projects

Recovers the selected auto-saved projects and opens them in separate project windows.

Recovering auto-saved projects

If Dorico Elements crashes, you can recover the most recent auto-saved version of each project that was open.

PROCEDURE

- 1. Reopen Dorico Elements.
- **2.** In the **Recover Auto-saved Projects** dialog that opens after the Dorico Elements splash screen, activate the checkbox for each auto-saved project you want to recover.

NOTE

Any auto-saved projects you do not recover are permanently deleted once you close the dialog.

3. Click **Recover Selected Projects** to recover the selected auto-saved projects and close the dialog.

RESULT

The selected auto-saved projects are recovered and opened in separate project windows.

AFTER COMPLETING THIS TASK

You can save auto-saved projects permanently in any folder location and with new file names if required.

Changing the auto-save frequency

You can change how frequently Dorico Elements auto-saves projects. By default, the auto-save interval is five minutes for the currently active project.

PROCEDURE

- 1. Press Ctrl/Cmd-, to open Preferences.
- **2.** In the category list, click **General**.
- 3. In the Files section, change the value for Auto-save every [n] minutes.
- 4. Click Apply, then Close.

Disabling auto-save

You can disable auto-save completely; for example, if it is significantly affecting the performance of a large project.

PROCEDURE

- 1. Press Ctrl/Cmd-, to open Preferences.
- 2. In the category list, click General.
- 3. In the Files section, deactivate Auto-save every [n] minutes.
- 4. Click Apply, then Close.

Project backups

Dorico Elements stores backup versions of your projects each time you save them explicitly. By default, the previous five saves are stored as backups.

Their default location is in a folder named after the corresponding project file name in the **Backup Projects** folder in the **Dorico Projects** folder, whose default location is in the **Documents** folder for your user account.

You can find deleted project backups in the bin on your computer.

Changing the number of backups per project

You can change the number of backups that Dorico Elements stores for each project; for example, if you want to store a greater range of changes.

PROCEDURE

- 1. Press Ctrl/Cmd-, to open Preferences.
- 2. In the category list, click **General**.
- 3. In the **Files** section, change the value for **Number of backups per project**.
- 4. Click Apply, then Close.

Changing the backup location

You can change the folder that Dorico Elements uses to store project backups. By default, Dorico Elements uses the **Backup Projects** folder inside your **Dorico Projects** folder, whose default location is in the **Documents** folder for your user account.

PROCEDURE

- 1. Press Ctrl/Cmd-, to open Preferences.
- 2. In the category list, click **General**.
- **3.** In the **Files** section, click **Choose** beside the **Project backup folder** field to open the File Explorer/macOS Finder.
- 4. Locate and select the folder where you want to save project backups.
- Click Select Folder (Windows)/Open (macOS) to insert the new path in the Project backup folder field.

6. Click Apply, then Close.

RESULT

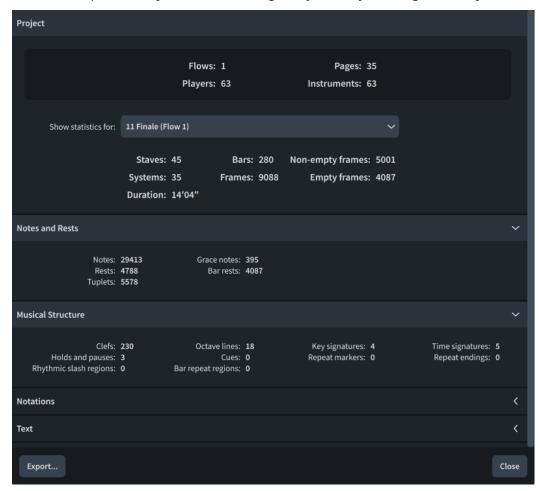
The default folder for project backups is changed. If the folder specified does not exist, Dorico Elements creates it.

Project Statistics dialog

The **Project Statistics** dialog displays and allows you to export statistics for either the whole project or only an individual flow, including the number of staves, notes, filled bars, and empty bars.

By default, Dorico Elements calculates statistics using the full score layout. For projects that contain either no or multiple full score layouts, Dorico Elements calculates statistics using the layout currently open in the music area.

• You can open the **Project Statistics** dialog in any mode by choosing **File** > **Project Statistics**.



In the **Project** section, you can use the **Show statistics for** menu to show statistics only for the selected flow.

Further sections contain various statistics for notes and notations, grouped according to their function. You can hide/show each section by clicking the corresponding section header.

At the bottom of the dialog, **Export** allows you to export project/flow statistics to a plain text file.

NOTE

In the context of project/flow statistics, a "frame" is a bar on a single staff. For example, a 24-bar flow with two staves contains 48 frames.

Exporting project statistics

You can export statistics for the whole project or only an individual flow; for example, to calculate engraving fees.

By default, Dorico Elements calculates statistics using the full score layout.

PREREQUISITE

If the project contains either no or multiple full score layouts, you have opened the layout that you want to use for generating and exporting statistics in the music area.

PROCEDURE

- 1. Choose File > Project Statistics to open the Project Statistics dialog.
- Optional: To export statistics from an individual flow only, select the flow from the Show statistics for menu in the Project section.
- **3.** At the bottom of the dialog, click **Export** to open the File Explorer/macOS Finder.
- **4.** Specify a name and location for the statistics file.
- 5. Click Save.

RESULT

Statistics for either the whole project or only the selected flow are exported to a plain text file, which opens automatically in your default text editor.

TIP

You can also open project statistics files in spreadsheet applications.

RELATED LINKS

File import and export on page 77 Switching between layouts on page 42 Creating layouts on page 171

Setup mode

Setup mode allows you to set up the fundamental elements of the project: instruments and the players that hold them, flows, layouts, and videos. You can also determine how they interact with each other; for example, by changing the players assigned to layouts.

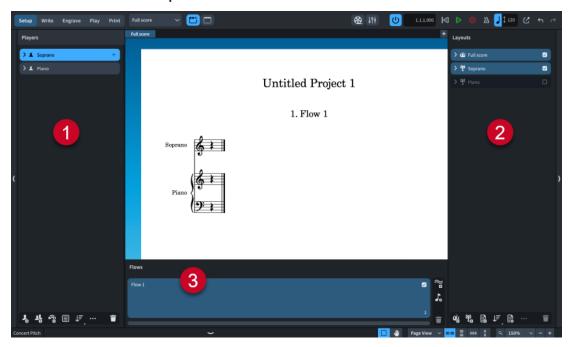
You can view music in the music area and switch between viewing other tabs and layouts, but you cannot select or interact with anything in the music area in Setup mode.

Project window in Setup mode

The project window in Setup mode contains panels with all the tools and functions that allow you to add players and instruments as well as to create layouts and flows for your project.

You can switch to Setup mode in any of the following ways:

- Press Ctrl/Cmd-1.
- In the toolbar, click **Setup**.
- Choose Window > Setup.



The following panels are available in Setup mode:

1 Players

Lists the players, instruments, and groups in your project. By default, players are assigned to all flows, all full score layouts, and their own part layout.

2 Layouts

Lists the layouts in your project. A single full score layout and a part layout for each player are created automatically, but you can create and delete layouts as required. By default, layouts contain all flows and full score layouts contain all players.

3 Flows

Shows the flows in your project, ordered left to right. By default, flows contain all players and are assigned to all layouts.

The three panels work together to allow you to control how and where the players, layouts, and flows in your project are used. When you select an item in one of the panels, that panel and the selected item are highlighted in a different color and checkboxes appear in cards in the other panels. You can activate/deactivate these checkboxes independently to change how material is distributed across players, layouts, and flows.

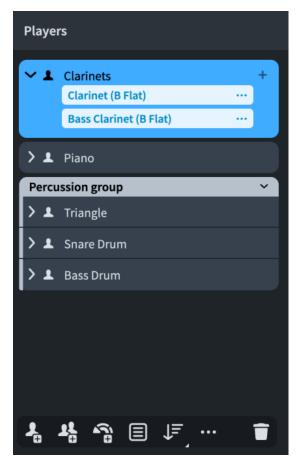
RELATED LINKS
Toolbar on page 29
Players, layouts, and flows on page 119
Starting new projects on page 70

Players panel

The **Players** panel contains all the players and player groups in the project, shown in a list. It is located on the left of the window in Setup mode.

You can hide/show the **Players** panel in Setup mode in any of the following ways:

- Press Ctrl/Cmd-7.
- Click the disclosure arrow on the left edge of the main window.
- Choose Window > Show Left Zone.



The order in which players are listed in the Players panel sets the default player order used in all layouts. You can also set a custom player order in each layout independently.

In the **Players** panel, each player is shown as a card that contains the instruments held by that player. Each player card shows the following:



1 Disclosure arrow

Expands/Collapses the player card.

2 Player type

Shows the type of player from the following options:

- Single player
- Section player

3 Player name

Shows the name of the player. By default, player names contain the names of all instruments held by the player. You can also rename players manually.

4 Add instruments icon

Opens the instrument picker, from which you can select an instrument for the player.

5 Instrument labels

Each instrument assigned to a player has its own instrument label. The instrument menu ··· in each instrument label opens a menu with further options that allow you to, for example, change the instrument names or move the instrument to another player.

Instrument labels appear blue. Kit instrument labels appear green.

The action bar at the bottom of the panel contains the following options:

Add Single Player



Adds a single player to your project. Dorico Elements also automatically adds a part layout for the player in the **Layouts** panel.

Add Section Player



Adds a section player to your project. Dorico Elements also automatically adds a part layout for the player in the **Layouts** panel.

Add Ensemble



Adds multiple players to your project. Dorico Elements also automatically adds part layouts for each player in the **Layouts** panel.

Add Group



Adds a player group to your project. If no players were selected, an empty player group is added. If existing players were selected, they are grouped together.

Sort Players



Sorts all players in the **Players** panel according to the first instrument they hold and the current instrument score order.

You can click and hold or right-click **Sort Players** to change the setting to one of the following options:

- **None**: New players are added at the bottom of the players list, regardless of their instrument.
- **Band**: Players are sorted according to the accepted wind/concert band convention; for example, strings positioned between brass and percussion.
- **Jazz**: Players are sorted according to the accepted jazz convention; for example, trumpets positioned above horns, and pitched percussion above guitars.
- Orchestral: Players are sorted according to the accepted orchestral order convention; for example, woodwinds positioned above brass and strings.

Player Settings



Allows you to access settings and controls for the selected player; for example, to rename them or show chord symbols above their staves.

You can also access player settings by right-clicking players.

Delete Player



Deletes selected players and player groups from the project. A warning message appears with further options, including allowing you to cancel.

RELATED LINKS
Players on page 121
Player groups on page 163
Ensembles on page 126

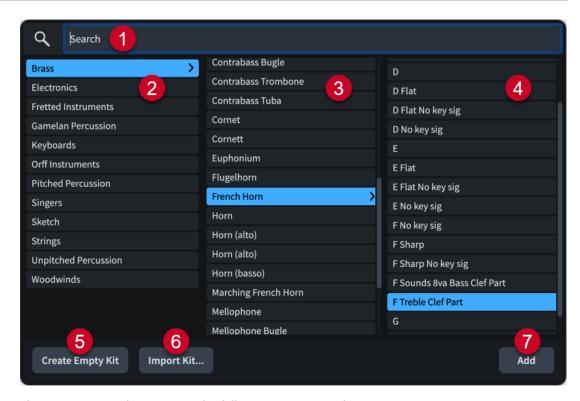
Instrument picker

The instrument picker allows you to find and add instruments to your project. It contains multiple versions of some instruments that have specific formatting and tuning requirements, such as French Horn, which has a version whose transposed pitch layouts are always in treble clef.

The instrument picker uses the application language.

You can open the instrument picker in Setup mode in any of the following ways:

- Add a new player.
- In the **Players** panel, click **Add Instrument to Player** + in player cards.
- In the **Players** panel, select a player and press **Shift-I**.
- In the **Players** panel, select a player, then click **Player Settings** in the action bar and choose **Add Instrument to Player**. You can also right-click players and choose this option from the context menu.



The instrument picker contains the following sections and options:

1 Search field

Allows you to enter the instrument you are searching for directly. You can enter only part of the instrument name, such as **cello** for Violoncello.

2 Instrument family column

Contains instrument families to help you focus your search.

3 Instrument column

Contains the instruments available in the selected instrument family.

4 Variants column

Contains variants of the selected instrument, such as alternative transpositions, tunings, key signature options, or different behavior in concert/transposed pitch layouts. This column is not populated for instruments without variants.

5 Create Empty Kit

Adds an empty percussion kit to the player.

6 Import Kit

Imports an existing percussion kit previously exported as a library file.

7 Add

Adds the selected instrument to the project.

In addition to entering the instrument you want directly into the **Search** field, you can click options in the instrument picker to select them, and you can also select other items in the same column by pressing **Up Arrow/Down Arrow**.

You can cycle forwards through the instrument picker by pressing **Tab**, which navigates in the following order: **Search field**, **Instrument**, **Variants**, **Instrument family**. You can also cycle backwards by pressing **Shift-Tab**, which navigates in the opposite direction.

An enclosure line shows which instrument family or instrument is selected when using the keyboard to navigate.

RELATED LINKS

Players on page 121

Instruments on page 128

Transposing instruments on page 130

Fretted instrument tuning on page 150

Percussion kits and drum sets on page 140

Capos on page 154

Adding players on page 122

Adding instruments to players on page 131

Changing instruments on page 132

Changing the application language on page 55

Ensemble picker

The ensemble picker allows you to find and add ensembles containing multiple players to your project. You can select existing ensembles and build new ones.

The ensemble picker uses the application language.

You can open the ensemble picker in Setup mode in any of the following ways:

- Press Shift-E.
- In the **Players** panel, click **Add Ensemble** \P .
- In empty projects, click **Add Ensemble** 🛜 in the project start area.

The ensemble picker contains **Build** and **Choose** tabs. You can switch between them using the options in the top left of the ensemble picker.

Build tab



The **Build** tab contains the following:

1 Search field

Allows you to specify the instruments you want to include in the ensemble in the following ways:

• Enter the name of an existing ensemble, such as **String Section**.

- Enter the names or abbreviations of instruments, with each name/abbreviation separated by a comma. You can prefix instruments with a number followed by a space.
 For example, enter 2 vin, 3 cl,bsn,tuba,marim to build an ensemble containing two violins, three clarinets, a bassoon, a tuba, and a marimba.
- Enter the corresponding orchestral shorthand, with or without separators. For example, enter 2picc.2.2.2 / 4.3.3.1 to add two flutes, one piccolo, two oboes, two clarinets, and two bassoons followed by four horns, three trumpets, three trombones, and one tuba.
 To specify only brass instruments, prefix orchestral shorthand entries with br, such as br4331.

NOTE

You can only use single digit numbers for each instrument type.

2 Player list

Contains the instruments currently in the ensemble based on your entries in the **Search** field.

By default, instruments are held by single players. You can change the player type by doubleclicking players in the list. Icons show the current player type from the following options:

- Single player
- Section player

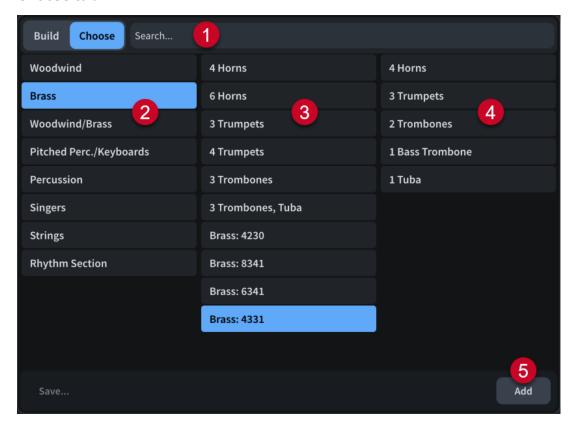
3 Save

Opens the **Save Custom Ensemble** dialog, which allows you to name and save your ensemble for reuse in future projects.

4 Add

Adds the players in the custom ensemble to the project.

Choose tab



The **Choose** tab contains the following:

1 Search field

Allows you to enter the ensemble you are searching for directly.

2 Ensemble category column

Contains ensemble categories to help you focus your ensemble search.

3 Ensemble column

Contains the ensembles available in the selected category.

4 Ensemble contents column

Displays the instruments included in the selected ensemble.

5 Add

Adds the players in the selected ensemble to the project.

RELATED LINKS

Ensembles on page 126

Players on page 121

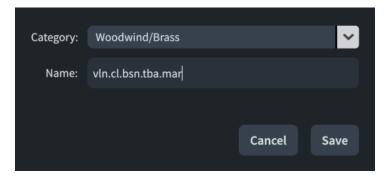
Project templates on page 76

Changing the application language on page 55

Save Custom Ensemble dialog

The **Save Custom Ensemble** dialog allows you to name and save custom ensembles for reuse in future projects.

• You can open the **Save Custom Ensemble** dialog in Setup mode from inside the ensemble picker by building a custom ensemble, then clicking **Save**.



The **Save Custom Ensemble** dialog contains the following options:

Category

Allows you to select an ensemble category for the custom ensemble.

Name

Allows you to enter a name for the custom ensemble.

RELATED LINKS

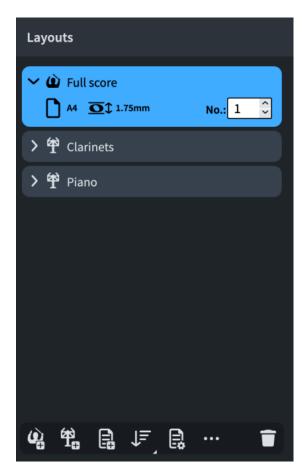
Building and saving custom ensembles on page 127

Layouts panel (Setup mode)

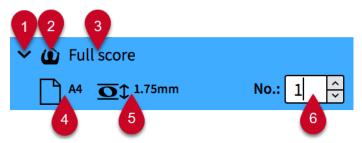
The **Layouts** panel contains all the layouts in the project, shown in a list. In Setup mode, it is located on the right of the window.

You can hide/show the **Layouts** panel in Setup mode in any of the following ways:

- Press Ctrl/Cmd-9.
- Click the disclosure arrow on the right edge of the main window.
- Choose Window > Show Right Zone.



In the **Layouts** panel, each layout is shown as a card. Each layout card shows the following:



1 Disclosure arrow

Expands/Collapses the layout card.

2 Layout type

Shows the type of layout from the following options:

- Full score layout
- Instrumental part layout
- Custom score layout

3 Layout name

Shows the name of the layout. Dorico Elements automatically adds default names depending on the name of the instrument that is assigned to a player and on the type of layout that is added. For example, if you assign a flute to a player, the instrumental part layout automatically gets the same name. If you add an empty instrumental part layout, the layout name shows **Empty part** and an incremental number if you add multiple empty part layouts.

4 Page size and orientation

Shows the size and orientation of the layout as set on the **Page Setup** page in **Layout Options**.

5 Space size

Shows the space size between two staff lines in points, as set on the **Page Setup** page in **Layout Options**. This indicates the size of staves in the layout.

6 Layout number

Allows you to set a unique number for the layout that can be used as part of its file name when exported as a graphic. This can be useful to ensure exported part layout files are organized in their orchestral order, as this is usually different to their alphabetical order.

There is a different layout number sequence for each layout type. For example, full score layouts are numbered independently of part layouts.

The action bar at the bottom of the panel contains the following options:

Add Full Score Layout



Adds a full score layout to your project. By default, every player and flow is included in the layout.

Add Instrumental Part Layout



Adds an empty instrumental part layout to your project. You can then assign one or multiple players to the layout. By default, part layouts contain all flows that originated in the project.

Add Custom Score Layout



Adds an empty custom score layout to your project. You can then assign players and flows to the layout.

Sort Layouts



Sorts all layouts in the **Layouts** panel according to their type in the following order: full score layouts, instrumental part layouts, custom score layouts.

You can click and hold or right-click **Sort Layouts** to change the setting to one of the following options:

- **Layout Number**: Sorts layouts within each category according to their current layout number.
- **Instrument Score Order**: Sorts layouts within each category according to the corresponding player order in the **Players** panel.

Layout Options



Opens the **Layout Options** dialog for the selected layouts.

Layout Settings



Allows you to access settings and controls for the selected layout; for example, to rename the layout.

You can also access layout settings by right-clicking layouts.

Delete Layout



Deletes selected layouts from the project.

RELATED LINKS

Layouts on page 170
Layout Options dialog on page 728
Layouts panel (Print mode) on page 562
File import and export on page 77
Assigning players to layouts on page 172
Assigning flows to layouts on page 173

Flows panel

The **Flows** panel contains all the flows in the project, shown in a horizontal list. It is located at the bottom of the window in Setup mode.

You can hide/show the **Flows** panel in Setup mode in any of the following ways:

- Press Ctrl/Cmd-8.
- Click the disclosure arrow at the bottom of the main window.
- Choose Window > Show Lower Zone.



In the **Flows** panel, each flow is shown as a card. Each flow card shows the following:



1 Flow name

Shows the name of the flow. If you create multiple flows without renaming them, each flow name shows a number that increments with each new flow that you create.

2 Film reel icon

Indicates the flow has an attached video.

3 Flow timecode

Shows the start timecode for the flow.

4 Flow number

Shows the number of the flow. The number increments with each new flow that you create or import. The number also indicates the position of the flow in a layout.

The **Flows** panel contains the following options:

Add Flow



Adds a new flow to your project. By default, every new flow is included in all layouts, and every player is added to the new flow.

Notation Options



Opens the **Notation Options** dialog that provides multiple options that allow you to make changes that affect the way music is notated for each flow.

Delete Flow



Deletes the selected flows from the project.

RELATED LINKS
Flows on page 167
Videos on page 185
Notation Options dialog on page 730

Players, layouts, and flows

In Dorico Elements, players, layouts, and flows are all connected to each other. Because they exist in the project rather than in a single score, you can, for example, have players and flows saved in the project without showing them in the full score.

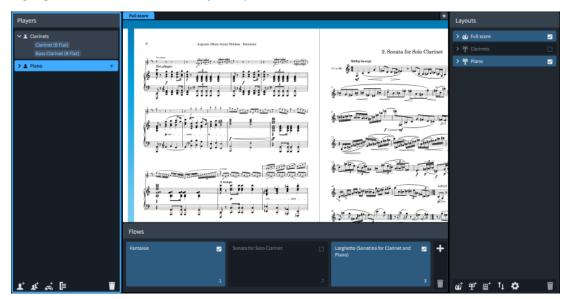
- Players can be assigned to any combination of layouts and flows. For example, you can
 assign a single player to both the full score layout and their own part layout, and remove
 them from flows in which they do not play. By default, players are assigned to all flows that
 originated in the project, all full score layouts, and their own part layout.
- Layouts can contain any combination of players and flows. For example, you can assign all the singers to a single part layout, then remove the flows in which they do not sing from the layout. By default, layouts contain all flows and full score layouts contain all players.
- Flows can contain any combination of players and be assigned to/removed from layouts. By default, flows contain all players and are assigned to all layouts.

NOTE

- If you remove a player from a flow, any notes you have already input for that player in that flow are deleted.
- Removing a flow from a layout automatically removes that layout from the flow, and vice versa. The same is true for players and layouts, and players and flows.

When you select a card in one of the panels in Setup mode, each card in the other panels shows a checkbox. Connected cards appear highlighted and have activated checkboxes, while unconnected cards are not highlighted and have deactivated checkboxes. For example, if you select a player card in the **Players** panel, all the flows to which the player is assigned are

highlighted and activated in the **Flows** panel, and all layouts to which the player is assigned are highlighted and activated in the **Layouts** panel.



A piano player selected in the **Players** panel with connected flows and layouts highlighted in the **Flows** and **Layouts** panels

EXAMPLE

A work for string quartet and choir is divided into three movements. The string quartet is tacet for the third movement, which the choir sings a cappella.

The Dorico project contains three flows (one for each movement), four single players for the string quartet, four section players for the choir, and another single player for a piano reduction. It uses the following layouts to produce the required performance materials:

- Four instrumental part layouts, one for each string quartet player. Each part layout contains all three flows but because the string players are not assigned to the third flow, automatic tacets are shown for it.
- One full score layout containing all three flows, the string quartet players, and the choir players but omitting the piano reduction player.
- One custom score layout for the vocal score. It contains all three flows, the choir players, and the piano reduction player.

RELATED LINKS

Tacets on page 623

Project Info dialog on page 74
Flows on page 167
Layouts on page 170
Creating layouts on page 171
Assigning flows to layouts on page 173
Assigning players to layouts on page 172
Assigning players to flows on page 169
Player, layout, and instrument names on page 176
File import and export on page 77

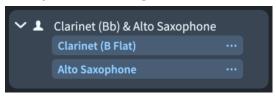
Players

In Dorico Elements, a player can represent an individual musician or multiple musicians in the same section. Players hold instruments, so you must add at least one player to your project before you can add instruments.

In Dorico Elements, there are the following types of players:

Single player

Represents an individual person who can play one or more instruments. For example, a clarinettist who doubles on alto saxophone or a percussionist who plays bass drum, clash cymbals, and triangle.



A single player in the **Players** panel in Setup mode

Section player

Represents multiple people who all play the same instrument. For example, a violin section player might represent all eight desks of the Violin I section in an orchestra, or a soprano section player might represent the whole soprano section in a mixed voice choir.



A section player in the **Players** panel in Setup mode

NOTE

Section players can only hold one instrument.

You can designate both single and section players as soloists, such as in a concerto for solo violin and orchestra.

When you add a player in Dorico Elements, the following happens automatically:

- A part layout is created and the new player is assigned to it.
- The player is added to any full score layouts that already exist. If no full score layouts exist, a new full score layout is created.
- The player is assigned to all existing flows that originated in the project. It is not added to any flows that you imported into the project.

RELATED LINKS

Instruments on page 128
Player groups on page 163
Adding ensembles on page 126
Player, layout, and instrument names on page 176
Instrument numbering on page 129
Instrument changes on page 134

Adding players

You can add both single and section players to your project. Single players can hold multiple instruments, while section players can only hold one instrument.

PROCEDURE

- **1.** In Setup mode, add an empty-handed player and open the instrument picker in any of the following ways:
 - To add a single player, either press **Shift-P**, or click **Add Single Player** 4 in the **Players** panel or project start area.
 - To add a section player, either press **Shift-Alt/Opt-P**, or click **Add Section Player** 4 in the **Players** panel or project start area.
- **2.** Select the instrument you want in the instrument picker.
- **3.** Press **Return** to add the selected instrument.

RESULT

The single/section player is added and is automatically named after the selected instrument. The player's position in the **Players** panel depends on the current instrument score order.

The player is assigned to its own new part layout, all full score layouts, and all flows that originated in the project.

Dorico Elements automatically loads sounds for the instrument according to the current playback template.

NOTE

- Players are not automatically added to flows that you imported into the project.
- If you want to add multiple instruments to your project at the same time, you can add ensembles or use a project template.

AFTER COMPLETING THIS TASK

- If you added a single player and you want them to hold multiple instruments, you can add other instruments to the single player.
- You can designate the player as a soloist.
- You can change the default order of players in all layouts and set custom player orders in each layout independently.

RELATED LINKS

Players panel on page 108

Instrument picker on page 110

Player, layout, and instrument names on page 176

Showing instrument/player names in staff labels on page 1291

Changing the language for instrument names on page 56

Instrument numbering on page 129

Adding instruments to players on page 131

Project templates on page 76

Playback templates on page 543

Duplicating players

You can duplicate existing players. This adds another player of the same type holding the same instruments as the original.

PROCEDURE

- 1. In Setup mode, in the **Players** panel, select the player you want to duplicate.
- 2. In the action bar, click **Player Settings** and choose **Duplicate Player**.

RESULT

A new player is added, with the same instruments as the original player and is named after those instruments. It is positioned in the **Players** panel according to the current instrument score order, and below the highest-numbered matching player.

The original and new players are automatically numbered to ensure their names are unique.

The new player is assigned to its own new part layout, all full score layouts, and all flows that originated in the project.

NOTE

- Any existing music belonging to the original player is not duplicated.
- You can also duplicate players by right-clicking them in the Players panel and choosing
 Duplicate Player from the context menu.

RELATED LINKS

Copying and pasting notes/items on page 445 Duplicating flows on page 168

Changing the default player order

You can change the default order in which players' staves appear in all layouts; for example, if your project requires an unconventional instrument order.

PROCEDURE

- 1. In Setup mode, in the **Players** panel, click and hold or right-click **Sort Players II**.
- **2.** Choose one of the following instrument score orders:
 - None
 - Band
 - Jazz
 - Orchestral
- 3. Optional: Click and drag players upwards/downwards.

An insertion line indicates where the players will be positioned.

RESULT

The default player order is changed. All players are automatically sorted according to first instrument they hold and the instrument score order, including if you later add or delete players.

NOTE

• This does not change the player order in layouts with custom player orders.

- When you move players manually in the Players panel, Dorico Elements automatically changes the instrument score order to None. This preserves your player order if you later add more players, for example.
- You can also select instrument score orders from the **Order** menu in the status bar.

AFTER COMPLETING THIS TASK

You can renumber instruments so that their numbering matches their default player order.

RELATED LINKS

Players panel on page 108 Status bar on page 37 Renumbering instruments on page 130 Reordering layouts on page 175

Setting custom player orders

You can change the order in which players' staves appear in each layout independently; for example, if you want to have a different player order in a custom score layout than the default player order for your other layouts, as set by the order of players in the **Players** panel.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- 2. In the Layouts list, select the layout in which you want to set a custom player order.

NOTE

You can only set custom player orders in one layout at a time. By default, the layout currently open in the music area is selected when you open the dialog.

- 3. In the category list, click Players.
- **4.** In the **Players** section, activate **Uses custom player order**.
- **5.** In the list, select a player whose position you want to change.
- **6.** Change its position relative to other players in one of the following ways:
 - Click Move up.
 - Click Move down.
- **7.** Optional: Repeat steps 5 to 6 for other players in the selected layout whose position you want to change.
- 8. Click Apply, then Close.

RESULT

The player order in the selected layout is changed. This overrides the default player order. Any subsequent changes you make to the order of players in the **Players** panel are not reflected in layouts with custom player orders.

RELATED LINKS

Layout Options dialog on page 728

Designating players as soloists

You can designate both single and section players as soloists, such as in a concerto for solo violin and orchestra. You can have multiple soloists in a single project.

PREREQUISITE

You have added the players you want to designate as soloists.

PROCEDURE

- 1. In Setup mode, in the **Players** panel, select the player you want to designate as a soloist.
- 2. In the action bar, click **Player Settings** and choose **Soloist**.

RESULT

The selected player is designated as a soloist.

Instruments held by players designated as soloists are not automatically numbered. Provided they have default instrument names, they are automatically given the prefix "Solo" as appropriate for the current instrument language setting, which appears in staff labels.

Soloists are automatically positioned in the conventional score position; that is, above the strings, and are bracketed separately from other players.

Choosing **Soloist** again, so that no tick appears beside it in the menu, returns soloists to being a normal player of their type.

TIP

You can also designate players as soloists by right-clicking them in the **Players** panel and choosing **Soloist** from the context menu.

RELATED LINKS

Players panel on page 108
Instrument numbering on page 129
Brackets according to ensemble type on page 847
Changing the positions of system objects on page 1304

Changing the language for instrument names on page 56

Staff labels on page 1287

Deleting players

You can delete players from your project, which also deletes all instruments held by those players. You can also optionally delete their part layouts.

IMPORTANT

Deleting instruments permanently deletes any music that you have input on their staves.

PROCEDURE

- 1. In Setup mode, in the **Players** panel, select the players that you want to delete.
- **2.** Delete the selected players in any of the following ways:
 - Press Backspace or Delete.
 - In the Players panel, click Delete Player .
- **3.** Choose one of the following options in the warning message that appears:

- To delete the selected players and all the instruments they hold, but leave their part layouts in the project, choose **Delete Player Only**.
- To delete the selected players, their instruments, and all corresponding part layouts, choose Delete Player and Part Layouts.

NOTE

Part layouts that also contain other players are not deleted.

RESULT

The selected players, and optionally their part layouts, are deleted.

TIP

You can delete only players without music in any flow by choosing **Setup > Delete Empty Players**.

RELATED LINKS

Players panel on page 108
Deleting instruments on page 134
Deleting layouts on page 176
Deleting player groups on page 167
Restoring default layouts on page 176
Assigning players to layouts on page 172

Ensembles

Ensembles are sets of multiple players that are commonly used together, such as a double woodwind section that contains two flutes, two oboes, two clarinets, and two bassoons. Dorico Elements provides predefined ensembles, but you can also build custom ensembles.

Ensembles can contain single and/or section players, depending on the ensemble. For example, woodwind ensembles contain single players whereas string ensembles contain section players.

You can use ensembles to add multiple players to your project simultaneously and build up the instrumentation quickly.

RELATED LINKS

Players, layouts, and flows on page 119 Project templates on page 76

Adding ensembles

You can add multiple players simultaneously by adding ensembles, such as a complete string section or four-part choir. You can select existing ensembles and build new ones.

PROCEDURE

- 1. In Setup mode, open the ensemble picker in any of the following ways:
 - Press **Shift-E**.
 - In the Players panel, click Add Ensemble
 - In an empty project, click **Add Ensemble 1** in the project start area.

- **2.** Select or build the ensemble you want in the ensemble picker.
- **3.** Optional: If you built a new ensemble that you want to reuse in future projects, click **Save** to open the **Save Custom Ensemble** dialog and save your ensemble.
- 4. Click Add.

RESULT

The players in the selected ensemble are added to the **Players** panel, as either single or section players depending on the ensemble type. They are assigned to all flows that originated in the project.

TIP

You can use project templates to start projects with multiple players.

RELATED LINKS

Players panel on page 108
Ensemble picker on page 112
Changing the language for instrument names on page 56
Starting new projects on page 70
Project templates on page 76
File import and export on page 77

Building and saving custom ensembles

You can build custom ensembles in the ensemble picker and save them for reuse in future projects; for example, if you frequently write music for an ensemble with unusual instrumentation.

PROCEDURE

- 1. In Setup mode, open the ensemble picker in any of the following ways:
 - Press Shift-E.
 - In the **Players** panel, click **Add Ensemble** \P .
 - In an empty project, click **Add Ensemble** 🛜 in the project start area.
- 2. Click **Build** to switch to the **Build** tab.
- 3. Enter the instruments you want into the **Search** field.

For example, enter **2 vln**, **3 cl**,**bsn**,**tuba**,**marim** to build an ensemble containing two violins, three clarinets, a bassoon, a tuba, and a marimba.

TIP

You can also use orchestral shorthand to specify instruments.

- **4.** Optional: To confirm the instruments identified by your current entry and clear the **Search** field, press **Tab**.
- 5. Optional: To change the player type, double-click players in the list.

 The icons for each player show whether they are single players

 or section players

 ...
- 6. Click Save to open the Save Custom Ensemble dialog.
- **7.** Select an ensemble category from the **Category** menu.
- 8. Enter a name for your ensemble in the Name field.

- 9. Click **Save** to save your ensemble and close the **Save Custom Ensemble** dialog.
- 10. Optional: Click Add to add the ensemble to the project and close the ensemble picker.

RESULT

Your ensemble is saved, allowing you to add it to future projects. If you clicked **Add** in the ensemble picker, the players in the ensemble are added to the project.

RELATED LINKS

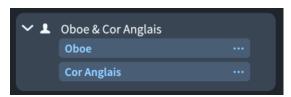
Ensemble picker on page 112 Save Custom Ensemble dialog on page 114

Instruments

In Dorico Elements, an instrument is an individual musical instrument, such as a piano, a flute, or a violin. Human voices, such as soprano or tenor, are also considered instruments.

In Dorico Elements, instruments are held by players, just as real instruments are held by human players. Section players can only hold one instrument, but single players can hold multiple instruments, which allows you to handle instrument changes easily, such as when an oboist doubling the cor anglais switches from one instrument to the other.

This means that before you can add instruments to a project, you must first add players or ensembles, which may in turn also be assigned to groups if needed. If you add ensembles, the appropriate instruments for the ensemble are automatically added to the players.



A single player holding two instruments, an Oboe and Cor Anglais, in the **Players** panel in Setup mode

Each instrument automatically gets its own staff, but when instrument changes are allowed, the music for multiple instruments held by the same single player can appear on the same staff, as long as no notes overlap. By default, Dorico Elements allows instrument changes in all layouts and automatically shows instrument change labels. This means that only the top instrument held by players is shown automatically in the music area. You can see staves for all instruments in galley view, and you can allow/disallow instrument changes in each layout independently. You can also hide/show empty staves in each layout independently.

Instruments in Dorico Elements do not have limited ranges; it is possible to notate any pitch in any register on every instrument. However, in the piano roll editor, only pitches that fall in the MIDI note range 0-127 can be represented. Similarly, if you input a pitch beyond the range of samples in the assigned VST instrument, the pitch does not sound in playback.

There are multiple variants of some instruments that have specific formatting and tuning requirements, such as French Horn, which has a version whose part layouts are always in treble clef.

You can change instruments at any time, add/delete them from players, and move them between players. You can also change the language for instrument names; for example, to recreate a French score.

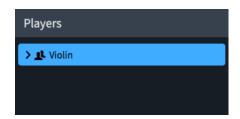
RELATED LINKS
Players on page 121

Player, layout, and instrument names on page 176
Brackets according to ensemble type on page 847
Designating players as soloists on page 125
Changing the default player order on page 123
Hiding/Showing empty staves on page 590
Piano roll editor on page 661

Instrument numbering

It is customary to number instruments when there is more than one in a piece so that they can be easily identified, such as Horn 1 and Horn 2. Dorico Elements automatically numbers instruments where there are multiple instruments of the same type in the same project.

For example, if there is only one flute in a project, it is called Flute, but if there are three flutes, they are automatically called Flute 1, Flute 2, and Flute 3.



One violin with no number



Adding a second violin automatically generates numbers for both violins

Instrument numbering applies to individual instruments, rather than players. For example, if an ensemble contains two flute players and a piccolo player, but the second flute is also holding a piccolo, then the instruments are numbered in the following way:

- Flute 1
- Flute 2 & Piccolo 1
- Piccolo 2

TIP

You can move individual instruments to different players if you want to change which numbered instruments are held by each player. For example, if you want the second flute to double second piccolo rather than first piccolo, you can swap the piccolo instruments between the players.

Dorico Elements automatically generates instrument numbers for players if the following criteria are met:

- The project contains multiple instruments with identical instrument names.
- The instruments have the same transposition.
- The players holding them are the same type, either single or section.
- The players are in the same group.

For example, if you have two flutes in your project, but one flute is a section player and the other flute is a single player, they are not numbered automatically. Similarly, if the two flutes are in different player groups, they are not numbered automatically.

NOTE

Instruments held by players designated as soloists are not automatically numbered.

RELATED LINKS

Player, layout, and instrument names on page 176 Designating players as soloists on page 125 Instrument transpositions in staff labels on page 1292 Staff label contents on page 1291

Renumbering instruments

You can renumber instruments so that their numbering matches their default player order; for example, if you want to swap the numbering of Horns 2 and 3.

PREREQUISITE

Your default player order matches the instrument numbering you want.

PROCEDURE

• In Setup mode, choose **Setup** > **Renumber Instruments**.

RESULT

Instruments are renumbered according to the order of players in the Players panel.

For players you have not already renamed, player names are updated to reflect the new instrument numbers.

RELATED LINKS

Changing the default player order on page 123
Reordering layouts on page 175
Renumbering layouts on page 175
Player, layout, and instrument names on page 176

Transposing instruments

While most instruments produce notes at concert pitch, transposing instruments produce a note that is different to the one that is written. Common transposing instruments include clarinets, horns, trumpets, saxophones, and the cor anglais.

When a clarinet in B plays a C, the sound produced is a B, one whole step (tone) below. When a horn in F plays a C, the sound produced is an F, a fifth below.

Octave-transposing instruments include the piccolo (sounding an octave above written), glockenspiel (sounding two octaves above written), and guitar and double bass (both sounding an octave below written).

Dorico Elements stores all note information in concert pitch and automatically transposes notes as appropriate for the transposition of the instrument. This means notes, key signatures, and chord symbols are automatically changed in transposing layouts compared to non-transposing layouts. You can also change instruments at any time, and the music is adjusted automatically to ensure the correct pitches are shown.

You can also change the octave of individual clefs and whether Dorico Elements respects or ignores clef octave indicators in each flow independently.

NOTE

According to convention, octave-transposing instruments always show transposed pitches, including in concert pitch layouts and without requiring clefs with octave indicators.

RELATED LINKS

Instrument transpositions in staff labels on page 1292

Making layouts transposed/concert pitch on page 173

Editing layout transposition text on page 981

Changing fretted instrument transpositions on page 158

Enharmonic equivalent key signatures on page 1006

Changing instruments on page 132

Hiding/Showing clefs according to layout transpositions on page 892

Clefs with octave indicators on page 895

Fretted instrument tuning on page 150

Capos on page 154

Adding instruments to players

You can add instruments and percussion kits to both single and section players. Single players can hold multiple instruments, while section players can only hold one instrument.

PREREQUISITE

You have added at least one player.

PROCEDURE

1. In Setup mode, in the **Players** panel, select the player to which you want to add instruments.

NOTE

- You can only add instruments to one player at a time.
- You cannot add instruments to section players who are already holding one instrument.
- 2. Open the instrument picker in any of the following ways:
 - Press Shift-I.
 - Click the plus symbol + in the player card.
- **3.** Select the instrument you want in the instrument picker.
- 4. Press Return to add the selected instrument.

RESULT

The selected instrument is added to the selected player. Dorico Elements automatically loads sounds for the instrument according to the current playback template.

If you have not already renamed the player, the player name updates to include all instruments held by the player.

NOTE

 Before you have input any notes, only the first instrument held by single players is shown in full scores in page view. All instrument staves are shown in galley view, so we recommend switching to galley view to input notes for any other instruments held by single players; for example, to create instrument changes. • If you want to add multiple players to your project at the same time, you can add ensembles or use a project template.

RELATED LINKS

Players panel on page 108

Instrument picker on page 110

Adding players on page 122

Designating players as soloists on page 125

Changing the default player order on page 123

Player, layout, and instrument names on page 176

Changing the language for instrument names on page 56

Starting new projects on page 70

Switching to galley/page view on page 49

Playback templates on page 543

Importing drum set patterns from Groove Agent SE on page 93

Note input on page 219

Changing instruments

You can change the type of instruments without affecting any music already entered onto their staves; for example, if your Clarinet part is very low and you want to change it to a Bass Clarinet, or you want to change the tuning of a guitar.

NOTE

- You cannot change percussion kits into other instruments, you can only change individual unpitched percussion instruments.
- You cannot change a pitched instrument into an unpitched instrument, and vice versa.
- These steps describe changing the instrument type, not an instrument change where a performer switches from one instrument to another partway through a flow.

PROCEDURE

1. In Setup mode, in the **Players** panel, expand the card of the player whose instrument you want to change.

The card lists the instruments held by the player.



- 2. In the instrument label, click the instrument menu and choose **Change Instrument** to open the instrument picker.
- **3.** Select the instrument you want in the instrument picker.
- **4.** Press **Return** to change to the selected instrument.

RESULT

The selected instrument is changed without affecting any music on its staff.

Where appropriate, different clefs are used by default. This means that notes can appear differently so that they are notated correctly according to the new clef.

AFTER COMPLETING THIS TASK

You can change the player order; for example, if the new instrument requires a different position according to orchestral convention.

RELATED LINKS

Players panel on page 108

Instrument picker on page 110

Transposing instruments on page 130

Fretted instrument tuning on page 150

Instrument changes on page 134

Changing the language for instrument names on page 56

Hiding/Showing instrument transpositions in staff labels on page 1292

Changing the default player order on page 123

Moving instruments

You can move individual instruments without affecting any music already input for those instruments. You can move instruments between players, or to a different position in the instrument list for a single player; for example, if you want to change the order of staves in the score.

Changing the order of instruments held by a single player also affects its player name, if you have not already renamed the player.

PREREQUISITE

You have added the players to which you want to move instruments.

PROCEDURE

- **1.** In Setup mode, in the **Players** panel, expand the cards of the players holding the instruments you want to move.
- 2. Move instruments in any of the following ways:
 - To change the order of instruments for a single player, click and drag a single instrument to the required position, then release the mouse.
 - To move instruments to another player, click and drag a single instrument to the required player card, then release the mouse.
 - To move instruments to another player, click the instrument menu in the instrument label and choose **Move Instrument to Player** > [**Player**].

RELATED LINKS

Players panel on page 108

Adding players on page 122

Changing the default player order on page 123

Setting custom player orders on page 124

Renaming players on page 177

Resetting player names on page 178

Deleting instruments

You can delete individual instruments without deleting the player holding them or other instruments held by the same player.

IMPORTANT

Deleting instruments permanently deletes any music that you have input on their staves.

PROCEDURE

- **1.** In Setup mode, in the **Players** panel, expand the card of the player holding the instrument you want to delete.
- 2. In the instrument label, click the instrument menu and choose **Delete Instrument**.
- 3. Click OK.

RESULT

The instrument is deleted from the player.

TIP

If you want to delete all instruments held by a single player, you can also delete the player.

RELATED LINKS

Players panel on page 108 Deleting players on page 125

Instrument changes

Instruments changes are when a player holding multiple instruments switches from playing one instrument to a different instrument. They are usually indicated with text labels, both after the last note before the change and at the first note after the change.



An instrument change from Oboe to Cor Anglais

Dorico Elements handles instrument changes automatically, including showing the appropriate instrument change labels, when the following criteria are met:

- You have added a single player holding at least two instruments.
- You have input notes on at least two instrument staves held by the single player, such as inputting oboe notes on the Oboe staff and cor anglais notes on the Cor Anglais staff.
- Notes for different instruments held by the same single player do not overlap.
- Instrument changes are allowed in the layout.

You can see staves for all instruments in galley view, and you can allow/disallow instrument changes in each layout independently.

By default, instrument changes occur after the last note in old instruments, instrument change labels for new instruments appear after cues on their staves, and instrument change warnings are hidden in full score layouts.

You can change the positions of instrument changes and instrument change labels in each layout independently.

Instrument change labels use the appropriate prefix for the current instrument name language setting.

RELATED LINKS

Adding players on page 122
Adding instruments to players on page 131
Switching to galley/page view on page 49
Inputting notes on page 219
Changing the language for instrument names on page 56

Allowing/Disallowing instrument changes

You can allow/disallow instrument changes in each layout independently; for example, if you want to show multiple percussion instruments on as few staves as possible in the score, but on separate staves for each percussion instrument in the percussion part.

Disallowing instrument changes shows all instrument staves in the selected layouts, including multiple instruments held by one single player.

TIP

If you want to input notes for other instruments held by single players but keep instrument changes in the layout, you can switch to galley view to see all staves in the project.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- **2.** In the **Layouts** list, select the layouts in which you want to allow/disallow instrument changes.

By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, **Shift** -clicking adjacent layouts, and **Ctrl/Cmd** -clicking individual layouts.

- **3.** In the category list, click **Players**.
- 4. In the **Instrument Changes** section, activate/deactivate **Allow instrument changes**.
- 5. Click **Apply**, then **Close**.

RESULT

Instrument changes are allowed in the selected layouts when **Allow instrument changes** is activated, and disallowed when it is deactivated.

NOTE

Multiple instruments can only appear on the same staff with an instrument change if none of their notes overlap. If any of their notes do overlap, multiple staves are shown.

RELATED LINKS

Inputting notes on page 219 Hiding/Showing empty staves on page 590 Changing instruments on page 132

Changing the position of instrument changes

You can show instrument changes either after the last note in the old instrument or before the first note in the new instrument in each layout independently. You can also change the positions of instrument change labels relative to cues.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- 2. In the **Layouts** list, select the layouts in which you want to change the position of instrument changes.

By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, **Shift** -clicking adjacent layouts, and **Ctrl/Cmd** -clicking individual layouts.

- 3. In the category list, click **Players**.
- **4.** In the **Instrument Changes** section, choose one of the following options for **Instrument transition position**:
 - After last note in old instrument
 - Before first note in new instrument
- 5. Activate/Deactivate Show instrument change label after cue, if cue precedes first note in new instrument.
- 6. Click Apply, then Close.

RESULT

Instrument changes are shown at the corresponding position in the selected layouts.

TIP

When instrument changes occur mid-system, you might prefer to show the new instrument in the staff label, if it is the first sounding instrument in the system. You can change this setting in **Layout Options** > **Staves and Systems** > **Staff Labels**.

EXAMPLE





Instrument change after last note in old instrument, and instrument change label at start of cue

Instrument change before first note in new instrument, and instrument change label after cue

RELATED LINKS

Layout Options dialog on page 728

Cues on page 902

Transposing instruments on page 130

Editing the default instrument change label text

You can change the default instrument change label prefix and whether instrument change labels show full or short instrument names by default in each layout independently; for example, if you want to show full instrument names in part layouts but short instrument names in full score layouts.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- **2.** In the **Layouts** list, select the layouts in which you want to change the default content in instrument change labels.

By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, **Shift** -clicking adjacent layouts, and **Ctrl/Cmd** -clicking individual layouts.

- 3. In the category list, click Players.
- **4.** In the **Instrument Changes** section, choose one of the following options for **Instrument** names to use in change labels:
 - Full Names
 - Short Names
- **5.** Choose one of the following options for **Prefix for instrument change warnings**:
 - To
 - Take
 - Custom

NOTE

To and **Take** prefixes appear as appropriate for the current instrument name language setting.

- **6.** Optional: If you chose **Custom**, enter the text you want in the following fields, individually or together:
 - Custom prefix
 - Custom suffix
- 7. Click Apply, then Close.

RESULT

The length of instrument names and prefixes/suffixes in all instrument change labels in the selected layouts is changed.

RELATED LINKS

Changing the language for instrument names on page 56 Staff labels on page 1287

Editing instrument change label text individually

You can override the text shown in instrument change labels individually; for example, if you want to show the full instrument name in the first instrument change label in the flow.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing 7** is selected in the Engrave toolbox.

PROCEDURE

- 1. In Engrave mode, select the instrument change labels whose text you want to edit.
- 2. In the Properties panel, activate **Custom text** in the **Instrument Changes** group.
- 3. Enter the text you want to appear in the instrument change labels into the value field.
- 4. Press Return.
- 5. Optional: Activate/Deactivate Hide prefix.

RESULT

The selected instrument change labels are changed to show the text you entered. If you activated **Hide prefix**, the prefix is hidden.

Deactivating **Custom text** returns the corresponding instrument change labels to their default text.

NOTE

- Deactivating properties permanently deletes any custom text entered.
- You can change the default instrument change label prefix and whether instrument change labels show full or short instrument names by default in each layout independently.

RELATED LINKS

Properties panel on page 646

Engrave toolbox on page 490

Changing the language for instrument names on page 56

Hiding/Showing instrument change labels at the start of flows

You can hide/show instrument change labels at the start of each flow in each layout independently. These labels can be useful for players holding multiple instruments as a way of clarifying the instrument required in their part layouts, which do not normally show staff labels.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- 2. In the **Layouts** list, select the layouts in which you want to hide/show instrument change labels at the start of flows.
 - By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, **Shift** -clicking adjacent layouts, and **Ctrl/Cmd** -clicking individual layouts.
- **3.** In the category list, click **Players**.

- **4.** In the **Instrument Changes** section, activate/deactivate **Show instrument change label at start of flow**.
- 5. Click Apply, then Close.

Hiding/Showing instrument change warnings

You can hide/show all instrument change warnings after the last notes before instrument changes in each layout independently. For example, if you want to show "To Marimba" in the percussion part layout but hide it in the full score.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- **2.** In the **Layouts** list, select the layouts in which you want to hide/show instrument change warnings.

By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, **Shift** -clicking adjacent layouts, and **Ctrl/Cmd** -clicking individual layouts.

- 3. In the category list, click Players.
- **4.** In the **Instrument Changes** section, activate/deactivate **Show instrument change** warnings.
- **5.** Click **Apply**, then **Close**.

Instrument change label paragraph styles

There are different paragraph styles for instrument change labels and instrument change warnings. You can change different aspects of these paragraph styles in the **Paragraph Styles** dialog, such as hiding/showing borders for each type of label.

By default, borders are shown on instrument change labels but not shown on instrument change warnings.



The following paragraph styles are used for instrument change labels:

- 1 Instrument Change Warnings: Used for warning labels before instrument changes
- 2 Instrument Change Labels: Used for labels after instrument changes

RELATED LINKS

Paragraph Styles dialog on page 739 Hiding/Showing borders on layout names on page 982 Adding borders to text items on page 1335

Percussion kits and drum sets

A percussion kit is a collection of unpitched percussion instruments that are played by a single player. Drum sets are a particular type of percussion kit that are often used in pop and rock music.

NOTE

In this documentation, we use "percussion kit" to refer to both percussion kits and drum sets.

In Dorico Elements, you can present percussion kits in different ways, including as a five-line staff and as a grid. If you want percussion kits to behave as drum sets, you can define them as drum sets. For example, there are options on the **Percussion** page in **Notation Options** for handling voices that only apply to drum sets.

You can add percussion kits to projects in the following ways:

- Add percussion kits to players in the same way as adding instruments.
- Combine existing unpitched percussion instruments held by a single player into kits.
- Add empty kits to players, to which you can then add unpitched percussion instruments.
- Import existing kits you have previously exported and saved.

You can move percussion instruments between players without affecting any music already added to that instrument. If the instrument you want to move is combined into a percussion kit, you must first remove the instrument from the kit before you can move it to another player.

You can change individual percussion instruments like any other instrument. However, you can only change unpitched percussion instruments to other unpitched percussion instruments, and you can only change the percussion instruments in kits within the **Edit Percussion Kit** dialog.

Percussion kit instrument labels appear green in the **Players** panel in Setup mode.



A single player holding a percussion kit in the **Players** panel in Setup mode

RELATED LINKS

Percussion kit presentation types on page 1406
Playing techniques for unpitched percussion instruments on page 1398
Staff labels for percussion kits on page 1297
Adding instruments to players on page 131
Inputting notes for unpitched percussion on page 233
Importing drum set patterns from Groove Agent SE on page 93

Edit Percussion Kit dialog

The **Edit Percussion Kit** dialog allows you to make changes to percussion kits, including which instruments they contain and how instruments are arranged in the different available kit presentations.

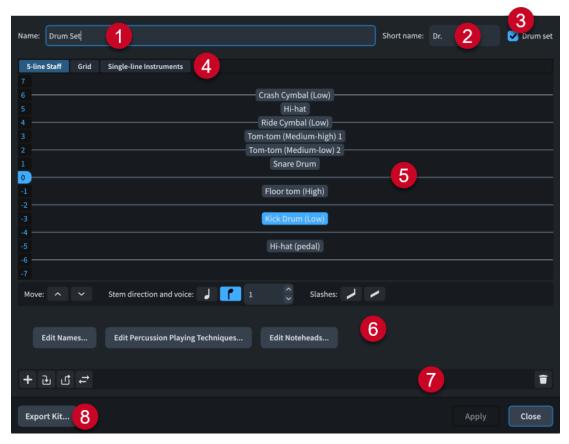
You can open the **Edit Percussion Kit** dialog in any of the following ways:

• Add an empty percussion kit or combine existing instruments into a percussion kit.

• In Setup mode, in the **Players** panel, expand the card of a player holding a percussion kit, then click the instrument menu in the kit instrument label and choose **Edit Percussion Kit**.

TIP

Percussion kit instrument labels are green in the **Players** panel in Setup mode.



1 Name

Allows you to enter or change the full name for the percussion kit. This is used in **Full** staff labels for percussion kits that use the five-line staff presentation type.

2 Short name

Allows you to enter or change the abbreviated name for the percussion kit. This is used in **Abbreviated** staff labels for percussion kits that use the five-line staff presentation type.

3 Drum set

Percussion kits are defined as drum sets when the checkbox is activated. Percussion kits that are defined as drum sets follow your settings for drum sets on the **Percussion** page in **Notation Options**, including for voicing and default stem directions.

4 Presentation types

Allows you to select a percussion kit presentation type in order to edit how the selected percussion kit appears in that presentation type.

• **5-line Staff**: Kit instruments are shown on a five-line staff. You can determine which instruments are shown on each line and in each space of the staff. A single staff label containing the name of the kit is shown.

- **Grid**: Kit instruments are shown on a grid, with each instrument on its own line. You can customize how large the gaps between each line are. Staff labels are shown for each instrument in a smaller font than normal staff labels.
- Single-line Instruments: Kit instruments are shown as individual instruments with their own lines. Normal-sized staff labels are shown for each instrument.

5 Editor

Displays the current arrangement of instruments in the selected percussion kit presentation type. You can change the order of instruments and the layout of lines and spaces in the grid presentation type by using the controls.

6 Controls

Allows you to change the order and stem direction of instruments in the selected percussion kit presentation type. It also allows you to add slash voices to the kit.

• **Edit Names**: Opens the **Edit Instrument Names** dialog, which allows you to change the names of the currently selected instrument.

NOTE

This changes the appearance of percussion instrument names in all presentations. Depending on the percussion kit presentation type, staff labels might use different information than these instrument names.

- Edit Percussion Playing Techniques: Opens the Percussion Instrument Playing Techniques dialog, which allows you to change how combinations of noteheads, articulations, and tremolos affect playback for the currently selected instrument.
- Edit Noteheads: Opens the Override Percussion Noteheads dialog, which allows you
 to override the noteheads used by the currently selected instrument in five-line staff kit
 presentations.

7 Action bar

Contains options that apply to all presentation types.

- Add New Instrument : Opens the instrument picker, which allows you to choose a new unpitched percussion instrument to be added to the kit.
- Add Existing Instrument From Player : Shows a menu listing the other players in your project that are holding individual percussion instruments not in kits. You can select a percussion instrument from another player to move to this kit, bringing its music with it.
- **Remove Instrument From Kit** Removes the selected instrument from the kit, so it appears as an individual instrument. You can move individual instruments to other players or into other kit instruments.
- **Change Instrument** Opens the instrument picker, which allows you to choose a new unpitched instrument to replace the selected instrument while retaining its music.
- **Delete Instrument** : Deletes the instrument from the kit, including its music.

8 Export Kit

Allows you to export the percussion kit as a library file so you can use it in other projects.

RELATED LINKS

Players panel on page 108 Voices in percussion kits on page 1413 Percussion kit presentation types on page 1406 Edit Instrument Names dialog on page 180 Percussion Instrument Playing Techniques dialog on page 1399 Override Percussion Noteheads dialog on page 1401 Playing technique-specific noteheads on page 1399 Inputting notes for unpitched percussion on page 233

Adding empty percussion kits to players

You can add empty percussion kits to players, to which you can then add unpitched percussion instruments.

NOTE

You cannot add percussion kits to section players that are already holding one instrument.

PREREQUISITE

You have added at least one player.

PROCEDURE

- In Setup mode, in the Players panel, open the Edit Percussion Kit dialog in any of the following ways:
 - Select a player, press **Shift-I**, and click **Create Empty Kit** in the instrument picker.
 - Click the plus symbol + in a player card and click **Create Empty Kit** in the instrument picker.
 - Select a player, then click **Player Settings** in the action bar and choose **Create Empty Kit.** You can also right-click players and choose this option from the context menu.
- 2. Add the percussion instruments you want to the kit in the Edit Percussion Kit dialog.

RELATED LINKS

Players panel on page 108

Percussion kits vs. individual percussion instruments on page 1397

Instrument picker on page 110

Percussion kit presentation types on page 1406

Changing the language for instrument names on page 56

Adding instruments to percussion kits

You can add new instruments to percussion kits within the Edit Percussion Kit dialog.

PROCEDURE

- 1. In Setup mode, in the **Players** panel, expand the card of the player holding the kit to which you want to add instruments.
- 2. In the kit instrument label, click the instrument menu and choose **Edit Percussion Kit** to open the **Edit Percussion Kit** dialog.
- 3. Click **Add New Instrument** to open the instrument picker.
- 4. Select the percussion instrument you want in the instrument picker.
- **5.** Press **Return** to add the selected instrument.
- 6. Click Close.

RESULT

The selected instrument is added to the percussion kit.

RELATED LINKS

Players panel on page 108

Percussion kit presentation types on page 1406

Inputting notes for unpitched percussion on page 233

Changing the language for instrument names on page 56

Combining individual percussion instruments into kits

If a player is holding one or more individual percussion instruments, you can combine them into a percussion kit.

PROCEDURE

- 1. In Setup mode, in the **Players** panel, select the player whose percussion instruments you want to combine into a kit.
- 2. In the action bar, click **Player Settings** and choose **Combine Instruments into Kit** to open the **Edit Percussion Kit** dialog.

TIP

You can also right-click players and choose this option from the context menu.

3. Edit the new percussion kit.

For example, you can change the order in which the instruments appear in a grid or on a five-line staff.

RESULT

A new kit is created containing all the instruments held by the player.

NOTE

If the player was already holding one or more kit instruments, all individual instruments and any other kits are combined into the first kit.

Removing individual instruments from percussion kits

You can remove individual instruments from percussion kits without affecting other instruments in the kit. For example, if you want to move an instrument from one percussion kit to another player.

PROCEDURE

- **1.** In Setup mode, in the **Players** panel, expand the card of the player holding the kit from which you want to remove instruments.
- 2. In the kit instrument label, click the instrument menu and choose **Edit Percussion Kit** to open the **Edit Percussion Kit** dialog.
- 3. Click the instruments you want to remove from the kit.
- **4.** Click **Remove Instrument From Kit** in the action bar.
- 5. Click Close.

The selected instruments are removed from the percussion kit. They appear as individual instruments belonging to the same player.

AFTER COMPLETING THIS TASK

You can move the instruments to other players if required.

RELATED LINKS

Players panel on page 108

Moving instruments on page 133

Defining percussion kits as drum sets

You can define individual percussion kits as drum sets. Drum sets follow your per-flow notation options for voicing in drum sets with five-line staff presentations.

PROCEDURE

- 1. In Setup mode, in the **Players** panel, expand the card of the player holding the kit you want to define as a drum set.
- 2. In the kit instrument label, click the instrument menu and choose **Edit Percussion Kit** to open the **Edit Percussion Kit** dialog.
- **3.** Activate **Drum set** in the top right of the dialog.
- 4. Click Apply, then Close.

RESULT

The selected percussion kit is defined as a drum set. The arrangement of voices for instruments in the kit when using the five-line staff presentation type follows your per-flow setting on the **Percussion** page in **Notation Options**.

TIP

If you no longer want a percussion kit to be defined as a drum set, you can deactivate **Drum set** in the **Edit Percussion Kit** dialog for that kit.

RELATED LINKS

Players panel on page 108

Voices in percussion kits on page 1413

Notation Options dialog on page 730

Changing instruments in percussion kits

You can change existing instruments in percussion kits while retaining any existing music for that instrument.

- **1.** In Setup mode, in the **Players** panel, expand the card of the player holding the kit in which you want to change instruments.
- 2. In the kit instrument label, click the instrument menu and choose **Edit Percussion Kit** to open the **Edit Percussion Kit** dialog.
- **3.** Click the instrument you want to change.

- **4.** Click **Change Instrument** in the action bar to open the instrument picker.
- **5.** Select the percussion instrument you want in the instrument picker.
- **6.** Press **Return** to change to the selected instrument.
- **7.** Click **Close**.

The instrument is changed to the one selected in the instrument picker. Any music input for the previous instrument is retained.

NOTE

Playing techniques expressed using playing technique-specific noteheads are not retained.

RELATED LINKS

Playing technique-specific noteheads on page 1399 Changing the language for instrument names on page 56

Moving instruments in percussion kits

You can change the positions of instruments within percussion kits of all presentation types to change the order in which the instruments appear in the score and parts. In five-line staff presentation types, you can also change the staff position of slash voices.

PROCEDURE

- 1. In Setup mode, in the **Players** panel, expand the card of the player holding the kit in which you want to change the positions of instruments.
- 2. In the kit instrument label, click the instrument menu and choose **Edit Percussion Kit** to open the **Edit Percussion Kit** dialog.
- **3.** Click the kit presentation type in which you want to change the order of instruments. For example, click **Grid** to change the order of instruments when the kit uses the grid presentation type.
- 4. Click the percussion instruments and/or slash voices whose position you want to change.

NOTE

When using the mouse, you can only move one instrument or slash voice at a time.

- **5.** Change the position of the selected instruments/slash voices in any of the following ways:
 - To move them upwards, click Move Up ...
 - To move them downwards, click Move Down ▼.
 - Click and drag a single instrument upwards/downwards (five-line staff presentation only).
- **6.** Optional: Repeat these steps for other instruments in the percussion kit, and for other kit presentation types for the same percussion kit.
- 7. Click Apply, then Close.

The positions of the selected instruments and/or slash voices within the kit is changed. Multiple instruments can share the same staff position, but we recommend that they use different noteheads so that the player can tell them apart.

RELATED LINKS

Players panel on page 108

Percussion kit presentation types on page 1406

Playing technique-specific noteheads on page 1399

Moving notes to other instruments in percussion kits on page 452

Inputting notes for unpitched percussion on page 233

Creating groups of instruments within grid presentation percussion kits

You can create groups of instruments within percussion kits that use the grid presentation type in order to have a better overview of the instruments in the kit.

In grid presentation percussion kits, the name of each individual instrument is shown in the staff label. You can simplify the staff label of grid presentation percussion kits by creating groups; for example, to show "Wood Blocks" instead of "Wood Block (High)", "Wood Block (Medium)", and "Wood Block (Low)".

PROCEDURE

- 1. In Setup mode, in the **Players** panel, expand the card of the player holding the kit in which you want to create groups in the grid presentation.
- 2. In the kit instrument label, click the instrument menu and choose **Edit Percussion Kit** to open the **Edit Percussion Kit** dialog.
- 3. Click **Grid** at the top of the dialog.
- **4.** Click the first instrument you want to include in the group.
- 5. Shift -click the last instrument you want to include in the group.

NOTE

You can only include adjacent instruments in groups.

6. Click Add

RESULT

A group is created containing the selected instruments. The group is given a default name that you can change.

RELATED LINKS

Players panel on page 108

Percussion kit presentation types on page 1406

Renaming groups in grid presentation percussion kits

Group names are shown as instrument labels. You can change the names of groups in percussion kits using the grid presentation type.

PROCEDURE

- **1.** In Setup mode, in the **Players** panel, expand the card of the player holding the kit whose grid presentation groups you want to rename.
- 2. In the kit instrument label, click the instrument menu and choose **Edit Percussion Kit** to open the **Edit Percussion Kit** dialog.
- 3. Click **Grid** at the top of the dialog.
- **4.** Double-click the group you want to rename to open the **Edit Percussion Grid Group Names** dialog.

Groups are shown as colored blocks in the column to the left of the list of percussion kit instruments.

- **5.** Enter the names you want to give the group in the corresponding fields in the **Edit Percussion Grid Group Names** dialog:
 - Full Name
 - Short Name
- **6.** Click **OK** to save your changes and close the dialog.

RESULT

The name of the group is changed. This also changes the staff label for the group.

NOTE

Staff labels for groups in grid presentation percussion kits use a different paragraph style to the staff labels for non-grouped instruments in grid presentation percussion kits.

EXAMPLE

Ride Cymbal Hi-hat	Ride Cymbal Hi-hat	
Wood Block 1 Wood Block 2 Wood Block 3	Wood blocks	
Tom 1 Tom 2 Kick Drum	Tom 1 Tom 2 Kick Drum	

Ungrouped grid presentation percussion kit

Grid presentation percussion kit with wood blocks grouped

RELATED LINKS

Staff labels for percussion kits on page 1297

Deleting groups within grid presentation percussion kits

You can delete groups in percussion kits using the grid presentation type without deleting the instruments within the group.

PROCEDURE

- **1.** In Setup mode, in the **Players** panel, expand the card of the player holding the kit from whose grid presentation you want to delete groups.
- 2. In the kit instrument label, click the instrument menu and choose **Edit Percussion Kit** to open the **Edit Percussion Kit** dialog.
- 3. Click **Grid** at the top of the dialog.
- **4.** Click the group you want to delete.
 - Groups are shown as colored blocks in the column to the left of the list of percussion kit instruments.
- 5. Click Delete .

RESULT

The group is deleted. The individual staff labels for each instrument in the group are restored.

Changing the size of gaps between lines in percussion grids

You can change the size of gaps between lines in percussion kits using the grid presentation type.

PROCEDURE

- 1. In Setup mode, in the **Players** panel, expand the card of the player in whose percussion kit you want to change the size of gaps in the grid presentation.
- 2. In the kit instrument label, click the instrument menu and choose **Edit Percussion Kit** to open the **Edit Percussion Kit** dialog.
- 3. Click **Grid** at the top of the dialog.
- 4. Click the instruments below which you want to change the gap size.
- 5. Change the value for **Gap**.
- 6. Click Apply, then Close.

RESULT

The size of the gaps below the selected instruments is changed.

Exporting percussion kits

You can export percussion kits as .doricolib files. This allows you to use kits again without having to create them from scratch.

- 1. In Setup mode, in the **Players** panel, expand the card of the player whose percussion kit you want to export.
- 2. In the kit instrument label, click the instrument menu and choose **Edit Percussion Kit** to open the **Edit Percussion Kit** dialog.

- 3. Click **Export Kit** at the bottom of the dialog to open the File Explorer/macOS Finder.
- **4.** In the File Explorer/macOS Finder, specify a name and location for the library file.
- 5. Click Save.

The kit is exported and saved as a .doricolib file.

TIP

You can later import the .doricolib file into other projects to reuse the percussion kit.

RELATED LINKS

Players panel on page 108

Importing percussion kits

You can import .doricolib files containing percussion kits, which allows you to use kits again without having to create them from scratch.

PREREQUISITE

Your project contains at least one single player or empty-handed section player.

PROCEDURE

- 1. In Setup mode, in the **Players** panel, open the instrument picker for the player to which you want to assign the imported percussion kit in any of the following ways:
 - Select the player and press **Shift-I**.
 - Click the plus symbol + in the player card.
 - Select the player, then click **Player Settings** in the action bar and choose **Add Instrument to Player**. You can also right-click players and choose this option from the
- 2. Click **Import Kit** in the instrument picker to open the File Explorer/macOS Finder.
- 3. Locate and select the percussion kit .doricolib file you want to import.
- 4. Click Open.

RESULT

The selected .doricolib file is imported as a percussion kit. It is assigned to the player from whose card you opened the instrument picker.

RELATED LINKS

Players on page 121

Players panel on page 108

Fretted instrument tuning

Fretted instruments can have different numbers of strings and frets. In order to display tablature for fretted instruments in Dorico Elements, you must specify information about the tuning of fretted instruments.

Dorico Elements requires the following information to display tablature:

- The number of strings the instrument has
- The open pitch of each string
- The number of frets
- The fret number at which each string starts, such as for the fifth string on a banjo
- The pitch intervals between frets
- The fret number of the capo, if applicable

When you add a fretted instrument or change an existing instrument, any available tunings for that instrument are shown in the instrument picker.

You can also customize all aspects of fretted instruments in the **Edit Strings and Tuning** dialog, including adding capos.

RELATED LINKS

Instrument picker on page 110

Capos on page 154

Changing the middle C numbering convention on page 50

Chord symbols on page 852

Chord diagrams on page 875

Tablature on page 1308

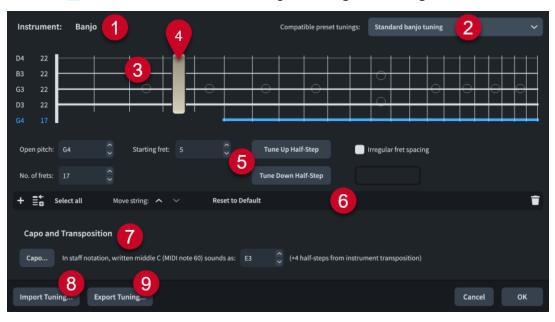
Guitar bends on page 1103

Guitar techniques on page 1118

Edit Strings and Tuning dialog

The **Edit Strings and Tuning** dialog allows you to customize the tuning of individual fretted instruments by changing the number of strings and frets they have, the pitches of their open strings, and the spacing of their frets. It also allows you to add/remove capos and change the fretted instrument transposition.

• You can open the **Edit Strings and Tuning** dialog in Setup mode by expanding the card of the player holding the fretted instrument in the **Players** panel, then clicking the instrument menu ··· in its instrument label and choosing **Edit Strings and Tuning**.



The **Edit Strings and Tuning** dialog comprises the following:

1 Instrument

Displays the name of the selected fretted instrument.

2 Compatible preset tunings

Allows you to select preset fretted instrument tunings with the same number of strings as the selected fretted instrument. If your changes in the dialog match a preset tuning, it is automatically selected.

3 String editor

Allows you to select and edit individual or all strings of the fretted instrument. The arrangement of strings in the editor matches that of the real instrument. The pitch and total number of frets of each string is shown to the left of the vertical line that represents the nut.

You can navigate through strings by pressing **Up Arrow** / **Down Arrow** , and to top/bottom strings by pressing Page Up/Page Down.

4 Capo representation

Indicates the fret position and extent of the capo added to the fretted instrument.

5 Controls

Allow you to edit individual or multiple strings. The following controls are available when at least one string is selected in the string editor:

- Open pitch: Allows you to set the open pitch of the string using the appropriate note name and octave for your middle C numbering convention setting, such as C4 for middle C. If necessary, you can add # for sharp and b for flat.
- No. of frets: Allows you to set the number of frets for the selected strings.
- **Starting fret**: Allows you to set the number of the first fret on the selected strings. For example, the fifth string on the banjo starts at fret 5.
- **Tune Up Half-Step**: Allows you to raise the open pitch of the selected strings by a half-step (semitone).
- **Tune Down Half-Step**: Allows you to lower the open pitch of the selected strings by a half-step (semitone).
- Irregular fret spacing: Allows you to set non-chromatic fret arrangements for instruments with fretboards that correspond to other scales, such as the dulcimer. Enter 1 for a half-step and 2 for a whole step, with each step separated by a comma. For example, enter 2,2,1,2,2,2,1 to set the pattern for a major scale.

6 Action bar

Contains options that allow you to change the number and arrangement of strings.

- Add String : Adds a new string below the lowest currently selected string. The new string is a duplicate of the lowest currently selected string.
- Add String at Top **E**: Adds a new string at the top of the fretboard. The new string is a duplicate of the previous top string.
- **Select all**: Selects all strings at once.
- **Move string buttons**: Allow you to move the currently selected strings up/down the fretboard.
- **Reset to Default**: Returns all strings and corresponding tunings to the factory default settings for the fretted instrument.
- Delete String : Deletes the selected strings.

7 Capo and Transposition section

Contains options that allow you to change the capo and fretted instrument transposition.

- **Capo**: Opens the **Capo Definition** dialog, which allows you to add full and partial capos to fretted instruments.
- In staff notation, written middle C (MIDI note 60) sounds as: Allows you to change the transposition of the selected fretted instrument. The pitch determines the spelling of notes and chord symbols for the corresponding number of half-steps.

8 Import Tuning

Opens the File Explorer/macOS Finder, where you can select the .doricotuning file that you want to import and apply to the fretted instrument.

9 Export Tuning

Opens the File Explorer/macOS Finder, where you can select the location to which you want to export the strings and tuning settings of the fretted instrument as a .doricotuning file. You can then import the .doricotuning file into other instruments/projects and share it with other users.

RELATED LINKS

Players panel on page 108
Chord diagrams on page 875
Tablature on page 1308
Capos on page 154
Changing the middle C numbering convention on page 50

Changing the open pitches of fretted instrument strings

You can change the open pitch of each fretted instrument string independently; for example, if your project requires an unconventional tuning that is not available as an instrument variant in the instrument picker.

PROCEDURE

- **1.** In Setup mode, in the **Players** panel, expand the card of the player holding the fretted instrument whose open pitches you want to change.
- 2. In the instrument label, click the instrument menu and choose **Edit Strings and Tuning** to open the **Edit Strings and Tuning** dialog.
- **3.** Select the string whose open pitch you want to change.
- 4. Change the Open pitch value; for example, to G2.
- **5.** Optional: Repeat steps 3 and 4 to change the open pitch of other strings.
- **6.** Click **OK** to save your changes and close the dialog.

RESULT

The open pitches of the selected strings are changed. This affects the tuning of the instrument and the pitch of all fret positions on those strings.

The new tuning becomes available for chord diagrams.

RELATED LINKS

Players panel on page 108 Chord diagrams on page 875

Exporting fretted instrument tunings

You can export fretted instrument tunings so you can reuse them for other instruments and in other projects. Fretted instrument tunings are exported as .doricotuning library files.

PROCEDURE

- 1. In Setup mode, in the **Players** panel, expand the card of the player holding the fretted instrument whose tuning you want to export.
- 2. In the instrument label, click the instrument menu and choose **Edit Strings and Tuning** to open the **Edit Strings and Tuning** dialog.
- 3. Click **Export Tuning** at the bottom of the dialog to open the File Explorer/macOS Finder.
- 4. In the File Explorer/macOS Finder, specify a name and location for the library file.
- 5. Click Save.

RESULT

The tuning of the selected fretted instrument is exported and saved as a .doricotuning library file.

AFTER COMPLETING THIS TASK

You can import the library file into other projects to reuse the fretted instrument tuning.

Importing fretted instrument tunings

You can import custom fretted instrument tunings that you have already created and apply them to instruments. This allows you to reuse tunings without having to create them from scratch.

PROCEDURE

- 1. In Setup mode, in the **Players** panel, expand the card of the player holding the fretted instrument to which you want to apply an imported tuning.
- 2. In the instrument label, click the instrument menu and choose **Edit Strings and Tuning** to open the **Edit Strings and Tuning** dialog.
- **3.** Click **Import Tuning** at the bottom of the dialog to open the File Explorer/macOS Finder.
- 4. Locate and select the .doricotuning library file you want to import.
- 5. Click Open.

RESULT

The selected .doricotuning file is applied to the fretted instrument. The imported tuning becomes available for chord diagrams.

Capos

Capos are devices that performers clamp onto the necks of fretted instruments to depress strings at a single fret position. This raises the sounding pitch of open strings affected by the capo, allowing performers to use the same fingerings and chord shapes but produce higher pitches.

In Dorico Elements, you can allow capos to affect your notated music in the following ways, independently of each other:

- You can change the pitches shown on tablature by adding capos to fretted instruments.
 Dorico Elements treats capos as fret 0 for fret numbers on tablature. Capos added to individual fretted instruments appear at the corresponding fret position and crossing the specified strings in the Edit Strings and Tuning dialog and in the Fretboard panel.
- You can change fretted instrument transpositions to reflect capos or detuned fretted instruments, and optionally allow fretted instrument transpositions to affect pitches on notation staves and in main chord symbols.
- You can define capos for chord symbols/diagrams in the music and/or used chord diagrams grids, and show only main chords, only capo chords, or both.

For example, you can show capo pitches on tablature but show sounding pitches on notation staves. You can also show both main and capo chords in chord symbols in layouts that do not contain a fretted instrument, such as when creating lead sheets in vocal part layouts.

RELATED LINKS

Tablature on page 1308 Chord symbols on page 852

Chord diagrams on page 875

Making layouts transposed/concert pitch on page 173

Assigning players to layouts on page 172

Edit Strings and Tuning dialog on page 151

Fretboard panel on page 204

Capo vs. main chords

For the same chord symbol, Dorico Elements can show its original pitch only, its sounding pitch based on the defined capo only, or both with capo chords above or below main chords.

Main chord

The original chord symbol you input. Its displayed pitches depend on whether the layout is transposing or concert pitch, and whether the layout uses fretted instrument transpositions for main chord symbols. For example, in the transposed pitch part layout for a trumpet in Bb, a C7 chord symbol appears as D7.

Capo chord

The chord that the fretted instrument must play in order to produce the desired main chord, according to the fret position of the capo. For example, if a guitarist with a capo on the second fret plays Gm7, the chord that sounds is Am7.

By default, capo chords appear in italics when shown alongside main chords.

TIP

You can choose to show capo chords in parentheses instead and change the vertical gap between capo and main chord symbols in the **Capo** section of the **Chord Symbols Options** dialog.

RELATED LINKS

Concert vs. transposed pitch on page 174

Chord symbols on page 852

Chord diagrams on page 875

Hiding/Showing capo chord symbols on page 160

Hiding/Showing capo chord symbols in used chord diagrams grids on page 163

Respelling chord symbols on page 865

Chord symbol appearance presets on page 853

Chord symbol font styles on page 858

Adding capos to fretted instruments

You can add capos to individual fretted instruments. This affects the pitches shown on tablature for the corresponding instruments, as Dorico Elements treats capos as fret 0. For example, if each flow in a project for guitar requires a capo at a different fret, you might add multiple players, each holding a guitar instrument with the required capo.

NOTE

These steps do not affect pitches on notation staves, chord symbols/diagrams in the music, or used chord diagram grids.

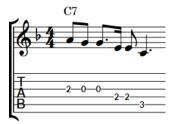
PROCEDURE

- 1. In Setup mode, in the **Players** panel, expand the card of the player holding the fretted instrument to which you want to add a capo.
- 2. In the instrument label, click the instrument menu and choose **Edit Strings and Tuning** to open the **Edit Strings and Tuning** dialog.
- 3. In the Capo and Transposition section, click Capo to open the Capo Definition dialog.
- **4.** Choose one of the following options for **Capo**:
 - Full Capo
 - Partial Capo
- 5. Change the fret position of the capo by changing the value for **Fret**.
- **6.** Optional: If you chose **Partial Capo**, change the strings across which the capo extends.
- 7. Click **OK** to save your changes and close the **Capo Definition** dialog.
- 8. Click **OK** to save your changes and close the **Edit Strings and Tuning** dialog.

RESULT

A capo is added to the selected instrument according to your settings. The capo appears at the corresponding fret position and crossing the specified strings in the **Edit Strings and Tuning** dialog and in the Fretboard panel for the selected instrument.

EXAMPLE



No capo



Capo added to the third fret

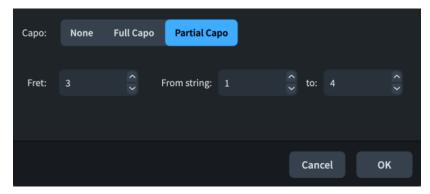
RELATED LINKS
Players panel on page 108
Edit Strings and Tuning dialog on page 151

Fretboard panel on page 204 Using fretted instrument transpositions on page 158

Capo Definition dialog

The Capo Definition dialog allows you to add full and partial capos to fretted instruments.

 You can open the Capo Definition dialog from inside the Edit Strings and Tuning dialog by clicking Capo in the Capo and Transposition section.



The **Capo Definition** dialog contains the following options:

Capo

Allows you to choose one of the following capo types:

- None
- Full Capo
- Partial Capo

Fret

Allows you to change the fret position of the capo.

From string [n] to [n]

Allows you to set the first and last strings across which the capo extends. Only available when **Partial Capo** is chosen for **Capo**.

Removing capos from fretted instruments

You can remove capos from individual fretted instruments. This affects the pitches shown on tablature for the corresponding instruments.

- **1.** In Setup mode, in the **Players** panel, expand the card of the player holding the fretted instrument whose capo you want to remove.
- 2. In the instrument label, click the instrument menu and choose **Edit Strings and Tuning** to open the **Edit Strings and Tuning** dialog.
- 3. In the Capo and Transposition section, click Capo to open the Capo Definition dialog.
- 4. Choose None for Capo.
- **5.** Click **OK** to save your changes and close the **Capo Definition** dialog.
- 6. Click **OK** to save your changes and close the **Edit Strings and Tuning** dialog.

Changing fretted instrument transpositions

You can change the transposition of individual fretted instruments; for example, to reflect capos added to them, or for a fretted instrument whose strings have all been detuned. This can affect the pitches shown on notation staves and in main chord symbols in the music, depending on your per-layout setting for using fretted instrument transpositions.

NOTE

- You can find different tunings for each fretted instrument in the instrument picker.
- You can also change the open pitch of individual fretted instrument strings.
- Fretted instrument transpositions do not affect pitches shown on tablature, which use the instrument's capo, or used chord diagram grids.

PROCEDURE

- 1. In Setup mode, in the **Players** panel, expand the card of the player holding the fretted instrument whose transposition you want to change.
- 2. In the instrument label, click the instrument menu and choose **Edit Strings and Tuning** to open the **Edit Strings and Tuning** dialog.
- 3. In the Capo and Transposition section, change the pitch for In staff notation, written middle C (MIDI note 60) sounds as.
 - The pitch determines the spelling of notes and chord symbols for the corresponding number of half-steps.
- **4.** Click **OK** to save your changes and close the dialog.

RELATED LINKS

Players panel on page 108

Instrument picker on page 110

Edit Strings and Tuning dialog on page 151

Fretted instrument tuning on page 150

Changing the open pitches of fretted instrument strings on page 153

Making layouts transposed/concert pitch on page 173

Changing the middle C numbering convention on page 50

Using fretted instrument transpositions

You can show transposed pitches on notation staves and in main chord symbols, according to the corresponding fretted instrument's transposition, in each layout independently and for each player holding at least one fretted instrument independently.

For example, if you have added a capo to a fretted instrument and want notation staves and main chord symbols to show the pitches the performer must play in order to produce the desired sounding pitch.

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- **2.** In the **Layouts** list, select the layouts in which you want to use fretted instrument transpositions for notation staves and main chord symbols.
 - By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking

and dragging across multiple layouts, **Shift** -clicking adjacent layouts, and **Ctrl/Cmd** -clicking individual layouts.

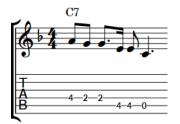
- 3. In the category list, click Players.
- **4.** In the **Fretted Instruments** section, activate **Use fretted instrument transposition** for each player holding at least one fretted instrument in your project.
- **5.** Choose one of the following options:
 - For notation
 - For notation and main chord symbols
- 6. Click Apply, then Close.

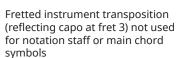
RESULT

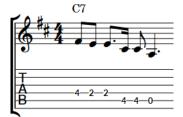
Transpositions set for the corresponding fretted instruments are used for either notation staves only or both notation staves and main chord symbols in the selected layouts.

For example, you might choose **For notation** for fretted instruments with capos that are set to show capo chord symbols, and **For notation and main chord symbols** for detuned fretted instruments.

EXAMPLE







Fretted instrument transposition used for notation staff only



Fretted instrument transposition used for notation staff and main chord symbols

RELATED LINKS

Layout Options dialog on page 728
Fretted instrument tuning on page 150
Capo vs. main chords on page 155
Hiding/Showing notation staves and tablature on page 1309
Hiding/Showing capo chord symbols on page 160

Defining capos for chord symbols/diagrams

You can define capos for chord symbols and chord diagrams on a per-player basis. This affects chord diagram shapes and the transposition of capo chord symbols. For example, you might show both main and capo chord symbols for the voice player when creating a lead sheet.

NOTE

These steps do not affect used chord diagram grids or pitches on notation staves/tablature.

PROCEDURE

- **1.** In Setup mode, select a player in the **Players** panel for whom you want to define a capo for chord symbols/diagrams.
- 2. In the action bar, click Player Settings and choose Chord Symbols > Capo Chord Symbol Definition to open the Capo Chord Symbol Definition dialog.

TIP

You can also right-click players and choose this option from the context menu.

- **3.** Change the pitch for **In capo chord symbols, written middle C (note 60) sounds as**. The pitch determines the spelling of capo chord symbols for the corresponding number of half-steps.
- **4.** Click **OK** to save your changes and close the dialog.

RESULT

A capo with the set transposition and spelling is set for the selected player.

Hiding/Showing capo chord symbols

You can show only main chords, only capo chords, or both in chord symbols on a per-player basis. For example, if you want to show both for the guitar player but only main chords for the singer.

NOTE

Chord diagrams always reflect the capo set for the player.

PROCEDURE

- **1.** In Setup mode, select a player in the **Players** panel for whom you want to hide/show capo chords in chord symbols.
- 2. In the action bar, click **Player Settings** and choose one of the following options:
 - To show only main chords, choose Chord Symbols > Show Main Chord Symbol for Capo.
 - To show only capo chords, choose Chord Symbols > Show Transposed Chord Symbol for Capo.
 - To show capo chords above main chords, choose Chord Symbols > Show Capo Chord Symbol Above Main.
 - To show capo chords below main chords, choose Chord Symbols > Show Capo Chord Symbol Below Main.

TIP

You can also right-click players and choose these options from the context menu.

RESULT

Main and/or capo chords are shown in chord symbols, according to the instrument staves and layouts set to show chord symbols for the selected player. By default, capo chords appear in italics when shown alongside main chords.

In layouts where chord symbols are only shown above the top staff in each system, the visibility of main/capo chords in chord symbols is determined by the setting for the player at the top of each system.

EXAMPLE



RELATED LINKS

Capo vs. main chords on page 155
Positions of chord symbols on page 859
Hiding/Showing chord symbols on page 859
Hiding/Showing empty staves on page 590
Hiding/Showing chord diagrams on page 877
Chord symbol appearance presets on page 853
Chord symbol font styles on page 858
Inputting chord symbols on page 310

Showing only main or capo chord symbols

You can show only the main or capo chord in individual chord symbols on staves set to show both. For example, if you want to show both the first time each chord symbol appears but only show main chords for subsequent instances. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The players on whose staves you want to show only main or capo chords are set to show both.
- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** Is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

- **1.** Select the chord symbols whose shown chords you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Show only** in the **Chord Symbols** group.
- **3.** Choose one of the following options:
 - Main Chord
 - Capo Chord

The selected chord symbols show only main or capo chords. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

EXAMPLE



Both main and capo chords shown in all chord symbols



Only main chords shown in some chord symbols

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490

Defining capos for used chord diagrams grids

You can define capos for used chord diagrams grids in each layout independently. This affects chord diagram shapes and the transposition of capo chord symbols. For example, you might show both main and capo chord symbols in used chord diagrams grids in the voice part layout when creating a lead sheet.

NOTE

These steps do not affect chord symbols/diagrams in the music or pitches on notation staves/tablature.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- **2.** In the **Layouts** list, select the layouts for which you want to define capos for used chord diagrams grids.

By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, **Shift** -clicking adjacent layouts, and **Ctrl/Cmd** -clicking individual layouts.

- 3. In the category list, click **Chord Symbols and Diagrams**.
- 4. In the Chord Diagrams section, change the pitch for Use capo with transposition.
 The pitch determines the spelling of capo chord symbols for the corresponding number of half-steps.
- **5.** Click **Apply**, then **Close**.

RELATED LINKS

Used chord diagrams grids on page 879 Capo vs. main chords on page 155 Inputting chord symbols on page 310

Hiding/Showing capo chord symbols in used chord diagrams grids

You can show only main chords, only capo chords, or both in used chord symbol grids in each layout independently. For example, if you want to show both in the guitar part layout but only main chords in the vocal part layout.

NOTE

Chord diagrams in used chord diagrams grids always reflect the capo set for the layout.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- 2. In the **Layouts** list, select the layouts in which you want to hide/show capo chord symbols in used chord diagrams grids.

By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, **Shift** -clicking adjacent layouts, and **Ctrl/Cmd** -clicking individual layouts.

- 3. In the category list, click **Chord Symbols and Diagrams**.
- **4.** In the **Chord Diagrams** section, select one of the following options from the **Capo chord symbols** menu:
 - To show only main chords, select Show Only Main Chord Symbol.
 - To show only capo chords, select **Show Only Transposed Chord Symbol**.
 - To show capo chords above main chords, select Show Above Main Chord Symbol.
 - To show capo chords below main chords, select Show Below Main Chord Symbol.
- 5. Click Apply, then Close.

RESULT

Main and/or capo chords are shown in used chord diagrams grids in the selected layouts. By default, capo chords appear in italics when shown alongside main chords.

Player groups

A player group represents a collection of musicians that are considered together, such as one choir in a work for double choir or an off-stage ensemble. Player groups can have their own brackets, depending on the bracket grouping set for each layout.

Grouping players together means they are positioned together in the default player order, numbered independently of players outside the group, and are bracketed together according to the ensemble type set for each layout.

For example, if your project is for double choir (SATB/SATB), all voices are joined by a single bracket by default because they are in the same family. However, if you add each choir to its own group, they are bracketed separately. This is useful in works containing multiple groups, such as in Britten's "War Requiem", which has three distinct groups, or in Walton's "Belshazzar's Feast" which requires two separate off-stage brass groups.



Two choir player groups in the **Players** panel in Setup mode

You can add as many player groups as required; for example, to allow easy separation of forces, or to prevent automatic instrument numbering for percussion instruments when multiple percussion players hold the same instrument to accommodate instrument changes.

You can also show player group labels for player groups in each layout independently.

RELATED LINKS

Instrument numbering on page 129
Brackets according to ensemble type on page 847
Changing the default player order on page 123
Setting custom player orders on page 124
Player group labels on page 1295
Player, layout, and instrument names on page 176
Players panel on page 108

Adding player groups

You can organize players into groups; for example, if you want to bracket them together. Players in different groups are also numbered separately.

PROCEDURE

- **1.** Optional: If you want to add a group that includes existing players, select those players in the **Players** panel in Setup mode.
- 2. In the Players panel, click Add Group .

RESULT

A new player group is added to the **Players** panel. If you selected players, those players are added to the group. If you did not select players, the new group is empty.

AFTER COMPLETING THIS TASK

- You can add players to groups and move them between groups.
- You can rename player groups and show player group labels.

RELATED LINKS

Players panel on page 108 Renaming player groups on page 166 Player group labels on page 1295

Adding players to groups

You can add new players to existing player groups.

PROCEDURE

- 1. In Setup mode, in the Players panel, select the group to which you want to add new players.
- 2. Add new players in one of the following ways:
 - To add a single player, click **Add Single Player** ! in the action bar.
 - To add a section player, click **Add Section Player** 4 in the action bar.

The instrument picker opens.

TIP

You can also open the instrument picker by selecting an existing player in the **Players** panel and pressing **Shift-1**.

- **3.** Select the instrument you want in the instrument picker.
- **4.** Press **Return** to add the selected instrument.

RESULT

The corresponding type of player is added to the selected group.

TIP

You can also move existing players to, from, or between groups.

RELATED LINKS

Players panel on page 108 Instrument picker on page 110 Adding players on page 122 Player group labels on page 1295

Changing the language for instrument names on page 56

Moving players between groups

You can move players to, from, or between player groups. For example, you can move ungrouped players into existing groups and move players from one group to another.

PROCEDURE

- 1. In Setup mode, in the **Players** panel, select the players that you want to move.
- **2.** Click and drag the selected players to the position you want. An insertion line indicates where the players will be positioned.

RESULT

The players are moved to the new position.

TIP

- You can also add existing players to existing groups by right-clicking them in the **Players** panel and choosing **Add Player to Group > [Group]** from the context menu.
- You can also add new players to player groups.

Removing players from groups

You can remove players from groups.

PROCEDURE

- In Setup mode, in the **Players** panel, remove players from groups in any of the following ways:
 - Select multiple players, then click and drag them out of the group.
 - Select one player, then click Player Settings in the action bar and choose Remove Player from Group. You can also right-click players and choose this option from the context menu.

RESULT

The players are removed from their groups but remain in the project as individual players.

Renaming player groups

You can change the name of player groups after you have added them. This changes the name shown in player group labels.

PROCEDURE

- 1. In Setup mode, in the **Players** panel, select the player group you want to rename.
- 2. In the action bar, click **Player Settings** and choose **Rename Player Group** to open the **Rename Player Group** dialog.

TIP

You can also right-click player groups and choose this option from the context menu.

- **3.** Enter new names or edit the existing names in the following fields:
 - Full name
 - Short name
- **4.** Click **OK** to save your changes and close the dialog.

RESULT

The corresponding names for the selected player group are changed.

Player group labels show full player group names by default. Short player group names are used when the full player group name is longer than the bracket.

RELATED LINKS

Players panel on page 108

Player group labels on page 1295

Player, layout, and instrument names on page 176

Deleting player groups

You can delete groups of players; for example, if you no longer need a group of players that you created when importing a MIDI file. When deleting player groups, you can choose to keep the players within the group or delete them as well.

PROCEDURE

- 1. In Setup mode, in the **Players** panel, select the player groups that you want to delete.
- **2.** Delete the selected player groups in any of the following ways:
 - Press Backspace or Delete.
 - In the Players panel, click Delete Player .
- **3.** Choose one of the following options in the warning message that appears:
 - To delete the selected player groups but keep the players within them, choose **Keep Players**.
 - To delete both the selected player groups and the players within them, choose **Delete** Players.

Flows

Flows are separate spans of music that are completely independent in musical content, meaning they can contain completely different players from each other and have different time signatures and key signatures. A single project can contain any number of flows.

Depending on the purpose of each project, a flow could be, for example, a single song in an album, a movement in a sonata or symphony, a number in a stage musical, or a short scale or sight-reading exercise of only a few bars in length.

Dorico Elements automatically adds a flow to projects once you have added at least one player. You cannot add flows until you have added at least one player to the project.

When you add a flow in Dorico Elements, the following happens automatically:

- The flow is assigned to all full score and part layouts in the project.
- All players are assigned to the new flow.

By default, all layouts include all flows in the project. If necessary, you can change the layouts to which flows are assigned and which players are assigned to flows.

IMPORTANT

If you exclude a player from a flow, any notes that you have already input for that player in that flow are deleted.

You can change notation options, such as beam grouping and accidental duration rules, for each flow independently in the **Notation Options** dialog.

RELATED LINKS

Players, layouts, and flows on page 119 Notation Options dialog on page 730 Flow headings on page 634 Tacets on page 623 Assigning flows to layouts on page 173 Importing flows on page 77 Exporting flows on page 79
Changing the gap between flows in playback on page 530

Adding flows

You can add any number of new flows to your project; for example, when engraving a large work that comprises multiple movements.

PROCEDURE

- In Setup mode, add a flow in any of the following ways:
 - Press Shift-F.
 - In the **Flows** panel, click **Add Flow**

RESULT

A new flow is added to your project. All existing players are assigned to new flows, and new flows are automatically assigned to all existing full score and part layouts.

AFTER COMPLETING THIS TASK

- You can rename the flow.
- You can change the players assigned to the flow and the layouts to which the flow is assigned.

RELATED LINKS

Flows panel on page 118
Renaming flows on page 184
Assigning players to flows on page 169
Assigning flows to layouts on page 173
Adding titles on page 978

Duplicating flows

You can duplicate flows; for example, if you want to experiment with some ideas without affecting the original flow, or if you want to copy material with any barlines you have added.

PROCEDURE

- 1. In Setup mode, in the **Flows** panel, right-click the flow that you want to duplicate.
- **2.** Choose **Duplicate Flow** from the context menu.

RESULT

A new flow is added, containing all the music and players of the original flow. It is automatically added to all full score and part layouts.

Assigning players to flows

By default, all players in your project are added to all flows that originated in the project. You can assign players to and remove players from flows manually; for example, if the soloists in a choral work do not sing for an entire flow.

NOTE

If you remove a player from a flow, any notes you have already input for that player in that flow are deleted.

PROCEDURE

- **1.** In Setup mode, in the **Flows** panel, select the flow whose assigned players you want to change.
- **2.** In the **Players** panel, activate the checkbox in the card of each player you want to assign to the flow.



TIP

You can **Shift** -click to activate/deactivate the checkboxes in multiple player cards at once.

RESULT

Players are assigned to the selected flow when the checkbox in their player card is activated, and removed from the flow when the checkbox is deactivated.

RELATED LINKS

Flows panel on page 118

Tacets on page 623

Players, layouts, and flows on page 119

Assigning flows to layouts on page 173

Assigning players to layouts on page 172

Reordering flows

You can change the order of flows; for example, if you want an imported flow to be the first flow rather than the last.

PROCEDURE

- 1. In Setup mode, in the **Flows** panel, select the flows whose order you want to change.
- Click and drag the selected flows to the right/left.

RESULT

The selected flows are moved to the specified position. Their flow numbers are automatically updated, as is their order in the **Project Info** dialog and in layouts by default.

TIP

You can also reorder flows in the **Project Info** dialog by selecting them in the flows list and clicking **Move Down** or **Move Up** in the action bar. This can be an easier method of reordering flows in projects that contain many flows.

RELATED LINKS

Project Info dialog on page 74
Flow names and flow titles on page 183
Flow headings on page 634
Importing flows on page 77

Deleting flows

You can delete flows that you no longer need. This deletes all music for all instruments and players in the flows.

PROCEDURE

- 1. In Setup mode, in the **Flows** panel, select the flows you want to delete.
- 2. Delete the selected flows in any of the following ways:
 - Press Backspace or Delete.
 - In the **Flows** panel, click **Delete Flow 1**.

RELATED LINKS

Importing flows on page 77 Exporting flows on page 79

Layouts

Layouts combine musical content, as represented by flows and players, with rules for page formatting and music engraving, and allow you to produce paginated music notation that can be printed or exported in various formats. For example, part layouts typically only show the music for one player, whereas full score layouts show the music of all players in the project.

Layouts can contain any combination of players and flows. They share the musical content of these players and flows, such as the notes each instrument plays. For example, when you change the pitch of a note in the full score, that note's pitch is also updated in the corresponding part layout.

You can control practically every aspect of page formatting in each layout independently, including note spacing, staff size, page size, margins, and casting off; that is, the positions of system breaks and page turns. Changing these aspects in one layout does not affect other layouts. For example, inserting systems breaks in a part layout does not change the casting off in the full score.

Similarly, you can change the visual appearance of many items only in one layout, without affecting other layouts, using local properties. For example, you can hide text items in the full score layout but show them in part layouts.

The default formatting of pages in layouts is determined by page templates. By default, full score layouts use a different page template set to part layouts; however, you can apply a different page template set to each layout.

Dorico Elements provides the following layout types:

Full score

A full score layout includes all players and all flows in your project by default. Full score layouts are concert pitch by default.

Dorico Elements automatically creates a single full score layout in every project.

Part

A part layout is automatically created when you add a player to your project. You can also create empty part layouts and assign players to them manually.

By default, instrumental part layouts contain all flows. They are also transposed pitch by default.

You can propagate the formatting of part layouts.

Custom score

A custom score layout initially does not contain any players or flows. This allows you to create your score manually and, for example, assign only one flow instead of all flows or only vocal and piano players to create a vocal score. Custom score layouts are concert pitch by default.

TIP

- You can create as many layouts of each type in each project as required.
- You can combine players, layouts, and flows together in any combination. For example, you might add all percussion players to a single part layout so that the performers can manage instrument changes themselves. In a large-scale work, you might also create a piano reduction for choir rehearsals, but only assign that piano player to the vocal score, meaning it does not appear in the orchestral full score at all.
- By default, respelling notes in score layouts also affects their spelling in all other layouts, but respelling notes in part layouts only affects their spelling in the current part layout.
- You can save options set in Layout Options as the default for score and part layouts independently. For example, full scores and part layouts often require different page and staff sizes.
- Deleting layouts does not delete any music from the project.

RELATED LINKS

Players, layouts, and flows on page 119
Part formatting propagation on page 626
Page templates on page 630
Layout Options dialog on page 728
Properties on page 646
Switching between layouts on page 42
Editing layout transposition text on page 981
Respelling notes on page 460

Creating layouts

You can create any number of full score, custom score, and part layouts in each project. By default, Dorico Elements creates a single full score layout and a part layout for each player.

- In Setup mode, in the **Layouts** panel, click one of the following layout types:
 - Add Full Score Layout @

- Add Custom Score Layout

The layout is added to the list of layouts in the **Layouts** panel.

NOTE

- Layouts are not available in the layout selector until you have assigned at least one player to them
- You can also add new custom score layouts by pressing Shift-L.

AFTER COMPLETING THIS TASK

- You can assign players and flows to the layout.
- If you want to change the position of the new layout in the layouts list, you can reorder and renumber layouts.

RELATED LINKS

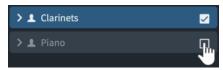
Layouts panel (Setup mode) on page 115 Switching between layouts on page 42 Switching to galley/page view on page 49 Opening new tabs on page 44

Assigning players to layouts

By default, all players are included in full score layouts and each player is automatically assigned its own part layout. You can assign players to and exclude players from layouts manually; for example, if you want to remove unnecessary players from the full score, or you want to add the soloists' music to the part for the accompanist.

PROCEDURE

- **1.** In Setup mode, in the **Layouts** panel, select the layout whose assigned players you want to change.
- **2.** In the **Players** panel, activate the checkbox in the card of each player you want to assign to the layout.



TIP

You can **Shift** -click to activate/deactivate the checkboxes in multiple player cards at once.

RESULT

Players are assigned to the selected layout when the checkbox in their player card is activated, and removed from the layout when the checkbox is deactivated. If you have not changed the name of the layout, it is automatically updated to reflect the players included in the layout.

RELATED LINKS

Project window in Setup mode on page 107

Player, layout, and instrument names on page 176 Renaming layouts on page 178 Assigning players to flows on page 169

Assigning flows to layouts

By default, all flows in your project are added to all full score and part layouts. You can assign flows to and remove flows from layouts manually; for example, if a flow in your project contains specific performance instructions for strings that you want to show in string part layouts but not in other part layouts.

PROCEDURE

- 1. In Setup mode, in the **Layouts** panel, select the layout whose assigned flows you want to change.
- **2.** In the **Flows** panel, activate the checkbox in the flow card of each flow you want to assign to the layout.



TIP

You can Shift -click to activate/deactivate the checkboxes in multiple flow cards at once.

RESULT

Flows are assigned to the selected layout when the checkbox in their flow card is activated, and removed from the layout when the checkbox is deactivated.

Dorico Elements automatically creates enough pages to display the flows assigned to the layout.

RELATED LINKS

Project window in Setup mode on page 107 Assigning players to flows on page 169

Making layouts transposed/concert pitch

You can change whether each layout in your project is transposed or concert pitch. In Dorico Elements, full score layouts are concert pitch and part layouts are transposed pitch by default.

For example, full scores are often concert pitch, to show notes at their sounding pitch, but part layouts are transposed pitch so the player can read the notes they must play in order to achieve the desired sounding pitch.

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- 2. In the Layouts list, select the layouts you want to make transposing/non-transposing. By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, Shift-clicking adjacent layouts, and Ctrl/Cmd -clicking individual layouts.

- 3. In the category list, click **Players**.
- **4.** In the **Players** section, activate/deactivate **Transposing layout**.
- 5. Click Apply, then Close.

The selected layouts are transposed pitch when **Transposing layout** is activated, and concert pitch when it is deactivated.

TIP

You can also change the transposition of the layout currently open in the music area in the following ways:

- To make layouts transposed pitch, choose either Transposed Pitch in the status bar or Edit > Transposed Pitch.
- To make layouts concert pitch, choose either Concert Pitch in the status bar or Edit > Concert Pitch.

RELATED LINKS

Status bar on page 37

Editing layout transposition text on page 981

Transposing instruments on page 130

Fretted instrument tuning on page 150

Transposing tools on page 454

Changing the input pitch setting on page 210

Hiding/Showing clefs according to layout transpositions on page 892

Concert vs. transposed pitch

Layouts in Dorico Elements can use concert or transposed pitch. This affects the pitches and key signatures on staves belonging to transposing instruments.

Concert pitch

When music is in concert pitch, all notes are written as they sound. This means that players with transposing instruments reading music in concert pitch must transpose the music themselves. For example, if a clarinet in Bb reads a C in concert pitch, they must play the note D on their instrument to produce the sounding note C.

Transposed pitch

When music is in transposed pitch, the notes written are the ones each instrument must play in order to produce the desired sounding pitch. For example, if a clarinet in Bb reads a D in transposed pitch, the pitch that sounds from the instrument is C.

Transposed pitch layouts automatically transpose key signatures and chord symbols according to the transposition of the instrument. Transposing and concert pitch layouts can also use different clefs.

RELATED LINKS

Transposing instruments on page 130
Enharmonic equivalent key signatures on page 1006
Clefs with octave indicators on page 895
Capo vs. main chords on page 155
Editing layout transposition text on page 981

Reordering layouts

You can change the order in which layouts appear in the **Layouts** panel and the layout selector; for example, if you added a custom score layout and want it to be positioned at the top next to the full score layout.

PROCEDURE

- 1. In Setup mode, in the **Layouts** panel, select the layouts whose order you want to change.
- 2. Click and drag the selected layouts upwards/downwards.

RESULT

The selected layouts are moved to the specified position. This does not affect their layout numbers.

TIP

You can also automatically sort layouts according to their type by clicking **Sort Layouts** In the **Layouts** panel, which positions all full score layouts at the top, all part layouts in the middle, and all custom score layouts at the bottom.

You can click and hold or right-click **Sort Layouts I** to change the setting to one of the following options:

- Layout Number
- Instrument Score Order

RELATED LINKS

Layouts panel (Setup mode) on page 115 Changing the default player order on page 123 Renumbering instruments on page 130

Renumbering layouts

You can renumber all layouts according to their current position in the **Layouts** panel in Setup mode; for example, after you have dragged layouts to different positions.

PROCEDURE

- 1. In Setup mode, in the Layouts panel, select any layout.
- 2. In the action bar, click Layout Settings and choose Renumber Layouts.

TIP

You can also right-click layouts and choose this option from the context menu.

RESULT

All layouts are renumbered according to their current position in the panel. Full score layouts, custom score layouts, and part layouts are all numbered separately.

Deleting layouts

You can delete layouts without removing the corresponding music from the project. For example, if you only want to use a combined Violin I and II part layout, you can delete their separate part layouts.

PROCEDURE

- 1. In Setup mode, in the **Layouts** panel, select the layouts that you want to delete.
- 2. Delete the selected layouts in any of the following ways:
 - Press Backspace or Delete.

RESULT

The selected layouts are deleted without removing any music from the project.

AFTER COMPLETING THIS TASK

You can later restore all the part layouts that Dorico Elements provides by default.

RELATED LINKS

Layouts panel (Setup mode) on page 115 Players, layouts, and flows on page 119

Restoring default layouts

You can recreate all the part layouts that Dorico Elements provides by default; for example, if you accidentally deleted some part layouts.

PROCEDURE

• In Setup mode, choose **Setup** > **Create Default Part Layouts**.

RESULT

The default set of part layouts is restored, recreating a single part layout for each player that contains all flows in the project. Any part layouts that were recreated are added at the bottom of the **Layouts** list. Their order matches the order of the corresponding players in the **Players** panel.

Player, layout, and instrument names

In Dorico Elements, you can use three different names to refer to the same player in different contexts. This allows you to show relevant information in different places, such as in staff labels and at the top of part layouts.

The following names relate to players and instruments:

Player name

The name of each player in the **Players** panel. They can be used in staff labels instead of instrument names.

Player names are automatically generated when you add instruments, and are linked to the corresponding instrument names until you rename the player.

Layout name

The name for each layout in the **Layouts** panel. By default, layout names appear with borders at the top of pages in part layouts that use the **First** page template.

Layout names for part layouts are automatically linked to the corresponding players' names until you rename the layout.

Instrument names

Used in staff labels by default. This means that the instrument label on each staff is relevant to the instrument or percussion kit currently being played by that player, rather than listing all instruments that player is playing in the flow.

For example, if a clarinettist is doubling bass clarinet, the staff label where the player plays clarinet automatically shows **Clarinet**, and the staff label automatically shows **Bass Clarinet** where the player plays bass clarinet.

All instruments in Dorico Elements come with a set of instrument names that you can change for individual instruments, independently of other players in the project holding the same instrument. You can change the language used for instrument names. You can also save changes to instrument names as default, which are then used whenever you add that instrument again in the current project and all future projects.

NOTE

- Changing the default instrument names does not change the instrument names of existing instruments of that type in your project.
- You can change various aspects of how instrument names appear in staff labels without changing instrument names, such as whether instrument transpositions are shown before or after instrument names.

RELATED LINKS

Instrument numbering on page 129
Types of page templates on page 631
Tokens on page 638
Staff labels on page 1287
Percussion legends on page 1407
Assigning players to layouts on page 172
Renaming player groups on page 166
Changing the language for instrument names on page 56

Renaming players

You can change the player names of players, and reset renamed players to their default names. Player names appear in guide instrument labels in galley view for players holding multiple instruments and can appear in staff labels.

PROCEDURE

- 1. In Setup mode, in the **Players** panel, select the player you want to rename.
- 2. In the action bar, click **Player Settings** and choose **Rename Player** to open the **Rename Player** dialog.

TIP

You can also right-click players and choose this option from the context menu.

- **3.** Enter new names or edit the existing names in the following fields:
 - Full name
 - Short name
- **4.** Click **OK** to save your changes and close the dialog.

The corresponding names for the selected player are changed. If you have not already renamed the corresponding part layout, its layout name is updated.

NOTE

- This does not affect staff labels that show instrument names, or the name at the top of part layouts if you have already renamed the layout. You can change instrument and layout names separately.
- Player names you have changed no longer get updated when you change the instruments or names of instruments held by the player.

RELATED LINKS

Players panel on page 108

Renaming player groups on page 166

Adding instruments to players on page 131

Designating players as soloists on page 125

Showing instrument/player names in staff labels on page 1291

Switching to galley/page view on page 49

Resetting player names

You can reset both full and short player names to their defaults simultaneously. Default player names automatically update when you change the instruments or names of instruments held by the player.

PROCEDURE

- 1. In Setup mode, in the **Players** panel, select the player whose names you want to reset.
- 2. Press **Return** to open the player name text field.
- 3. Click Reset to Default 5.

RESULT

Both the full and short names for the corresponding player are reset to their defaults.

Renaming layouts

You can rename layouts and reset renamed layouts to their default name. By default, layout names appear with borders at the top of pages in part layouts that use the **First** page template.

- 1. In Setup mode, in the Layouts panel, select the layout you want to rename.
- 2. Press **Return** to open the layout name text field.
- 3. Rename the layout in any of the following ways:
 - Enter a new layout name, or edit the existing name.

To revert the layout name to the player name, click Reset to Default 5.

TIP

If you want to include an accidental in the instrument transposition, you can enter the appropriate token, such as **@flat@**} for b.

4. Press Return.

RESULT

The selected layout is renamed, or reverted to its default name.

NOTE

- Renaming layouts does not affect staff labels, which show either instrument or player names.
- Part layout names you have changed no longer get updated when you rename the corresponding players.

RELATED LINKS

Layouts panel (Setup mode) on page 115

Tokens on page 638

Types of page templates on page 631

Hiding/Showing borders on layout names on page 982

Staff label contents on page 1291

Changing instrument names

By default, instrument names are used in staff labels and instrument change labels shown above the staff. You can change the different instrument names used for each instrument.

NOTE

- If you want to change instrument names because you want them to appear in a different language, you can instead change the default language for all instrument names.
- You can change various aspects of how instrument names appear in staff labels without changing instrument names, such as whether instrument transpositions are shown before or after instrument names.
- Changing instrument names does not automatically update player and layout names if you have already renamed them.

- 1. In Setup mode, in the **Players** panel, click the disclosure arrow in the card of the player holding the instrument whose names you want to change.
 - This expands the card to show the instruments held by the player.
- 2. In the instrument label, click the instrument menu and choose **Edit Names** to open the **Edit Instrument Names** dialog.
- **3.** Enter new names in any of the name fields.
- **4.** Choose one of the following options for **Show transposition**:
 - Always

- Follow Layout Options
- Never
- **5.** Optional: Activate **Save as default for instrument**.
- **6.** Click **OK** to save your changes and close the dialog.

The instrument names for the selected instrument are changed. If you have not already renamed the corresponding player, its player name is updated.

- If you did not save your changes as default, only the names of the selected instrument are changed. Any instruments of the same type added later or in future projects use the original default names.
- If you saved your changes as default, any instruments of the same type added later or in future projects use your new instrument names. This does not affect any existing instruments of that type unless you reset their names.

RELATED LINKS

Players panel on page 108

Showing instrument/player names in staff labels on page 1291

Changing the appearance/position of instrument transpositions in staff labels on page 1293

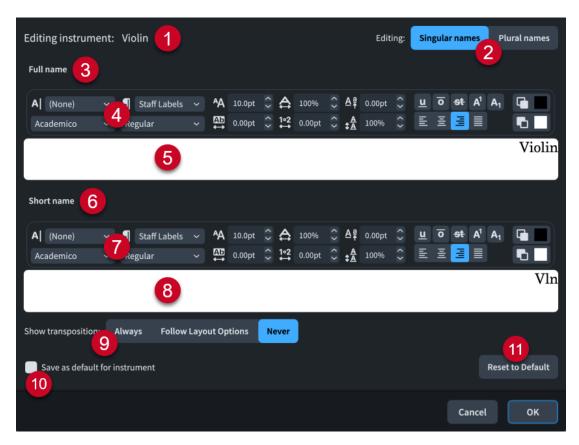
Changing the language for instrument names on page 56

Editing the default instrument change label text on page 137

Edit Instrument Names dialog

The **Edit Instrument Names** dialog allows you to change the content and formatting of each instrument's names, which are used in staff labels and instrument change labels shown above the staff. You can edit both singular/plural full instrument names and singular/plural short instrument names.

• You can open the **Edit Instrument Names** dialog in Setup mode by clicking the instrument menu — in an instrument label in the **Players** panel and choosing **Edit Names**.



The **Edit Instrument Names** dialog contains the following options and sections:

1 Editing instrument

Displays the permanent underlying name of the instrument.

2 Editing

Allows you to switch between editing the **Singular names** and **Plural names** of the selected instrument.

Singular names are used when the staff contains one player, **Plural names** are used when the staff contains multiple players.

3 Full name section

Contains options that allow you to edit the appearance of the full instrument name.

4 Full name text editor options

Allows you to customize the font, size, and formatting of the selected part of the full instrument name.

5 Full name text editing area

Shows the current long name for the selected instrument, as it appears in **Full** staff labels. You can select any part of the instrument name and edit it independently of other parts; for example, if you want to add additional information on a new line and in italics. However, instrument names in instrument change labels are always shown on a single line.

Staff labels are right-aligned by default, so they appear at the right edge of the text editing area.

6 Short name section

Contains options that allow you to edit the appearance of the short instrument name.

7 Short name text editor options

Allows you to customize the font, size, and formatting of the selected part of the short instrument name.

8 Short name text editing area

Shows the current short staff label for the selected instrument, as it appears in **Abbreviated** staff labels. You can select any part of the instrument name and edit it independently of other parts; for example, if you want to add additional information on a new line and in italics. However, instrument names in instrument change labels are always shown on a single line.

Staff labels are right-aligned by default, so they appear at the right edge of the text editing area.

9 Show transposition

Allows you to choose when the transposition is shown in the instrument name for the selected instrument. It is common to see the transposition included in the name of transposing instruments, such as Clarinet in Bb.

You can choose when the transposition is shown from the following options:

- Always: Instrument transpositions are shown even if you have chosen to hide them on the Staves and Systems page in Layout Options.
- **Follow Layout Options**: Instrument transpositions can be hidden and shown, depending on your per-layout settings in **Layout Options**.
- Never: Instrument transpositions are never shown, even if you have chosen to show them in Layout Options.

10 Save as default for instrument

Activating the checkbox saves your changes in the dialog as the default. This affects all new instruments of that type that you add to the project and all future projects. It does not affect any existing instruments of that type unless you reset their names.

11 Reset to Default

Removes all your changes to the names of the selected instrument type and reverts them to the current default settings. If you changed the default name for an instrument type or the instrument name language setting after adding an instrument, resetting its names changes them to your new default names and language setting.

NOTE

Overrides to the horizontal alignment or leading of instrument names are only used in staff labels in simple cases. They are not used for inner, grouped, or condensed staff labels.

RELATED LINKS

Layout Options dialog on page 728
Staff label paragraph styles on page 1296
Hiding/Showing instrument transpositions in staff labels on page 1292
Text editor options in Write mode on page 379

Resetting instrument names

You can reset all your changes to the names of individual instruments and revert them to the current default settings for their instrument type.

NOTE

Resetting instrument names does not change the name shown at the top of part layouts. If you want to change the name used at the top of part layouts, rename the layout.

PROCEDURE

- 1. In Setup mode, in the **Players** panel, click the disclosure arrow in the card of the player holding the instrument whose names you want to reset.
 - This expands the card to show the instruments held by the player.
- 2. In the instrument label, click the instrument menu and choose **Edit Names** to open the **Edit Instrument Names** dialog.
- 3. Click Reset to Default.
- **4.** Click **OK** to save your changes and close the dialog.

RESULT

The instrument names for the selected instrument are reset to the current default settings for its instrument type. If you changed the default name for the instrument type or the instrument name language setting after adding the instrument, resetting its names changes them to your new default names and language setting.

TIP

You can assign a key command for **Reset Instrument Names** on the **Key Commands** page in **Preferences**, which resets all instrument names in the project to their default settings.

RELATED LINKS

Players panel on page 108

Key Commands page in the Preferences dialog on page 58 Changing the language for instrument names on page 56

Flow names and flow titles

Whenever you add a flow to a project, the default name of a flow is **Flow** plus an incremental number. In Dorico Elements, flows have both a flow name and a flow title, which are the same by default but can be different if, for example, you want to organize sketch versions of flows without affecting their displayed titles in the music.

Flow names

Set either in the **Flows** panel in Setup mode or in the flows list in the **Project Info** dialog.

Flow titles

Set in the **Title** field for each flow in the **Project Info** dialog.

Flow titles automatically match the flow name until you change the flow title independently. Changing flow titles removes the link between their flow title and flow name.

Titles shown in layouts are linked to the **Title** fields in the **Project Info** dialog, using the **@projectTitle@}** and **@flowTitle@}** tokens. This allows you to organize flows with different names to their displayed title in the music.

TIP

You can change both flow names and flow titles in the **Project Info** dialog, and you can also change flow names in the **Flows** panel in Setup mode.

RELATED LINKS

Tokens on page 638
Project Info dialog on page 74
Flows panel on page 118
Export File Names dialog on page 572
Adding titles on page 978

Renaming flows

You can change the names of flows in Setup mode. This automatically updates the title of the corresponding flow until you change the title in the **Project Info** dialog.

PROCEDURE

- 1. In Setup mode, in the **Flows** panel, double-click the card of the flow you want to rename to open the flow name text field.
- **2.** Enter a new name for the flow, or edit the existing name.
- 3. Press Return.

RESULT

The name of the flow is changed. If you have not entered a different title for the flow in the **Project Info** dialog, the title shown in the music area is updated to match the new flow name.

TIP

You can also rename flows in the Project Info dialog.

Changing flow titles

You can change flow titles in the **Project Info** dialog. Once you have done so, flow titles are no longer automatically changed if you change their flow name.

PROCEDURE

- 1. Press Ctrl/Cmd-I to open the Project Info dialog.
- 2. Select the flow whose title you want to change in the flows list.
- 3. Enter a new title in the **Title** field.
- 4. Optional: Repeat steps 2 and 3 for other flows in your project.
- **5.** Click **OK** to save your changes and close the dialog.

RESULT

The titles of the selected flows are changed.

NOTE

This breaks the link between flow names and the title shown in the music area.

Videos

Dorico Elements supports the use of videos within the program as well as the associated notations, such as markers and timecodes, and allows you to find appropriate tempos based on where important markers occur.

Videos in Dorico Elements are shown in a separate **Video** window and play back in sync with the music. Any existing audio in the video is also played back, and you can control the volume of this audio independently of the volume of the music.

TIP

You can use these features, including setting a project frame rate, without having a video attached.

RELATED LINKS

Timecodes on page 1206
Markers on page 1201
Find Tempo dialog on page 393
Changing the volume of video audio on page 189

Supported video formats

Dorico Elements uses the same video engine that was introduced in Cubase and Nuendo in 2017. It supports the most commonly-used video formats.

The following video formats are supported:

- MOV: Including H263, H264, Apple ProRes, DV/DVCPro and Avid DNxHR codecs
- MP4: Including H263 and H264
- AVI: Including DV/DVCPro and MJPEG/PhotoJPEG

All the common frame rates, such as 23.976, 24, 24.975, 25, 29.97, and 30 frames per second, are fully supported in Dorico Elements.

NOTE

- Videos with variable frame rates are not supported.
- Support for more formats is planned for future versions.

You can consult the Steinberg support site for more information about the supported formats as well as how to identify and change video formats.

RELATED LINKS

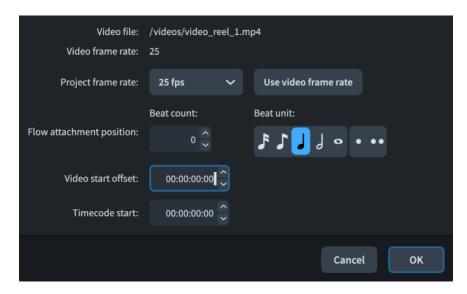
Frame rates on page 189

Video Properties dialog

The **Video Properties** dialog allows you to change video-related settings, including their frame rate and start position.

• You can open the **Video Properties** dialog in Setup mode by right-clicking a flow in the **Flows** panel and choosing **Video** > **Properties** from the context menu.

It also opens automatically when you add a new video.



The **Video Properties** dialog contains the following fields and options:

Video file

Shows the location of the video file on your computer. This field is read-only.

Video frame rate

Shows the frame rate of the video file. This field is read-only.

Project frame rate

Allows you to select a frame rate for your project from the menu. You can only have a single frame rate across the project.

Use video frame rate

Sets the project frame rate to be the same as the video file.

Flow attachment position

Allows you to set the rhythmic position at which the video attaches. This is set using the **Beat count** and **Beat unit** settings in combination, such as eight dotted quarter notes.

Video start offset

Allows you to set a position within the video that syncs with the flow attachment position; for example, you can set the fifth second of the video to attach to the start of the third bar.

Timecode start

Allows you to set the timecode at the start of the video. This also affects the timecode of the flow, but the initial timecode of the flow adjusts to accommodate the video. For example, if the initial timecode of the video is 02:00:00:00 but the video does not start until the start of the third bar in 4/4, the initial timecode of the flow is eight beats of time less than 02:00:00:00; if the tempo is 60 bpm, this makes the initial flow timecode 01:59:52:00.

NOTE

Flow timecodes are shown in their flow cards in the **Flows** panel.

RELATED LINKS

Timecodes on page 1206 Flows panel on page 118

Adding videos

You can add a video to each flow in your project. You can also follow these steps to reload videos previously added to the project that Dorico Elements can no longer locate.

Flows with missing videos show a warning icon **A** instead of the video icon in the flow card in the **Flows** panel. This can happen if you send a project to someone else without the video file.

PREREQUISITE

You have added at least one player to the project.

PROCEDURE

- 1. In Setup mode, in the **Flows** panel, right-click the flow to which you want to add/reload a video
- 2. Choose Video > Attach from the context menu to open the File Explorer/macOS Finder.
- 3. Locate and select the video file you want to add.
- 4. Click Open to open the Video Properties dialog.
- **5.** Change the settings as required.
- **6.** Click **OK** to save your changes and close the dialog.

RESULT

The selected video file is added to the flow and is shown in the **Video** window. A video reel icon appears in the flow card in the **Flows** panel, beside a timecode indicating the combination of the **Video start offset** and **Timecode start**.

If you reloaded a video, all your previous settings are retained.

RELATED LINKS

Adding players on page 122

Changing the initial timecode value on page 1207

Changing the start position of videos

You can change both the rhythmic position in the music at which videos start, and the position in the video that coincides with that rhythmic position; for example, if you want the fifth second of a video to sync with the start of the third bar of music.

PROCEDURE

- 1. In Setup mode, open the Video Properties dialog in one of the following ways:
 - Add a video to a flow.
 - In the Flows panel, right-click a flow and choose Video > Properties from the context menu.
- 2. Change the values for the following options, individually or together:
 - Flow attachment position
 - Video start offset
- 3. Click **OK** to save your changes and close the dialog.

RESULT

Changing the value for **Flow attachment position** changes the rhythmic position in the music at which the video starts.

Changing the value for **Video start offset** changes the position in the video that occurs at the **Flow attachment position**.

For example, if you change the **Video start offset** to **00:00:05:00** and the **Flow attachment position** to **8**, then the fifth second in the video happens on the eighth beat in the music.

NOTE

- The initial rhythmic position is 0. Therefore, if the **Flow attachment position** is set to **8** and the time signature is 4/4, the flow attachment occurs on the first beat in the third bar.
- Changing the Video start offset changes what part of the video coincides with the Flow
 attachment position, but this does not cut the video before this point. Any preceding video
 material is shown as long as it happens within the flow.

Hiding/Showing the Video window

You can hide and show the **Video** window at any time and in any mode; for example, if you do not want it in view when working on the music in the music area.

PROCEDURE

- Hide/Show the **Video** window in any of the following ways:
 - Press F4.
 - In the toolbar, click Show Video ...
 - Choose Window > Video.

RELATED LINKS

Toolbar on page 29

Markers track on page 519

Changing the size of the Video window

You can change the size of the Video window at any time.

PREREQUISITE

The **Video** window is shown.

PROCEDURE

- Change the size of the **Video** window in any of the following ways:
 - Click and drag the corners/edges in any direction.
 - **Shift** -click and drag a corner/edge to change the size without changing the shape.

RESULT

The size of the **Video** window is changed. Dorico Elements saves the new size and shape and uses this for all projects until you change the size again.

Changing the volume of video audio

Any audio that is part of a video you have added is played back in sync with the music in the project. You can change the video volume manually.

PREREQUISITE

The Mixer is shown, either in the lower zone or in the Mixer window.

PROCEDURE

- 1. Optional: If the Video channel is not shown in the Mixer, click Video in the Mixer toolbar.
- 2. Do one of the following:
 - To change the volume of video audio, click and drag the Video channel fader upwards/ downwards.
 - To mute video audio, click **Mute** m in the **Video** channel.

RESULT

The volume of audio from videos in your project is changed.

RELATED LINKS

Mixer on page 700

Muting/Soloing tracks on page 532

Removing videos

You can remove videos from each flow independently.

PROCEDURE

- 1. In Setup mode, in the **Flows** panel, right-click the flow from which you want to remove a video
- 2. Choose Video > Detach from the context menu.

RESULT

The video is removed from the selected flow.

RELATED LINKS

Flows panel on page 118

Frame rates

The frame rate of a video is the number of still images that are used per unit of time in order to create the impression of a moving image, commonly measured in frames per second, or "fps".

The number of frames per second required to create the impression of a moving image is determined by how fast the human eye processes movement, and so the most common frame rate is around 24 fps. However, recent major films have been released at 48 fps, which results in sharper images.

Dorico Elements supports frame rates from 23.976 fps to 60 fps. For example, the US and Canadian broadcast standard NTSC uses 29.97 fps.

Frame rates are closely linked to timecodes, as timecodes include both the time and the current frame position.

All the common frame rates, such as 23.976, 24, 24.975, 25, 29.97, and 30 frames per second, are fully supported in Dorico Elements.

By default, Dorico Elements uses the same frame rate for the project as the video file, but you can manually choose a different frame rate.

RELATED LINKS

Timecodes on page 1206

Changing the project frame rate

By default, Dorico Elements uses the video frame rate as the project frame rate. You can change the project frame rate if you want it to be different; for example, if your project contains multiple videos with different frame rates.

TIP

You can change the frame rate even if there are no videos in the project.

PROCEDURE

- 1. In Setup mode, open the Video Properties dialog in one of the following ways:
 - Add a video to a flow.
 - In the **Flows** panel, right-click a flow and choose **Video** > **Properties** from the context menu.
- **2.** Select the frame rate you want to use for the project from the **Project frame rate** menu.
- 3. Click **OK** to save your changes and close the dialog.

RESULT

The project frame rate is changed.

Write mode

Write mode allows you to input and edit your music, including changing the rhythmic positions of items, changing the pitch of notes, and deleting notes and items. The available toolboxes and panels allow you to input all the notes and notation items that are most commonly used.

By design, you cannot move notes and items graphically in Write mode. Graphical adjustments are only possible in Engrave mode.

Project window in Write mode

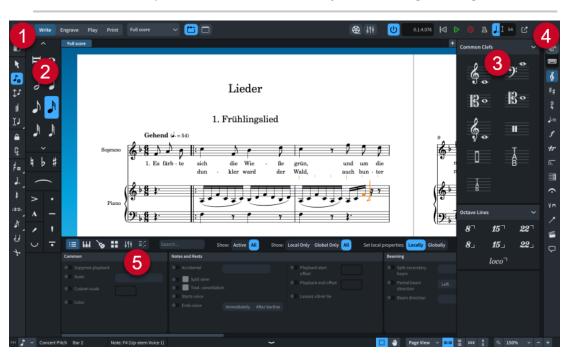
The project window in Write mode contains toolboxes and panels with the tools and functions required to write your music.

You can switch to Write mode in any of the following ways:

- Press Ctrl/Cmd-2.
- In the toolbar, click Write.
- Choose Window > Write.
- In Setup mode or Engrave mode, double-click in the music area.

TIP

You can disable this option in **Preferences > Note Input and Editing > Editing**.



The following zones and toolboxes are available in Write mode:

1 Notes toolbox

Contains tools that affect note input and editing.

2 Left zone

Contains the Notes panel. The Notes panel provides the note durations, accidentals, and articulations that are most commonly used during note input.

3 Right zone

Can display different panels, according to the current selection in the Notations toolbox. Panels in the right zone contain notation items that you can add to your music, such as dynamics and playing techniques, divided into separate categories.

4 Notations toolbox

Contains either panel or popover buttons, depending on whether **Panels** or **Popovers**

Allows you to show panels for different notations in the right zone, open popovers, and input certain items directly, such as rehearsal marks and text.

5 Lower zone

Can display different panels, according to the current selection in the lower zone toolbar. Panels in the lower zone include the Properties panel, which allows you to make individual modifications to the currently selected notes and notations, and the Keyboard panel, which allows you to input notes.

RELATED LINKS

Toolbar on page 29
Properties panel on page 646
Mixer panel on page 700

Notes toolbox

The tools in the Notes toolbox allow you to start note input, modify notes, and change the type and scope of notes you input. The Notes toolbox is located on the left of the window in Write mode.

Show Left Zone



Hides/Shows the left zone.

Select



Enables/Disables mouse input. When **Select** is activated, mouse input is disabled and you cannot input notes by clicking on the staff.

TIP

You can assign a key command for **Disable Mouse Input** on the **Key Commands** page in **Preferences**.

Start Note Input



Starts/Stops note input by showing/hiding the caret. If a note, rest, or item is selected in the music area, note input starts at the selected rhythmic position. If nothing is selected in the music area, note input starts at the earliest rhythmic position on the top staff in view.

Pitch Before Duration



When this option is activated, you can select the pitch before specifying the duration during note input. This allows you to experiment with pitches without having to stop note input because you only input the note when you specify the duration.

You can also activate/deactivate Pitch Before Duration by pressing K.

Chords



Allows you to add multiple notes at the same rhythmic position in order to build a chord during note input. This function prevents the caret from advancing automatically after inputting a note. Chord mode also affects some edits outside of note input, such as copying/pasting notes and items without overwriting existing material.

You can also start/stop chord input by pressing **Q**.

Insert



Allows you to insert notes before existing notes in the current voice ahead of the caret, instead of overwriting them, during note input. Insert mode also affects some edits outside of note input, such as deleting notes or changing their duration. For example, reducing the duration of notes with Insert mode activated pulls them closer together without leaving rests between the notes.

When inputting or changing time signatures, Insert mode instructs Dorico Elements to add any extra beats required to fill bars.

You can click and hold or right-click **Insert** to access the following options:

- **Voice 1**: Insert mode only affects the selected voices.
- **Player 1:** Insert mode affects all voices and instruments belonging to the selected players.
- Global is: Insert mode affects all players in the flow.
- **Global Adjustment of Current Bar** : Insert mode affects all players in the flow, changes the duration of the current bar, and updates its time signature to reflect its new duration.

You can also activate/deactivate Insert mode by pressing **I**. You can cycle through the different Insert mode scopes by pressing **Alt/Opt-I**.

Lock Duration



Allows you to maintain the duration of notes while you change their pitches. Only available during note input.

You can also activate/deactivate **Lock Duration** by pressing **L**.

Force Duration



Allows you to input notes/rests with the explicit duration you have selected during note input, and fixes the current notated duration of existing notes outside of note input. For example, you can activate **Force Duration** to force the input of a dotted quarter note on the second quarter beat of 4/4, where Dorico Elements splits the note with a tie by default.

IMPORTANT

You can get unexpected results if you force the duration of notes and later change the time signature or move barlines, for example.

You can remove **Force Duration** from selected notes by resetting their appearance. You can also activate/deactivate **Force Duration** by pressing **O**.

Create Voice



Allows you to create a new voice on the current staff into which you can input notes during note input. Outside of note input, **Create Voice** allows you to change the voice of existing notes.

You can click and hold or right-click Create Voice to access the following options:

- **Create Voice** : Creates a new voice on the current staff. You can also use the key command **Shift-V**.
- Create Slash Voice : Creates a new slash voice with each click. For example, the third new slash voice is stemless. You can also use the key command Shift-Alt/Opt-V.
- **Next Voice** : Cycles through active voices on the staff. You can also use the key command **V**.

Dotted Notes



Allows you to input dotted notes/rests based on the currently selected duration during note input. Outside of note input, **Dotted Notes** allows you to add rhythm dots to, and remove rhythm dots from, existing notes/rests.

You can click and hold or right-click **Dotted Notes** to access the following options:

- One Rhythm Dot .: Inputs notes/rests with one rhythm dot during note input.

 Adds one rhythm dot to selected existing notes/rests outside of note input.
- **Two Rhythm Dots** : Inputs notes/rests with two rhythm dots during note input. Adds two rhythm dots to selected existing notes/rests outside of note input.
- Three Rhythm Dots .: Inputs notes/rests with three rhythm dots during note input. Adds three rhythm dots to selected existing notes/rests outside of note input.
- **Four Rhythm Dots** : Inputs notes/rests with four rhythm dots during note input. Adds four rhythm dots to selected existing notes/rests outside of note input.

You can also activate/deactivate **Dotted Notes** by pressing . or double-pressing note duration key commands. You can cycle through the different numbers of rhythm dots by pressing **Alt/Opt-.**.

Rests



Allows you to input rests of the currently selected duration instead of notes.

You can also start/stop rest input by pressing ,.

NOTE

If **Force Duration** is not activated, Dorico Elements automatically combines adjacent rests as appropriate for their position in relation to notes and according to the current meter.

Tuplets



Inputs a triplet based on the currently selected note duration at the caret position or at the selected rhythmic position.

You can click and hold or right-click **Tuplets** to access the following options:

- 2:3 : Inputs a duplet; that is, two notes in the space of three.
- **3:2** Inputs a triplet; that is, three notes in the space of two.
- 4:3 : Inputs a quadruplet; that is, four notes in the space of three.
- 5:4 : Inputs a quintuplet; that is, five notes in the space of four.
- **6:4** .: Inputs a sextuplet; that is, six notes in the space of four.
- 7:8 🔤: Inputs a septuplet; that is, seven notes in the space of eight.
- **x:y** See: Opens the tuplets popover, into which you can enter any tuplet ratio.

Grace Notes



Allows you to input grace notes instead of normal notes at the caret position. Only available during note input.

You can click and hold or right-click **Grace Notes** to access the following options:

- Unslashed Grace Notes 1. Selects unslashed grace notes.
- Slashed Grace Notes : Selects slashed grace notes.

You can also start/stop grace note input by pressing /. You can switch between slashed/unslashed grace notes by pressing **Alt/Opt-/**.

Tie



During note input, this ties the next note you input to the previous note of the same pitch, in the same voice, and on the same staff. Outside of note input, you can use this tool to tie together notes of the same pitch in different voices or to tie grace notes to rhythmic notes.

You can also activate **Tie** by pressing **T**.

NOTE

You cannot deactivate **Tie**. If you want to delete ties, you must use **Scissors**.

Scissors



Splits notes and explicit rests in two at the caret position during note input. Outside of note input, it deletes all ties in tie chains.

You can also activate **Scissors** by pressing **U**.

RELATED LINKS

Enabling/Disabling mouse input on page 208

Inputting notes with rhythm dots on page 225

Inputting chords on page 247

Inputting grace notes on page 244

Inputting tuplets on page 249

Tuplets popover on page 251

Input methods for time signatures and pick-up bars on page 277

Resetting the appearance of items on page 424

Key Commands page in the Preferences dialog on page 58

Notes panel

The Notes panel contains buttons that allow you to select note and rest durations, and to input accidentals, slurs, and articulations. It is located on the left of the window in Write mode.

You can hide/show the Notes panel in any of the following ways:

- Press Ctrl/Cmd-7.
- In the toolbox on the left, click **Show Left Zone .**
- Choose Window > Show Left Zone.



The upper part of the Notes panel contains note durations that you can select for input or to change the duration of existing notes. By default, only the most common note durations are shown. You can see all note durations by clicking the **Show/Hide All Notes** disclosure arrows at the top and bottom of the section.

In the middle part of the Notes panel, you can activate/deactivate accidentals and activate slurs.

In the bottom part of the Notes panel, you can activate/deactivate articulations.

RELATED LINKS

Inputting notes on page 219

Inputting accidentals on page 239
Inputting articulations on page 266
Inputting slurs on page 267
Inputting nested slurs on page 1273
Deleting notes/items on page 443
Deleting accidentals on page 775
Deleting articulations on page 788

Notations toolbox

The Notations toolbox allows you to access panels and popovers, which you can use to input the different notations available. It is located on the right of the window in Write mode.

Panels



Allows you to access panels from the Notations toolbox. Panels allow you to input notations by clicking them in the panel.

Popovers



Allows you to access popovers from the Notations toolbox. Popovers allow you to input notations by typing entries on your computer keyboard. Popovers open above the top staff on which the caret is active or an item is selected, and at the caret position or the rhythmic position of the earliest selected item.

NOTE

Popovers are only available during note input or when at least one note/item is selected in the music area.

Panel buttons

Clefs



Hides/Shows the Clefs panel, which contains sections for clefs and octave lines.

Key Signatures, Tonality Systems, and Accidentals



Hides/Shows the Key Signatures, Tonality Systems, and Accidentals panel, which contains sections for key signatures, tonality systems, and accidentals. You can also create and edit custom tonality systems from this panel.

Time Signatures (Meter)



Hides/Shows the Time Signatures (Meter) panel, which contains sections for the different types of time signatures, including a section where you can create custom time signatures, such as interchangeable time signatures and time signatures with pick-up bars.

Tempo



Hides/Shows the Tempo panel, which contains sections for the different types of tempo changes, including gradual tempo changes, metronome marks, and tempo equations.

Dynamics



Hides/Shows the Dynamics panel, which contains sections for the different types of dynamics, including immediate, gradual, and custom combined dynamics.

Ornaments



Hides/Shows the Ornaments panel, which contains sections for ornaments, arpeggio signs, glissando lines, and guitar techniques.

Repeat Structures



Hides/Shows the Repeat Structures panel, which contains sections for the different types of repeat structures, including repeat endings and segments, repeat markers, single-note and multi-note tremolos, bar repeats, and slash regions.

Bars and Barlines



Hides/Shows the Bars and Barlines panel, which contains sections for bars, bar rests, and barlines.

Holds and Pauses



Hides/Shows the Holds and Pauses panel, which contains sections for fermatas, breath marks, and caesuras.

Playing Techniques



Hides/Shows the Playing Techniques panel, which contains sections for the various instrument family groups. Each section contains playing techniques for the corresponding instrument family.

Lines



Hides/Shows the Lines panel, which contains sections for horizontal and vertical lines.

Video



Hides/Shows the Video panel, which allows you to open the **Video Properties** dialog, view and edit markers in the current flow, and to calculate suitable tempos for important markers.

Comments



Hides/Shows the Comments panel, which allows you to view, edit, and export comments in the current flow.

Popover and direct input buttons

Clefs



Opens the clefs and octave lines popover.

Key Signatures, Tonality Systems, and Accidentals



Opens the key signatures popover.

Time Signatures (Meter)



Opens the time signatures popover.

Tempo



Opens the tempo popover.

Dynamics



Opens the dynamics popover.

Ornaments



Opens the ornaments popover.

Repeat Structures



Opens the repeats popover.

Bars and Barlines



Opens the bars and barlines popover.

Holds and Pauses



Opens the holds and pauses popover.

Playing Techniques



Opens the playing techniques popover.

Rehearsal Marks



Inputs a rehearsal mark.

Text



Opens the text editor for inputting text items.

Lyrics



Opens the lyrics popover.

Chord Symbols



Opens the chord symbols popover.

Note Tools



Opens the note tools popover.

Fingering



Opens the fingerings popover.

Figured Bass



Opens the figured bass popover.

RELATED LINKS

Notations input on page 266 Video Properties dialog on page 185 Comment dialog on page 483

Right zone (Write mode)

The right zone in Write mode can display different panels for the available notation items, according to your selection in the Notations toolbox. You can use panels in the right zone to input notations. The right zone is located on the right of the window in Write mode.

You can hide/show the right zone in any of the following ways; for example, if you want to find a notation to input but then want to increase the size of the music area after inputting it:

- Press Ctrl/Cmd-9.
- In the Notations toolbox, click the button for any panel you want to show, or the active button for the panel you want to hide.
- Choose Window > Show Right Zone.

RELATED LINKS

Hiding/Showing zones on page 43
Clefs panel on page 324
Key Signatures, Tonality Systems, and Accidentals panel on page 276
Time Signatures (Meter) panel on page 280
Tempo panel on page 292
Dynamics panel on page 309

Ornaments panel on page 337
Repeat Structures panel on page 398
Bars and Barlines panel on page 296
Holds and Pauses panel on page 331
Playing Techniques panel on page 361
Lines panel on page 375
Video panel on page 392
Comments panel on page 482

Lower zone (Write mode)

The lower zone in Write mode can display different panels for inputting notes and editing notes/ items.

You can hide/show the lower zone in any of the following ways:

- Press Ctrl/Cmd-8.
- Click the disclosure arrow at the bottom of the main window.
- Choose Window > Show Lower Zone.

You can use the panel selectors in the top left of the lower zone to display the corresponding panel:

Properties



Shows the Properties panel, which allows you to edit individual notes and notations, such as by changing their appearance or position.

Keyboard



Shows the Keyboard panel, which allows you to input notes using a piano keyboard layout and displays the pitches of selected notes as depressed keys.

Fretboard



Shows the Fretboard panel, which allows you to input notes for fretted instruments using the corresponding fretboard layout for the selected instrument type.

Drum Pads



Shows the Drum Pads panel, which allows you to input notes for unpitched percussion instruments using a drum pads layout.

Mixer



Shows the Mixer panel, which allows you to control the sounds produced in playback by instruments in the project, both for the master output and each individual instrument's channel.

Key Editor



Shows the Key Editor panel, which allows you to view and edit notes belonging to the selected instrument in a continuous piano roll.

RELATED LINKS

Hiding/Showing zones on page 43 Properties panel on page 646 Mixer panel on page 700 Key Editor panel on page 650 Note input on page 219 Notations input on page 266

Keyboard panel

The Keyboard panel allows you to input notes using a piano keyboard layout, and displays selected notes and sounding notes in playback as depressed keys with blue dots. It is located in the lower zone at the bottom of the window in Write mode.

During note input, the notes you press in the Keyboard panel are input. Outside of note input, Dorico Elements plays the notes you press using the instrument sounds of your most recent selection but does not input them.

• You can show the Keyboard panel by showing the lower zone, then clicking **Keyboard** III in the lower zone toolbar.



Between the toolbar and the keyboard, there is a keyboard range selector. The brighter keys indicate the keys shown in the panel. The shaded keys at each end of the range allow you to change the keys shown in the panel; for example, if you want to show fewer, wider keys.

The Keyboard panel toolbar contains the following options:

Advance Caret



Advances the caret by the currently selected note duration without inputting notes. Extends notations with duration, such as gradual dynamics and pedal lines. Only available during note input.

You can also advance the caret by pressing **Space**.

Delete Left



Deletes notes at the previous rhythmic position and moves the caret back to that position. Only available during note input.

You can also delete notes/items during note input by pressing **Backspace**.

TIP

You can delete notes/items outside of note input by pressing **Backspace or Delete**.

Set Note Duration



Allows you to select a note duration, both for the next notes you input during note input and to change the duration of existing notes outside of note input.

You can also select note durations by pressing the corresponding key command or by clicking note durations in the Notes panel in the left zone.

Slur



Inputs a slur, starting from the currently selected note or spanning the selected notes. During note input, slurs extend automatically as you input notes.

You can also input slurs by pressing **S**.

Set Articulation









Allows you to activate/deactivate articulations, both for the next notes you input during note input and to add articulations to existing notes.

You can also activate/deactivate articulations by pressing the corresponding key command.

NOTE

Notes cannot have both accent and marcato articulations, or both staccato and tenuto articulations.

Respell Using Note Name Above



Respells the selected notes upwards to show the enharmonic equivalent using the note name above; for example, respelling F^{\sharp} as G^{\flat} .

Respell Using Note Name Below



Respells the selected notes downwards to show the enharmonic equivalent using the note name below, such as respelling Gb as F#.

Resize Lower Zone



Allows you to change the height of the lower zone.

RELATED LINKS

Caret on page 214
Hiding/Showing zones on page 43
Inputting notes on page 219
Inputting chords on page 247
Selecting note/rest durations on page 254

Inputting slurs on page 267

Inputting articulations on page 266

Respelling notes on page 460 Changing the middle C numbering convention on page 50

Fretboard panel

The Fretboard panel allows you to input notes for fretted instruments using the corresponding fretboard layout for the selected instrument type, and displays the pitches of the earliest selected notes as stopped strings with blue dots. It is located in the lower zone at the bottom of the window in Write mode.

During note input, the notes you press in the Fretboard panel are input. Outside of note input, Dorico Elements plays the notes you press using the instrument sounds of your most recent selection but does not input them.

• You can show the Fretboard panel by showing the lower zone, then clicking **Fretboard** in the lower zone toolbar.



The Fretboard panel toolbar contains the following options:

Advance Caret



Advances the caret by the currently selected note duration without inputting notes. Extends notations with duration, such as gradual dynamics and pedal lines. Only available during note input.

You can also advance the caret by pressing **Space**.

Delete Left



Deletes notes at the previous rhythmic position and moves the caret back to that position. Only available during note input.

You can also delete notes/items during note input by pressing **Backspace**.



You can delete notes/items outside of note input by pressing Backspace or Delete.

Set Note Duration



Allows you to select a note duration, both for the next notes you input during note input and to change the duration of existing notes outside of note input.

You can also select note durations by pressing the corresponding key command or by clicking note durations in the Notes panel in the left zone.

RELATED LINKS

Caret on page 214

Hiding/Showing zones on page 43
Inputting notes on tablature on page 237
Selecting note/rest durations on page 254
Fretted instrument tuning on page 150
Tablature on page 1308

Drum Pads panel

The Drum Pads panel allows you to input notes for unpitched percussion instruments using a drum pads layout. It is located in the lower zone at the bottom of the window in Write mode.

During note input, the notes you press in the Drum Pads panel are input. Outside of note input, Dorico Elements plays sounds for the instruments and techniques you press but does not input them.

• You can show the Drum Pads panel by showing the lower zone, then clicking **Drum Pads II** in the lower zone toolbar.



The Drum Pads panel toolbar contains the following options:

Advance Caret



Advances the caret by the currently selected note duration without inputting notes. Extends notations with duration, such as gradual dynamics and pedal lines. Only available during note input.

You can also advance the caret by pressing **Space**.

Delete Left



Deletes notes at the previous rhythmic position and moves the caret back to that position. Only available during note input.

You can also delete notes/items during note input by pressing **Backspace**.



You can delete notes/items outside of note input by pressing **Backspace or Delete**.

Set Note Duration



Allows you to select a note duration, both for the next notes you input during note input and to change the duration of existing notes outside of note input.

You can also select note durations by pressing the corresponding key command or by clicking note durations in the Notes panel in the left zone.

Reorder Drum Pads



Allows you to move drum pads in relation to each other; for example, to create a different arrangement for easier input in different circumstances.

Resize Lower Zone



Allows you to change the height of the lower zone.

RELATED LINKS
Caret on page 214
Hiding/Showing zones on page 43
Inputting notes for unpitched percussion on page 233
Selecting note/rest durations on page 254
Percussion kits and drum sets on page 140
Percussion kit presentation types on page 1406
Voices in percussion kits on page 1413

Inputting vs. editing

Dorico Elements distinguishes the processes for inputting and editing music.

Inputting

If you can see the caret, you are inputting new music. The caret must be activated in order to input notes and notations. If the caret is activated, selecting tools or items in the Notes toolbox and the Notes panel affects the note or chord that you are about to input, as you can specify the duration, rhythm dot, accidentals, and articulations. Then you specify the pitch by clicking the note into the score, by pressing the letter name of the note on your computer keyboard, or by playing the note or chord on your MIDI keyboard.

When the caret is activated, notes and notations are input at the caret position.

If no notes or chords are selected in the music area and you select a duration, either by pressing its key command or by clicking it in the Notes panel, mouse input is activated. If you move the mouse pointer over the staff, a shadow note is displayed to indicate where the note will be input if you click.

NOTE

Deactivating mouse input prevents Dorico Elements from starting mouse input in this circumstance.

Editing

If you cannot see the caret, you can edit existing music. Editing music includes moving, copying/paste, and deleting notes and notations. You can switch back and forth between inputting and editing at any time.

When the caret is not activated, new items are input at the position of the first selected note or item in the music area, according to your item input position setting. If there is no selection, the mouse pointer is loaded with the new item. The item is then created at the location where you click.

To edit existing notes and notations, you must select them in the music area. This allows you to update the selected notes or items when you select, for example, new note durations, accidentals, or articulations in the Notes panel.

We recommend that you spend a moment to understand the difference between how Dorico Elements behaves if the caret is shown and if it is not. In the latter case, all editing functions operate on the items that you have selected in the music area.

NOTE

The results of some edits outside of note input, including copying/pasting notes, can be affected by Insert mode and Chord mode.

RELATED LINKS

Editing items on page 418
Selecting notes/items on page 410

Note input on page 219

Notations input on page 266

Insert mode on page 439

Chord mode on page 249

Key Editor on page 650

Changing the gradual dynamic input position setting on page 310

Changing your mouse input settings

You can change your mouse input settings; for example, if you want to load a playing technique on the pointer once and input it in multiple places without having to reselect the playing technique each time.

PROCEDURE

- 1. Press Ctrl/Cmd-, to open Preferences.
- 2. In the category list, click Note Input and Editing.
- 3. In the **Editing** section, choose one of the following options for **Creating items with the** mouse:
 - To input items at the position of the earliest selected note/item in the music area, choose **Create item at selection**.
 - To load items onto the mouse pointer so you can click in the music area where you want to input the item, choose **Load pointer with item**.
- **4.** Optional: If you chose **Load pointer with item**, activate/deactivate **Allow multiple items to be created with the mouse**.

NOTE

When this option is activated, you can load an item onto your mouse pointer once, then input that item multiple times without having to reselect it each time.

When this option is deactivated, you can only input an item loaded onto your mouse pointer once.

5. Click Apply, then Close.

RESULT

Your mouse input settings are changed in the current project and for all future projects.

RELATED LINKS

Preferences dialog on page 57 Notations input on page 266

Enabling/Disabling mouse input

You can enable/disable mouse input; for example, if you only want to input notes using your computer keyboard or MIDI device. Disabling mouse input also allows you to click other items to stop note input.

PROCEDURE

• In Write mode, in the Notes toolbox, activate/deactivate **Select \rightarrow**.

RESULT

Mouse input is enabled in the current project when **Select** is deactivated, and disabled when **Select** is activated.

TIP

You can change whether mouse input is enabled/disabled by default in all future projects in **Preferences** > **Note Input and Editing** > **Note Input**.

RELATED LINKS

Notes toolbox on page 192 Preferences dialog on page 57

Enabling/Disabling mouse editing

You can enable/disable mouse editing for notes; for example, if you want to transpose and move notes by dragging with the mouse.

This does not affect your ability to edit notations using the mouse, which is always enabled.

PROCEDURE

- 1. Press Ctrl/Cmd-, to open Preferences.
- 2. In the category list, click Note Input and Editing.
- 3. In the Note Input section, activate/deactivate Enable note pitch and rhythmic position editing using the mouse.
- 4. Click Apply, then Close.

RESULT

The setting is changed in the current project and for all future projects.

TIP

You can assign a key command for **Toggle Mouse Note Editing** on the **Key Commands** page in **Preferences**.

RELATED LINKS

Key Commands page in the Preferences dialog on page 58 Changing the pitch of individual notes on page 455

Adding notes above/below existing notes on page 253 Copying and pasting notes/items on page 445 Moving notes/items rhythmically on page 448 Moving notes/items to other staves on page 451

Changing the item input position setting

By default, Dorico Elements inputs items at the position of the earliest note on each selected staff. You can change this setting if you prefer to input items at the same rhythmic position on each selected staff, regardless of whether that represents a note or rest.

PROCEDURE

- 1. Press Ctrl/Cmd-, to open Preferences.
- 2. In the category list, click Note Input and Editing.
- 3. In the Editing section, activate/deactivate Create items at position of first selected note.
- **4.** Optional: If you activated **Create items at position of first selected note**, activate/ deactivate **Create clefs at position of first selected note**.
- 5. Click Apply, then Close.

RESULT

When **Create items at position of first selected note** is activated, items are input at the rhythmic position of the earliest selected note. Items with duration end at the rhythmic position of the last selected note. This can cause items to be input at different rhythmic positions on each selected staff.

When **Create items at position of first selected note** is deactivated, items are input at the rhythmic position of the earliest selected item. Items with duration end at the rhythmic position of the last selected item. This can cause items to be input at the rhythmic positions of rests rather than notes.

EXAMPLE





Whole bar selected

Octave line input with setting activated

Octave line input with setting deactivated

RELATED LINKS

Preferences dialog on page 57
Notations input on page 266
Selecting notes/items on page 410
Inputting notes and notations onto multiple staves on page 231
Changing the gradual dynamic input position setting on page 310

Changing the note-based notation input setting

You can change your default setting for whether rhythm dots, accidentals, and articulations apply to the last input note or the next note you input during note input. This setting also affects

whether or not the last input note remains selected after entry when using pitch before duration for inputting notes.

For example, changing the setting to **After inputting note** when using pitch before duration for notes ensures the last input note remains selected after you input it, making it easier to change its enharmonic spelling when inputting notes using a MIDI keyboard. The last input note is always selected when using duration before pitch for notes, regardless of your note-based notation input setting.

PROCEDURE

- 1. Press Ctrl/Cmd-, to open Preferences.
- 2. In the category list, click **Note Input and Editing**.
- **3.** In the **Note Input** section, choose one of the following options for **Specify accidental**, **rhythm dot and articulations** in the **Pitch and Duration** subsection:
 - After inputting note
 - Before inputting note
- 4. Click Apply, then Close.

RESULT

The setting is changed in the current project and for all future projects. If you chose **Before inputting note**, notes do not remain selected after you input them during pitch before duration note input.

RELATED LINKS

Inputting notes on page 219
Inputting notes using pitch before duration on page 222
Inputting accidentals on page 239
Inputting notes with rhythm dots on page 225
Inputting articulations on page 266

Changing the input pitch setting

You can input and record notes at either sounding pitch or written pitch; for example, if you want to record notes at their sounding pitch in transposing part layouts.

In concert pitch layouts, written pitch and sounding pitch are the same.

PROCEDURE

- In Write mode, choose one of the following input pitch settings:
 - To input/record notes at their written pitch, choose Write > Input Pitch > Written Pitch.
 - To input/record notes at their sounding pitch, choose Write > Input Pitch > Sounding Pitch.

RESULT

The resulting pitch notated or recorded is changed. For example, if you input a C in a Horn in F transposing part layout with the input pitch set to **Sounding Pitch**, the note is written as a G.

RELATED LINKS

Inputting notes on page 219
Inputting notes using MIDI recording on page 259

Concert vs. transposed pitch on page 174

Playing/Muting notes during note input/selection

You can change your default setting for whether notes are played back as you input them or not. By default, notes are played back with the prevailing dynamic but you can set a fixed volume instead.

PROCEDURE

- 1. Press Ctrl/Cmd-, to open Preferences.
- 2. In the category list, click Note Input and Editing.
- **3.** In the **Note Input** section, activate/deactivate **Play notes during note input and selection** in the **Auditioning** subsection.
- **4.** Optional: If you want notes to play back with a fixed volume instead of the prevailing dynamic, activate **Use fixed volume to play selected notes** and change the value in the value field.
- 5. Click Apply, then Close.

RESULT

When the option is activated, notes play back as you input them during note input and when you select them. When it is deactivated, notes do not play back.

When **Use fixed volume to play selected notes** is activated, notes play back with the set volume. When it is deactivated, notes play back with the prevailing dynamic.

RELATED LINKS

Inputting notes on page 219

Selecting/Deselecting notes and items individually on page 411

Playing back music on page 525

Changing the click settings on page 262

Mixer panel on page 700

Input methods for dynamics on page 302

Playing all/individual notes in chords during note input/selection

You can change your default setting for whether all notes in chords are played when you select any note in the chord or whether only the selected notes are played.

PREREQUISITE

Notes are played during note input/selection.

PROCEDURE

- 1. Press Ctrl/Cmd-, to open Preferences.
- 2. In the category list, click Note Input and Editing.
- **3.** In the **Note Input** section, activate/deactivate **Play all notes in chord when any is selected** in the **Auditioning** subsection.
- 4. Click Apply, then Close.

RESULT

When the option is activated, all notes in chords are played when any note in the chord is selected. When it is deactivated, only the selected notes are played.

Enabling/Disabling MIDI thru

You can enable/disable MIDI thru at any time. For example, you can enable MIDI thru during note input to hear sounds from your MIDI keyboard, but disable MIDI thru during playback to hear the sounds produced by Dorico Elements.

PROCEDURE

- 1. Press Ctrl/Cmd-, to open Preferences.
- 2. In the category list, click Play.
- 3. In the **Recording** subsection, activate/deactivate **Enable MIDI thru**.
- 4. Click Apply, then Close.

RESULT

The setting is changed in the current project and for all future projects.

TIP

You can assign a key command for **Toggle MIDI Thru** on the **Key Commands** page in **Preferences**.

RELATED LINKS

Key Commands page in the Preferences dialog on page 58
Inputting notes on page 219
Playing back music on page 525
MIDI recording on page 258
Enabling/Disabling MIDI input devices on page 265

Rhythmic grid

The rhythmic grid is a unit of rhythmic duration whose value affects certain aspects of inputting and editing, such as the amount by which items move. However, it does not control the duration of notes and items that you input.



Rhythmic grid set to eighth notes (quavers) shown above the staff

The current rhythmic grid resolution is shown by the note value in the status bar, and by ruler markings above the staff on which the caret is active or on which you are dragging notes. Longer lines in the rhythmic grid indicate beat divisions, while shorter lines indicate beat subdivisions.

The rhythmic grid controls the following:

 The possible input positions when using the caret or the mouse, and when copying and pasting. For example, setting the rhythmic grid resolution to 32nd notes allows you to input notes and items at a greater number of possible rhythmic positions than when the rhythmic grid is set to quarter notes.

- The amount by which the caret moves when using Right Arrow / Left Arrow.
- The amount by which notes and items are lengthened/shortened.
- The amount by which notes and items move.
- The duration by which notes are split.

RELATED LINKS

Rhythmic position on page 23

Changing the Key Editor rhythmic grid resolution on page 658

Caret on page 214

Splitting notes by duration on page 256

Moving notes/items rhythmically on page 448

Lengthening/Shortening items on page 419

Copying and pasting notes/items on page 445

Changing music area colors on page 53

Changing the rhythmic grid resolution

You can change the resolution of the rhythmic grid; for example, you might decrease the rhythmic grid resolution so you can shorten notes by smaller increments. The resolution is indicated by the note value symbol in the status bar and by the beat divisions/subdivisions in the ruler markings above the caret.

The rhythmic grid resolution is set to eighth notes (quavers) by default.

PROCEDURE

- Change the resolution of the rhythmic grid in any of the following ways:
 - To decrease the rhythmic grid resolution, press Alt/Opt-].
 - To increase the rhythmic grid resolution, press **Alt/Opt-[**.
 - Choose Write > Rhythmic Grid > Decrease Grid Resolution.
 - Choose Write > Rhythmic Grid > Increase Grid Resolution.
 - Choose Write > Rhythmic Grid > [Beat division].
 - Select a value from the **Rhythmic Grid** selector in the status bar.

RESULT

Decreasing the rhythmic grid resolution makes it finer by making the note value shorter. Increasing the rhythmic grid resolution makes it coarser by making the note value longer.

RELATED LINKS

Status bar on page 37

Changing the Key Editor rhythmic grid resolution on page 658

Caret

In Dorico Elements, the caret is a vertical line that extends above and below five-line staves but appears shorter on percussion staves and tablature. It shows the rhythmic position at which notes, chords, or notation items are input, which can be partway through tie chains.

A caret is a mark that is commonly used when proofreading published text to denote the position at which something should be inserted or added; for example, a missing letter or a word. In software, the caret shows where something is inserted. The caret is also known as an "insertion point" or "cursor". In this documentation, we use "caret" to refer to the line that appears during note input, and "cursor" to refer to the line that appears during text input.

If you are inputting notes, the caret advances to the next rhythmic position automatically. If you are inputting chords or notes on tablature, the caret does not move automatically, and you must move it to the next rhythmic position manually.

The caret has a note symbol beside it, which indicates the stem direction and type of the currently selected voice. It is accompanied by a + symbol if the voice is new.



The caret

The appearance of the caret changes depending on the input mode and the currently selected voice number.

Multiple staves

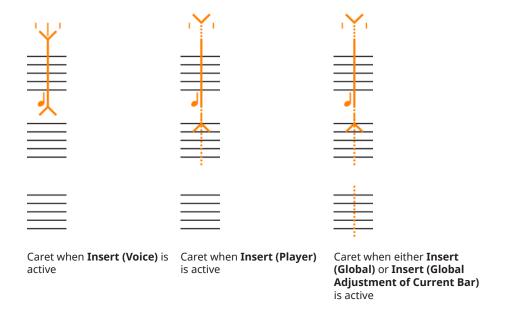
The caret extends vertically across all the staves onto which notes and notations will be input. This allows you to input, for example, the same dynamics or playing techniques on multiple staves simultaneously or play in chords on a MIDI keyboard and distribute the notes in those chords onto multiple staves. The note symbol and rhythmic grid also appear for each included staff.



Caret when inputting notes onto multiple staves

Insert

The caret shows V and inverted V shapes at the top and bottom. Dotted lines are shown on staves affected by the Insert mode scope across which the caret does not already extend. In Insert mode, inserted notes shift existing notes after the caret along by the input duration instead of overwriting them.



NOTE

Insert mode also affects some edits outside of note input, such as copying/pasting, deleting, and lengthening/shortening notes.

Chords

The caret shows a plus symbol at the top left. During chord input, you can input multiple notes at the same rhythmic position.



Caret when inputting chords

NOTE

Chord mode also affects some edits outside of note input, such as copying/pasting and lengthening/shortening notes and items.

Lock Duration

The caret is dashed. **Lock Duration** allows you to repitch notes without changing their duration or rhythm.



Caret when Lock Duration is activated

Grace Notes

The caret is shorter than the default caret. It allows you to input grace notes at the caret position.

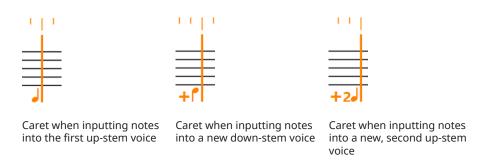


Caret when inputting grace notes

Voices

To identify voices, the caret shows the following:

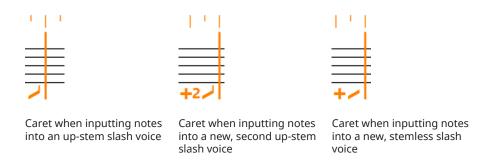
- An up-stem or down-stem note symbol to indicate the stem direction of the voice
- The voice number into which you are about to input notes, for second voices and above
- A plus symbol at the bottom left, if the voice is new



Slash voices

To identify slash voices, the caret shows the following:

- An up-stem or down-stem slash note symbol, indicating the stem direction of the slash voice, and whether it has stems or is stemless
- The number of the slash voice into which you are about to input notes, for second voices and above
- A plus symbol on the left at the bottom, if the slash voice is new



Percussion kits

The caret appears significantly smaller than usual when inputting notes into percussion kits. The name of the kit instrument into which you are currently inputting notes is shown above the rhythmic grid.



Caret when inputting notes into percussion kits

Tablature

The caret appears significantly smaller than usual when inputting notes into tablature. On tablature, the caret behaves as if chord input is always active, meaning you must advance the caret and move it to other string lines manually.



Caret when inputting notes on tablature

RELATED LINKS

Note input on page 219

Chord mode on page 249

Insert mode on page 439

Repitching notes without changing their rhythm on page 459

Splitting tie chains on page 1351

Splitting notes by duration on page 256

Changing music area colors on page 53

Activating/Deactivating the caret

When the caret is activated, you can input notes and notations at the caret position; for example, if you want to input a dynamic in the middle of a tie chain. When the caret is deactivated, you cannot input notes, instead you can select and edit items in the music area.

PROCEDURE

- 1. In Write mode, activate the caret and start note input in any of the following ways:
 - Select an item and press Shift-N.
 - In the Notes toolbox, click Start Note Input ...
 - Double-click a rhythmic position on a staff.
- **2.** Deactivate the caret and stop note input in any of the following ways:
 - Press Shift-N, Return, or Esc.
 - If you have deactivated mouse input, click any selectable item in the music area.
 - In the Notes toolbox, click **Start Note Input 7**_a.
 - Switch to another mode.

RELATED LINKS

Enabling/Disabling mouse input on page 208

Note input on page 219

Notations input on page 266

Extending the caret to multiple staves

You can extend the caret so it spans multiple staves. This allows you to input notes and notations onto multiple staves simultaneously, including automatically exploding the notes in chords that you play on a MIDI keyboard onto the appropriate staves.

PROCEDURE

- **1.** In Write mode, activate the caret in any of the following ways:
 - Select an item and press Shift-N.
 - In the Notes toolbox, click **Start Note Input** ...
 - Double-click a rhythmic position on a staff.
- **2.** Extend the caret to other staves in any of the following ways:
 - To extend to the staff above, press Shift-Up Arrow.
 - To extend to the staff below, press Shift-Down Arrow.
- 3. Optional: Repeat step 2 as many times as you require.

RELATED LINKS

Notes toolbox on page 192

Inputting notes and notations onto multiple staves on page 231

Moving the caret manually

During normal note input, the caret moves automatically as you input notes, but you can also move it manually. For example, the caret does not move automatically when **Chords** is activated.

PROCEDURE

- In Write mode, move the caret in any of the following ways:
 - To move the caret according to the current rhythmic grid resolution or to the next/ previous note/rest, whichever is closest, press Right Arrow/Left Arrow.
 - To advance the caret according to the note value currently selected, press **Space** or click **Advance Caret** in the Keyboard, Fretboard, or Drum Pads panel toolbar.
 - To move the caret to the next/previous bar, press **Ctrl/Cmd-Right Arrow** / **Ctrl/Cmd-Left Arrow** .
 - To move the caret to the staff above/below, press Up Arrow / Down Arrow.
 - To move the caret to the top/bottom staff in the system, press Ctrl/Cmd-Up Arrow / Ctrl/Cmd-Down Arrow .

RELATED LINKS

Inputting chords on page 247 Keyboard panel on page 202 Fretboard panel on page 204 Drum Pads panel on page 205 Rhythmic grid on page 212

Note input

In Dorico Elements, you can only input notes during note input, which is when the caret is activated. This reduces the risk of you adding notes to staves accidentally.

You can also input notations at the same time as inputting notes. Notations are input at the caret position or on the selected note.

You can input notes in different ways and using any of the following devices, including switching between them at any time:

- MIDI keyboard
- Computer keyboard
- Mouse or touchpad
- Keyboard, Fretboard, and Drum Pads panels

RELATED LINKS

Accidental selection during MIDI input on page 240 Keyboard panel on page 202 Fretboard panel on page 204 Drum Pads panel on page 205 Notations input on page 266 Arranging tools on page 443

Inputting notes

You can input notes into your project during note input, which is when the caret is activated. You can input notes with a computer keyboard, with the mouse, using panels in the lower zone, or by playing notes with a MIDI keyboard.

NOTE

- These steps describe inputting notes with the default preference of duration before pitch. However, you can also specify the pitch before duration instead.
- These steps describe selecting rhythm dots, articulations, and accidentals not in the prevailing key signature before inputting notes. However, you can also select them after inputting notes. If you change this setting, you must perform step 7 before steps 4 to 6.
- You do not have to input rests between notes, as Dorico Elements automatically shows implicit rests of the appropriate duration between the notes you input. Similarly, you do not have to input ties, as Dorico Elements shows notes as tie chains if necessary.
- You can also input notations alongside notes without deactivating note input.

PREREQUISITE

- You have chosen the appropriate input pitch setting.
- You have chosen the appropriate note-based notation input setting.
- You have connected any MIDI devices you want to use for note input.
- If you want to hear sounds from connected MIDI devices, you have enabled MIDI thru.
- If you want to select note durations using the Notes panel, the left zone is shown.
- If you want to input notes into multiple instruments held by a single player or instruments not visible in the score in page view, you are in galley view.
- If your music requires a key signature, you have input that key signature.

PROCEDURE

- 1. In Write mode, start note input in any of the following ways:
 - Select a note or rest on the staff where you want to input notes and press **Shift-N**.

NOTE

You can also press **Return**; however, if you select a notation, such as a dynamic, pressing **Return** opens the corresponding popover instead of starting note input.

- Select a note or rest on the staff where you want to input notes and click **Start Note Input** In the Notes toolbox.
- Double-click the staff where you want to input notes.
- **2.** Optional: If you want to input notes onto multiple staves at once, extend the caret to those staves.
- **3.** Select a note duration in any of the following ways:
 - Press the number on your computer keyboard that corresponds to the duration you want.

For example, press **6** for quarter notes (crotchets). Press smaller numbers for smaller durations, such as **5** for eighth notes (quavers) and **4** for 16th notes (semiquavers). Press larger numbers for larger durations, such as **7** for half notes (minims).

- In the Notes panel, click the duration you want.
- In the Keyboard, Fretboard, or Drum Pads panel toolbar, click the duration you want.
- **4.** Optional: Select any required rhythm dots.
- **5.** Optional: If you want to input a pitch whose accidental is not in the prevailing key signature, select the appropriate accidental.
- **6.** Optional: Select any required articulations.
- **7.** Input the pitches you want in any of the following ways:
 - Press the corresponding letters on your computer keyboard.

TIP

Dorico Elements automatically selects the note whose register is the smallest interval away from the previously input note. However, you can force a different register.

- To input a note above the previously input note, press Shift-Alt/Opt as well as the letter for the note; for example, Shift-Alt/Opt-A.
- To input a note below the previously input note, press Ctrl-Alt (Windows) or Ctrl (macOS) as well as the letter for the note; for example, Ctrl-Alt-A (Windows) or Ctrl-A (macOS).
- Click the staff at the rhythmic position of each note you want to input.
 A shadow notehead appears when inputting with the mouse to indicate where the note will be input.
- In the Keyboard, Fretboard, or Drum Pads panel, play the notes you want.
- Play the notes on a MIDI keyboard.
- **8.** Optional: Advance the caret by the currently selected note duration without inputting notes in any of the following ways:
 - Press Space.

• In the Keyboard, Fretboard, or Drum Pads panel toolbar, click **Advance Caret** ...

TIP

You can also move the caret in different ways and by different increments.

- **9.** Stop note input in any of the following ways:
 - Press Esc or Return.
 - In the Notes toolbox, click **Start Note Input** ...

RESULT

Notes are input with the selected duration at the caret position or where you click and are played back as you input them by default. Their pitch follows the prevailing key signature. For example, if you press **F** in G major, an F# is input automatically.

If you selected rhythm dots or articulations, notes continue to be input with them until you deactivate them. However, accidentals not in the prevailing key signature are only added to the first note you input after selecting them.

Dorico Elements notates and beams notes appropriately according to their duration, the prevailing time signature, and their position in the bar. This includes showing notes as tie chains if required.

If you advance the caret without inputting notes, Dorico Elements fills the gaps between notes with implicit rests of the appropriate duration.

If you input notes on notation staves belonging to fretted instruments, Dorico Elements automatically allocates these notes to the strings on which they can be played closest to the nut. Because this calculation is done for each note separately, multiple notes can be allocated to the same string. In such cases, the notes are shown next to each other on tablature and are colored green. You can then select them individually and make your own string allocation.

NOTE

- The notes you input overwrite existing notes at the caret position in the voice indicated by the quarter note symbol beside the caret. If you want to add notes to an existing voice, you can input chords. You can also input notes into new voices.
- You can change the default beam, note, and rest grouping settings for each flow independently in **Notation Options**. You can also specify custom beat groupings within individual time signatures.

AFTER COMPLETING THIS TASK

- You can move notes to different rhythmic positions and other staves after they have been input.
- You can also show brackets on noteheads individually.

RELATED LINKS

Changing the input pitch setting on page 210

Changing the note-based notation input setting on page 209

Switching to galley/page view on page 49

Notes toolbox on page 192

Notes panel on page 196

Moving notes/items rhythmically on page 448

Moving notes/items to other staves on page 451

Changing the allocated string for notes on tablature on page 1310

Note and rest grouping on page 841

Bracketed noteheads on page 1047

Register selection during note input

Dorico Elements automatically selects the register of pitches during note input, but you can override this and select the register manually.

During note input, Dorico Elements automatically selects the note whose register is the smallest interval away from the previously input note. For example, if you input an F and then press **A**, an A is input a third above the F, rather than a sixth below.

You can override this automatic register selection in the following ways:

- To input a note above the previously input note, press **Shift-Alt/Opt** as well as the letter for the note; for example, **Shift-Alt/Opt-A**.
- To input a note below the previously input note, press **Ctrl-Alt (Windows) or Ctrl (macOS)** as well as the letter for the note; for example, **Ctrl-Alt-A (Windows) or Ctrl-A (macOS)**.

Register selection when inputting chords

During chord input, Dorico Elements automatically inputs notes above the highest note at the caret position. For example, if you press **A** then **E** then **A**, a chord of A-E-A is input at the caret position.

You can input notes below the lowest note at the caret position instead by pressing **Ctrl-Alt (Windows) or Ctrl (macOS)** as well as the letter for the note name; for example, **Ctrl-Alt-A (Windows) or Ctrl-A (macOS)**.

RELATED LINKS

Changing the pitch of individual notes on page 455 Accidental selection during MIDI input on page 240 Respelling notes on page 460

Inputting notes using pitch before duration

You can input notes into your project by specifying their pitch before their duration, meaning you can test pitches before inputting them without leaving note input. You can input notes with a computer keyboard, with the mouse, using panels in the lower zone, or by playing notes with a MIDI keyboard.

By default in Dorico Elements, you must specify the duration before the pitch of notes.

NOTE

- These steps describe selecting the pitch before the duration when inputting notes. However, you can also specify the duration before the pitch instead, which is the default note input behavior in Dorico Elements.
- These steps describe selecting rhythm dots, articulations, and accidentals not in the prevailing key signature before inputting notes. However, you can also select them after inputting notes. If you change this setting, you must perform steps 7 and 8 before steps 4 to 6.
- When inputting notes on tablature using pitch before duration, you must select note durations by clicking them in the Notes panel.
- You do not have to input rests between notes, as Dorico Elements automatically shows implicit rests of the appropriate duration between the notes you input. Similarly, you do not have to input ties, as Dorico Elements shows notes as tie chains if necessary.

• You can also input notations alongside notes without deactivating note input.

PREREQUISITE

- You have chosen the appropriate input pitch setting.
- You have chosen the appropriate note-based notation input setting.
- You have connected any MIDI devices you want to use for note input.
- If you want to hear sounds from connected MIDI devices, you have enabled MIDI thru.
- If you want to select note durations using the Notes panel, the left zone is shown.
- If you want to input notes into multiple instruments held by a single player or instruments not visible in the score in page view, you are in galley view.
- If your music requires a key signature, you have input that key signature.

PROCEDURE

- 1. In Write mode, start note input in any of the following ways:
 - Select a note or rest on the staff where you want to input notes and press Shift-N.

NOTE

You can also press **Return**; however, if you select a notation, such as a dynamic, pressing **Return** opens the corresponding popover instead of starting note input.

- Select a note or rest on the staff where you want to input notes and click **Start Note**Input In the Notes toolbox.
- Double-click the staff where you want to input notes.
- 2. Activate **Pitch Before Duration** in any of the following ways:
 - Press K.
 - In the Notes toolbox, click **Pitch Before Duration 27**.
- **3.** Optional: If you want to input notes onto multiple staves at once, extend the caret to those staves.
- **4.** Optional: If you want to input a pitch whose accidental is not in the prevailing key signature, select the appropriate accidental.
- **5.** Optional: Select any required articulations.
- **6.** Optional: Select any required rhythm dots.
- **7.** Select a pitch in any of the following ways:
 - Press the corresponding letters on your computer keyboard.

TIP

Dorico Elements automatically selects the note whose register is the smallest interval away from the previously input note. However, you can force a different register.

- To input a note above the previously input note, press Shift-Alt/Opt as well as the letter for the note; for example, Shift-Alt/Opt-A.
- To input a note below the previously input note, press Ctrl-Alt (Windows) or Ctrl (macOS) as well as the letter for the note; for example, Ctrl-Alt-A (Windows) or Ctrl-A (macOS).

When inputting notes using pitch before duration, you can press these key commands multiple times to select higher/lower octaves.

- Click the staff at the rhythmic position of each note you want to input.
 A shadow notehead appears when inputting with the mouse to indicate where the note will be input.
- In the Keyboard, Fretboard, or Drum Pads panel, play the notes you want.
- Play the notes on a MIDI keyboard.

Once you have selected a pitch, a shadow note of the corresponding pitch appears at the caret position. You can release the pitch after selecting it.

- **8.** Select a note duration and input the note in any of the following ways:
 - Press the number on your computer keyboard that corresponds to the duration you want.

For example, press **6** for quarter notes (crotchets). Press smaller numbers for smaller durations, such as **5** for eighth notes (quavers) and **4** for 16th notes (semiquavers). Press larger numbers for larger durations, such as **7** for half notes (minims).

• In the Notes panel, click the duration you want.

NOTE

When inputting notes on tablature, you must click durations in the Notes panel.

- In the Keyboard, Fretboard, or Drum Pads panel toolbar, click the duration you want.
- **9.** Optional: Advance the caret by the currently selected note duration without inputting notes in any of the following ways:
 - Press Space.
 - In the Keyboard, Fretboard, or Drum Pads panel toolbar, click Advance Caret

TIP

You can also move the caret in different ways and by different increments.

- **10.** Stop note input in any of the following ways:
 - Press Esc or Return.
 - In the Notes toolbox, click **Start Note Input** .

RESULT

Notes are input with the selected duration at the caret position or where you click and are played back as you input them by default. Their pitch follows the prevailing key signature. For example, if you press **F** in G major, an F# is input automatically.

If you selected rhythm dots or articulations, notes continue to be input with them until you deactivate them. However, accidentals not in the prevailing key signature are only added to the first note you input after selecting them.

Dorico Elements notates and beams notes appropriately according to their duration, the prevailing time signature, and their position in the bar. This includes showing notes as tie chains if required.

If you advance the caret without inputting notes, Dorico Elements fills the gaps between notes with implicit rests of the appropriate duration.

If you input notes on notation staves belonging to fretted instruments, Dorico Elements automatically allocates these notes to the strings on which they can be played closest to the nut. Because this calculation is done for each note separately, multiple notes can be allocated to the same string. Similarly, when you input chords on tablature using pitch before duration with a MIDI keyboard, all notes in the chord are allocated to the same string. In such cases, the notes are shown next to each other on tablature and are colored green. You can then select them individually and make your own string allocation.

NOTE

- The notes you input overwrite existing notes at the caret position in the voice indicated by the quarter note symbol beside the caret. If you want to add notes to an existing voice, you can input chords. You can also input notes into new voices.
- You can switch between using pitch before duration and duration before pitch note input at any time by pressing **K** or clicking **Pitch Before Duration □**. For example, duration before pitch can be easier when inputting a sequence of notes with the same duration.
- You can change the default beam, note, and rest grouping settings for each flow independently in **Notation Options**. You can also specify custom beat groupings within individual time signatures.
- You can change whether note input uses pitch before duration or duration before pitch by default on the **Note Input and Editing** page in **Preferences**.

AFTER COMPLETING THIS TASK

You can move notes to different rhythmic positions and other staves after they have been input. You can also show brackets on noteheads individually.

RELATED LINKS

Changing the input pitch setting on page 210
Changing the note-based notation input setting on page 209
Switching to galley/page view on page 49
Notes toolbox on page 192
Notes panel on page 196
Moving notes/items rhythmically on page 448
Moving notes/items to other staves on page 451
Changing the allocated string for notes on tablature on page 1310
Note and rest grouping on page 841

Inputting notes with rhythm dots

Bracketed noteheads on page 1047

The **Dotted Notes** tool allows you to input notes with rhythm dots and add rhythm dots to existing notes. You can input notes with up to four rhythm dots.

NOTE

- These steps describe inputting notes with the default preference of duration before pitch. However, you can also specify the pitch before duration instead.
- These steps describe selecting rhythm dots before inputting notes. However, you can change this setting if you prefer to specify rhythm dots after inputting notes.
- You cannot add rhythm dots to grace notes.

PROCEDURE

- **1.** In Write mode, do one of the following:
 - Start note input.
 - Select existing notes to which you want to add rhythm dots.
- **2.** Optional: If you want to input notes with rhythm dots onto multiple staves at once, extend the caret to those staves.
- **3.** Select a note duration in any of the following ways:
 - Press the number on your computer keyboard that corresponds to the duration you want.

For example, press **6** for quarter notes (crotchets). Press smaller numbers for smaller durations, such as **5** for eighth notes (quavers) and **4** for 16th notes (semiquavers). Press larger numbers for larger durations, such as **7** for half notes (minims).

- In the Notes panel, click the duration you want.
- In the Keyboard, Fretboard, or Drum Pads panel toolbar, click the duration you want.
- **4.** Activate **Dotted Notes** in any of the following ways:
 - Press ..
 - Double-press the required note duration key command.
 For example, press 6 twice quickly for a dotted quarter note.
 - In the Notes toolbox, click Dotted Notes ...
- **5.** Optional: Change the number of rhythm dots in any of the following ways:
 - Press Alt/Opt-. to cycle through different numbers of rhythm dots.
 - In the Notes toolbox, click and hold **Dotted Notes 1**, then click the number of rhythm dots you want.

Dotted Notes I. in the Notes toolbox updates to indicate the current number of rhythm dots. You can input notes with up to four rhythm dots.

- **6.** Optional: Activate **Force Duration** in any of the following ways:
 - Press O.
 - In the Notes toolbox, click **Force Duration \mathbb{G}**.

If **Force Duration** is not activated, the notes you input might be shown as tied notes rather than dotted notes, depending on their position in the bar and the prevailing meter.

7. Input the dotted notes you want.

Dotted Notes I. remains activated until you either select a different note duration or deactivate it.

- **8.** Press . or click **Dotted Notes J.** again to deactivate **Dotted Notes**.
- **9.** Stop note input in any of the following ways:
 - Press Esc or Return.
 - In the Notes toolbox, click **Start Note Input** ...

RESULT

During note input, notes are input as dotted notes until you deactivate **Dotted Notes** or change the note duration.

When you add rhythm dots to multiple existing notes that would then overlap, Dorico Elements adjusts the duration of notes in the selection to avoid deleting notes at the end of the selection.

EXAMPLE





A phrase containing eighth notes

After adding rhythm dots to the whole selection

RELATED LINKS

Note and rest grouping on page 841
Inputting notes using pitch before duration on page 222
Changing the note-based notation input setting on page 209
Extending the caret to multiple staves on page 218
Notes toolbox on page 192
Notes panel on page 196
Insert mode on page 439
Chord mode on page 249

Inputting notes into multiple voices

By default, notes are input into the first up-stem voice, as indicated by the symbol of an up-stem quarter note beside the caret. You can input notes directly into other voices during note input, and switch between voices as required.

You can also create new voices on staves with existing notes and input notes into those voices anywhere else on those staves.

PROCEDURE

- **1.** In Write mode, select an item on the staff and at the rhythmic position where you want to input multiple voices.
- 2. Start note input in any of the following ways:
 - Press Shift-N.
 - In the Notes toolbox, click Start Note Input ...
 - Double-click the staff.
- 3. Select the voice into which you want to input notes in one of the following ways:
 - To create a new voice, press **Shift-V** or click **Create Voice** in the Notes toolbox.

 When a new voice is added, a + sign appears beside the symbol of a quarter note beside the caret. The quarter note symbol indicates the stem direction, and the number beside the quarter note indicates the voice number if applicable.



Caret when adding the first down-stem voice

TIP

You can press **Shift-V** as many times as you require. For example, on a staff containing no notes, creating one new voice allows you to input notes into the first down-stem voice, but you can also create another new voice immediately if you want to input notes into the second up-stem voice.

Only voices that contain notes are preserved.

• To select an existing voice, press **V** or click **Next Voice** in the Notes toolbox to cycle through active voices on the staff.

NOTE

- You can switch between voices as often as you like.
- If you have three or more voices on a single staff, you can only cycle through all the voices in a set order. For example, if you have two up-stem voices and two down-stem voices, the order is: first up-stem voice, first down-stem voice, second down-stem voice, second up-stem voice.
- **4.** Input the notes you want.
- **5.** Stop note input in any of the following ways:
 - Press Esc or Return.
 - In the Notes toolbox, click **Start Note Input 7**.

RESULT

Notes are input into the voice indicated by the quarter note symbol beside the caret.

If you are inputting notes into a new voice on a staff that already contains notes in another voice, the stem directions of existing notes at the same rhythmic position change automatically as necessary. Rests appear as required around notes in different voices.

NOTE

- Any voices that you created, but did not input notes into, are deleted.
- You can show voice colors to check which notes are in which voice. Additionally, when you select single notes or multiple notes in the same voice at the same rhythmic position, their pitches are shown in the status bar and as depressed keys in the Keyboard panel.

EXAMPLE



Caret when inputting notes into the first up-stem voice



Caret when inputting notes into the first down-stem voice



Caret when inputting notes into a new, second up-stem voice

RELATED LINKS

Inputting notes on page 219

Voices on page 1416
Stem direction on page 1055
Implicit rests in multiple-voice contexts on page 1251
Hiding/Showing voice colors on page 1417
Changing the voice of existing notes on page 453
Allowing/Disallowing noteheads in opposing voices to overlap on page 1418
Hiding/Showing bar rests in additional voices on page 1256

Inputting notes into slash voices

You can input notes into multiple slash voices; for example, if you want to indicate a precise rhythm without specifying pitches. By default, the first slash voice is up-stem, but you can add extra slash voices both with and without stems, and switch between them as often as you want.

You can also input notes into new slash voices on a staff with existing notes. Once you have created a slash voice somewhere on a staff, you can input notes into that slash voice anywhere else on the same staff.

PROCEDURE

- **1.** In Write mode, select an item on the staff and at the rhythmic position where you want to input slash voices.
- 2. Start note input in any of the following ways:
 - Press Shift-N.
 - In the Notes toolbox, click **Start Note Input** ...
 - Double-click the staff.
- 3. Select the slash voice into which you want to input notes in one of the following ways:
 - To create a new slash voice, press **Shift-Alt/Opt-V**. You can also click and hold **Create Voice** In the Notes toolbox, then click **Create Slash Voice**.

When a new slash voice is added, a + sign appears beside the symbol of a note beside the caret, which now appears as a slash note. The slash note symbol indicates the stem direction, and the number beside the slash note symbol indicates the voice number if applicable.



Caret when adding the first down-stem slash voice

TIP

You can press **Shift-Alt/Opt-V** as many times as you require. For example, on a staff containing no notes in slash voices, creating one new slash voice allows you to input notes into the first up-stem slash voice.

You can also create a second new slash voice immediately if you want to input notes into a down-stem slash voice, or a third new slash voice if you want to input notes into a stemless slash voice.

Only voices that contain notes are preserved.

- To select an existing slash voice, press **V** or click **Next Voice** in the Notes toolbox to cycle through active voices on the staff.
- **4.** Input the notes you want.

Notes in slash voices appear at the same staff position, regardless of their pitch. By default, this is the middle line of the staff, but this changes in multiple-slash-voice contexts.

NOTE

By default, notes in slash voices are not played back. However, if you include slash voices in playback, notes in slash voices play back with their input pitch.

- **5.** Stop note input in any of the following ways:
 - Press Esc or Return.
 - In the Notes toolbox, click **Start Note Input** ...

RESULT

Notes are input into new slash voices, as indicated by the caret indicator. The slash note symbol beside the caret changes to indicate which voice is currently selected and into which notes are input.

You can switch between voices as often as you like.

NOTE

- If you are inputting notes into a new slash voice on a staff that already contains notes in
 other voices/slash voices, the stem directions of existing notes and the staff positions of
 slash voices at the same rhythmic position change automatically as necessary. Rests appear
 as required around notes in different voices.
- If you have three or more voices of any type on a single staff, you must cycle through all the voices in a set order. For example, if you have two up-stem voices, two down-stem voices, and a slash voice, the order is: first up-stem voice, first down-stem voice, second down-stem voice, second up-stem voice, slash voice.
- Any voices that you created, but did not input notes into, are deleted.

EXAMPLE



Caret when inputting notes into the first upstem slash voice



Caret when inputting notes into the first downstem slash voice



Caret when inputting notes into a new stemless slash voice



Caret when inputting notes into a new, second up-stem slash voice

RELATED LINKS

Notes toolbox on page 192

Slash voices on page 1236

Slash regions on page 1239 Adding slash voices to percussion kits on page 1238 Changing the voice of existing notes on page 453
Including/Excluding slash voices in playback on page 1238
Stem direction on page 1055
Implicit rests in multiple-voice contexts on page 1251

Inputting notes and notations onto multiple staves

You can input notes and notations onto multiple staves simultaneously, including automatically exploding the notes in chords that you play on a MIDI keyboard onto the appropriate staves. For example, if you want to input notes onto both piano staves or input the same dynamics for multiple instruments.

Inputting notes and notations onto multiple staves is most useful for multiple adjacent pitched instruments whose music is only a single voice.

PREREQUISITE

If you want to explode individual notes in chords onto multiple staves during note input, you have connected a MIDI keyboard. You can only input the different notes in chords onto separate staves when using a MIDI keyboard.

PROCEDURE

- **1.** In Write mode, select an item at the rhythmic position where you want to input notes/ notations onto multiple staves.
- **2.** Start note input in any of the following ways:
 - Press Shift-N.
 - In the Notes toolbox, click **Start Note Input** ...
 - Double-click the staff.
- **3.** Extend the caret to another staff in any of the following ways:
 - To extend to the staff above, press Shift-Up Arrow.
 - To extend to the staff below, press Shift-Down Arrow.
- **4.** Optional: Repeat step 3 for as many staves as you require.
- 5. Input the notes and notations you want.

NOTE

You must input notes using a computer keyboard or MIDI keyboard. If you use the mouse, notes are only input on the staff you click. Similarly, you must use the corresponding popover to input notations on multiple staves. When inputting notations using the corresponding panel, they are only input on the top staff.

- **6.** Stop note input in any of the following ways:
 - Press Esc or Return.
 - In the Notes toolbox, click **Start Note Input** ...

RESULT

The notes and notations you input are input at the caret position on all staves across which the caret extends. If the caret extends across both staves of a grand staff instrument, notes are input on either the top or bottom staff according to their pitch. However, this does not apply to grand staff instruments with extra staves.

When inputting notes using a MIDI keyboard, the individual notes in any chords you input are automatically exploded across the staves.

RELATED LINKS

Caret on page 214

Notes toolbox on page 192

Inputting notes using pitch before duration on page 222

Changing the item input position setting on page 209

Notations input on page 266

Preferences dialog on page 57

MIDI Import Options dialog on page 84

Inputting notes in Insert mode

In Insert mode, you can input notes before existing notes in a single voice without overriding them. This allows you to push existing notes ahead at the same time as inputting new notes at their previous positions.

NOTE

- These steps describe inputting notes with the default preference of duration before pitch. However, you can also specify the pitch before duration instead.
- You can only input chords in Insert mode when using a MIDI keyboard.

PROCEDURE

- 1. In Write mode, start note input.
- **2.** Activate Insert mode in any of the following ways:
 - Press I.
 - In the Notes toolbox, click **Insert 1**.

In Insert mode, the caret shows V and inverted V shapes at the top and bottom. Dotted lines are shown on staves affected by the Insert mode scope across which the caret does not already extend.



- **3.** Choose the appropriate Insert mode scope.
- **4.** Optional: If the Insert mode scope is set to **Voice** , press **V** until the voice you want is selected.
- **5.** Optional: If the Insert mode scope is set to **Player** or **Voice** and you want to input notes in Insert mode onto multiple staves at once, extend the caret to those staves.
- 6. Input the notes you want.
- **7.** Optional: Press **I** or click **Insert I** again to deactivate Insert mode and return to normal note input.
- **8.** Stop note input in any of the following ways:
 - Press Esc or Return.

In the Notes toolbox, click Start Note Input 3.

RESULT

Notes are inserted at the caret position or where you click without overwriting any existing notes at rhythmic positions after the caret. Instead, existing notes after the caret are pushed ahead to subsequent rhythmic positions.

The voices and staves affected by Insert mode depend on the Insert mode scope.

RELATED LINKS

Notes toolbox on page 192 Caret on page 214 Insert mode on page 439 Insert mode scopes on page 440

Inputting notes for unpitched percussion

You can input notes for individual unpitched percussion instruments and on all percussion instruments in percussion kits using any presentation type, including selecting playing technique-specific noteheads for individual instruments.

When inputting notes in percussion kits, the caret is smaller than when inputting notes on pitched instrument or individual percussion instrument staves. Instead of occupying the whole height of the staff, the caret in percussion kits is positioned at a particular staff position.

The name of the percussion instrument or slash voice currently selected by the caret, and any applicable playing technique, is shown directly above the rhythmic grid display.

NOTE

- You can only input notes into slash voices in percussion kits when using the five-line staff presentation type.
- These steps describe inputting notes with the default preference of duration before pitch. However, you can also specify the pitch before duration instead.



Inputting notes on instruments with five-line staff kit presentation

PREREQUISITE

If you want to use additional playing technique-specific noteheads for percussion instruments, you have defined these in the **Percussion Instrument Playing Techniques** dialog for each instrument.

PROCEDURE

- **1.** In Write mode, select an item on the unpitched percussion instrument/kit staff and at the rhythmic position where you want to input notes.
- **2.** In Write mode, start note input in any of the following ways:
 - Select a note or rest on the staff where you want to input notes and press **Shift-N**.

NOTE

You can also press **Return**; however, if you select a notation, such as a dynamic, pressing **Return** opens the corresponding popover instead of starting note input.

- Select a note or rest on the staff where you want to input notes and click **Start Note Input** In the Notes toolbox.
- Double-click the staff where you want to input notes.
- **3.** Optional: When inputting into percussion kits, move the caret up/down to other instruments in the kit in any of the following ways:
 - To move it up, press **Up Arrow**.
 - To move it down, press **Down Arrow**.
- **4.** Select a note duration in any of the following ways:
 - Press the number on your computer keyboard that corresponds to the duration you want.
 - For example, press **6** for quarter notes (crotchets). Press smaller numbers for smaller durations, such as **5** for eighth notes (quavers) and **4** for 16th notes (semiquavers). Press larger numbers for larger durations, such as **7** for half notes (minims).
 - In the Notes panel, click the duration you want.
 - In the Keyboard, Fretboard, or Drum Pads panel toolbar, click the duration you want.
- **5.** Select an appropriate playing technique for the instrument currently selected by the caret before inputting notes.
 - To cycle upwards through playing techniques, press **Alt/Opt-Up Arrow**.
 - To cycle downwards through playing techniques, press **Alt/Opt-Down Arrow**.
 - Play the pitch for the playing technique you want on a MIDI keyboard.

NOTE

You can define MIDI pitches for playing techniques on the **Note Input and Editing** page in **Preferences**.

- **6.** Input notes in one of the following ways:
 - Any kit presentation type/Individual instruments: Press **Y** to input notes for the instrument and playing technique shown above the rhythmic grid.
 - Any kit presentation type/Individual instruments: Click on the staff where you want to input notes, and at the rhythmic positions where you want them.
 - Five-line staff presentation type: Press letters on a computer keyboard or play notes on a MIDI keyboard, corresponding to staff positions for the clef set in **Preferences**. For example, press **B** to input notes for the instrument assigned to the middle line of a five-line staff when **Treble G clef** is set.
 - Grid and single-line instruments presentation types/Individual instruments: Press the
 letter of any note name A to G on a computer keyboard or play any note on a
 MIDI keyboard to input notes for the instrument on whose line the caret is currently
 positioned.

NOTE

Notes played on MIDI keyboards are interpreted differently, depending on whether **Use percussion map** or **Use staff position** is set for the different kit presentation types in **Preferences > Note Input and Editing > Note Input**.

- **7.** Optional: Advance the caret by the currently selected note duration without inputting notes in any of the following ways:
 - Press Space.
 - In the Keyboard, Fretboard, or Drum Pads panel toolbar, click **Advance Caret**

TIP

You can also move the caret in different ways and by different increments.

- **8.** Stop note input in any of the following ways:
 - Press Esc or Return.
 - In the Notes toolbox, click **Start Note Input** ...

RESULT

Notes are input at the caret position or where you click with the selected duration and are played back as you input them by default. If you selected playing techniques, their noteheads appear as set in the **Percussion Instrument Playing Techniques** dialog for the corresponding instrument and playing technique, or in the **Override Percussion Noteheads** dialog for five-line staff presentations only.

If you selected rhythm dots or articulations, notes continue to be input with them until you deactivate them.

Dorico Elements notates and beams notes appropriately according to their duration, the prevailing time signature, and their position in the bar. This includes showing notes as tie chains if required.

If you advance the caret without inputting notes, Dorico Elements fills the gaps between notes with implicit rests of the appropriate duration.

TIP

You can change the default beam, note, and rest grouping settings for each flow independently in **Notation Options**. You can also specify custom beat groupings within individual time signatures.

RELATED LINKS

Notes toolbox on page 192

Caret on page 214

Percussion kits and drum sets on page 140

Playing techniques for unpitched percussion instruments on page 1398

Specifying the stem direction/voice of instruments in percussion kits on page 1413

Adding slash voices to percussion kits on page 1238

Edit Percussion Kit dialog on page 140

Importing drum set patterns from Groove Agent SE on page 93

Preferences dialog on page 57

Note and rest grouping on page 841

Notation Options dialog on page 730

Note input setup for percussion kits

Inputting music for unpitched percussion instruments works differently than for pitched instruments. You can use any of the usual methods for unpitched percussion input, but using a MIDI keyboard or a computer keyboard is most efficient.

 You can find options relating to note input for percussion in Preferences > Note Input and Editing > Note Input.

There is one set of options for input onto five-line staves, and another set of options for input onto grids and individual instruments.

The main choice affects input via MIDI keyboards and computer keyboards.

Use percussion map

A percussion map defines which MIDI notes produce which sound for a particular patch in a sound library. For example, in General MIDI percussion, C2 (note 36) produces bass drum, and D2 (note 38) produces snare drum, and so on.

If you know a particular mapping well, you may find it helpful to use the mapping directly for input.

Use staff position

This option uses the staff position defined in the **Edit Percussion Kit** dialog. For example, on a drum set, the bass drum is normally positioned in the bottom space of the staff, while the snare drum is positioned in the third space from the bottom.

You can think of staff positions relative to what they would be when using a treble G clef (F4 and C5 respectively) or using a bass F clef (A2 and E3 respectively).

You can choose which clef is used to interpret staff positions for five-line staves:

- Treble G clef
- Bass F clef

When you select **Use staff position**, you can designate one octave of your MIDI keyboard to input playing techniques.

By default, the **Input techniques from MIDI key** option is set to MIDI note 48, which is C3 when using the middle C numbering convention that middle C (MIDI note 60) is numbered as C4. You can click the MIDI learn button and then play a note on your MIDI keyboard to change the starting pitch. Assuming a starting pitch of C3, ascending notes operate as follows:

- C3 (48): Previous playing technique
- C#3 (49): Next playing technique
- D3 (50): First mapped playing technique
- Eb3 (51): Second mapped playing technique
- E3 (52): Third mapped playing technique

And so on, up to:

• B3 (59): Tenth mapped playing technique

In general, we recommend that you set **Use staff position** for percussion input. **Use percussion map** is normally only useful when you are inputting notes onto a drum set and you have already memorized the General MIDI percussion map.

RELATED LINKS
Preferences dialog on page 57
Edit Percussion Kit dialog on page 140

Changing playing technique-specific noteheads on page 1402 Changing the middle C numbering convention on page 50

Default note selection during note input for percussion kits

During note input in percussion kits, you can press the letters on a computer keyboard that correspond to staff positions for kits using the five-line staff presentation type. For example, you can press **F** to input a note on the F space or line.

In **Preferences** > **Note Input and Editing** > **Note Input**, you can set options for inputting notes into percussion kits. For example, if you want to use staff positions to determine notes, choose **Use staff position** for **Input onto kit or grid**.

If you have the staff positions set relative to **Treble G clef**, then F could mean either the bottom space on the staff or the top line on the staff. In a standard drum set, this means either the kick drum in the bottom space, or the ride cymbal on the top line.

When inputting notes in pitched instruments, Dorico Elements chooses the lower or upper possible staff position based on which is closer to the current position of the caret.

However, when inputting notes in percussion kits, Dorico Elements chooses the staff position of the note with the same stem direction as the last input note, rather than the staff position that is closest to the current position of the caret. This makes it easier to input common note patterns used in percussion kits.

For example, inputting kick drum and snare drum notes on a standard drum set is a common pattern. The kick drum is in the bottom space, and the snare drum is two spaces above: five staff positions away from the bottom space, and four staff positions away from the top line.

You can press **F** for the kick drum and **C** for the snare drum.

The default stem direction behavior for inputting notes in kits in Dorico Elements means that you can alternate pressing **F** and **C**, and the notes are input at the positions of the kick drum and snare drum, even though the top line is the closer position after inputting a snare drum note.

This is because the kick drum uses the same stem direction, and therefore voice, as the snare drum.



NOTE

Dorico Elements automatically changes the directions of stems according to the positions of notes on the staff when only one voice on the staff contains notes, regardless of their voice.

RELATED LINKS

Stem direction on page 1055

Inputting notes on tablature

You can input notes directly into tablature in the same ways as inputting normal notes. When inputting notes on tablature, the caret is smaller than when inputting notes on standard five-line

staves and behaves as if chord input is always active, meaning you must advance the caret manually to input notes at other rhythmic positions.

NOTE

These steps describe inputting notes with the default preference of duration before pitch. However, you can also specify the pitch before duration instead.

When inputting notes on tablature using pitch before duration, you must select note durations by clicking them in the Notes panel.

PROCEDURE

1. In Write mode, select an item on the tablature and at the rhythmic position where you want to input notes.

NOTE

If both notation staves and tablature are shown in the current layout, you must select an item on the notation staff and then move the caret to the tablature after starting note input.

- **2.** Start note input in any of the following ways:
 - Press Shift-N.
 - In the Notes toolbox, click **Start Note Input** ...
 - Double-click the staff.
- **3.** Select a note duration in any of the following ways:
 - To select the next longer duration, press =.
 - To select the next shorter duration, press -.
 - In the Notes panel, click the duration you want.
 - In the Fretboard panel toolbar, click the duration you want.
- **4.** Input the pitch you want for the current string in any of the following ways:
 - Press the number on your computer keyboard or numeric keypad that corresponds to the fret number you want. For example, press **6** for fret 6.
 - For fret numbers 10 and above, press the two digits quickly.
 - Press the corresponding letters on your computer keyboard.

NOTE

When using letters, Dorico Elements automatically chooses the octave closest to the nut on the corresponding string.

- In the Fretboard panel, click the corresponding string and fret position.
- Play the note on a MIDI keyboard.
- **5.** Move the caret up/down to input notes on different strings at the same rhythmic position in any of the following ways:
 - To move it up, press Up Arrow.
 - To move it down, press **Down Arrow**.
- **6.** Move the caret to other rhythmic positions in any of the following ways:
 - To move the caret according to the current rhythmic grid resolution, press **Right Arrow** / **Left Arrow** .

- To advance the caret according to the note duration currently selected, press **Space** or click **Advance Caret** in the Fretboard panel toolbar.
- To move the caret to the next/previous bar, press Ctrl/Cmd-Right Arrow / Ctrl/Cmd-Left Arrow .

RESULT

Notes are input at the caret position with the selected duration on the string indicated by the caret and are played back as you input them by default. Notes continue to be input at the caret position until you move the caret manually and overwrite any previous note on the same string. If you attempt to input a note that is impossible on the current string, it is input on the closest available string in addition to any existing notes.

If you have input two or more notes on the same string at the same rhythmic position, they are shown next to each other on tablature and are colored green. Similarly, when you input chords on tablature using pitch before duration with a MIDI keyboard, all notes in the chord are allocated to the same string. You can then select them individually and change their string allocation.

RELATED LINKS

Caret on page 214
Fretboard panel on page 204

Tablature on page 1308

Hiding/Showing notation staves and tablature on page 1309

Changing the allocated string for notes on tablature on page 1310

Inputting accidentals

You can input accidentals during note input and by adding them to existing notes. You can also change the accidentals of existing notes.

NOTE

- Accidentals that are part of the prevailing key signature are input automatically. For example, if you press F in G major, an F# is input automatically. You would only need to specify an accidental if you want to input an F#, for example.
 - This also applies if you are using a MIDI keyboard, though you can respell notes if the accidentals chosen automatically are not the ones that you expected.
- These steps describe selecting accidentals before inputting each note. However, you can change this setting if you prefer to specify accidentals after inputting notes.

PROCEDURE

- **1.** In Write mode, do one of the following:
 - Start note input.
 - Select the existing notes to which you want to add accidentals or whose accidentals you want to change.
- **2.** Select the accidental you want to input in one of the following ways:
 - For a flat accidental, press -.
 - For a sharp accidental, press =.
 - For a natural accidental, press **0**.
 - In the Notes panel, click the accidental you want.

TIP

You can find more accidentals, such as double sharps/flats or microtonal accidentals, in the **Accidentals** section of the Key Signatures, Tonality Systems, and Accidentals panel on the right of the window.

3. Optional: During note input, input the note you want with your selected accidental.

RESULT

The accidental is added to the selected existing notes. If you selected existing notes with different accidentals, they are changed to have the accidental you selected.

During note input, the selected accidental is only input on the next note you input. You must reselect the accidental for each subsequent note.

NOTE

- Due to the default accidental duration rule in Dorico Elements, subsequent accidentals for the same note in the same register do not appear in the same bar.
- If you input notes using a MIDI device, Dorico Elements automatically shows an accidental if necessary. It selects a sharp, flat, or natural based on key signature and context. You can later respell notes so they are shown as their enharmonic equivalents with different accidentals.

RELATED LINKS

Notes panel on page 196
Accidentals on page 775
Changing the note-based notation input setting on page 209
Respelling notes on page 460
Changing the pitch of individual notes on page 455
Accidental duration rules on page 783

Accidental selection during MIDI input

Dorico Elements interprets MIDI data to create accidentals, and automatically determines the spelling of notes according to preset rules.

Dorico Elements automatically displays an accidental if one is required. It selects a sharp or flat based on key signature and context.

The algorithm for this takes into account the key signature and the intervals between successive notes and chords. Therefore Dorico Elements prefers sharp accidentals in a key with sharps, and flats in a key with flats. If you change the spelling of an accidental, Dorico Elements follows your spelling preference whenever that note is used again in the score.

If you input notes with accidentals outside the key signature, Dorico Elements uses sharps if the figure is rising, and flats if it is falling. The spelling is also calculated vertically, meaning a simpler interval is produced where possible, such as a major third rather than a diminished fourth.

By default, Dorico Elements makes retrospective changes to how it has spelled accidentals, depending on how your music develops. For example, in C major, if you input a sequence of pitches C-E-G \sharp , but then input a G \flat , the G \sharp is respelled as an A \flat .

Inputting rests

Dorico Elements automatically shows rests as appropriate in the gaps between the notes you input. However, you can also input rests manually; for example, to show fermatas on specific beats for players without notes in that bar.

NOTE

These steps describe selecting the duration before inputting rests. However, you can also input rests when **Pitch Before Duration** is active, in which case step 7 is unnecessary.

PROCEDURE

- **1.** In Write mode, select an item on the staff and at the rhythmic position where you want to input rests.
- 2. Start note input in any of the following ways:
 - Press Shift-N.
 - In the Notes toolbox, click **Start Note Input** ...
 - Double-click the staff.
- **3.** Optional: If you want to input rests onto multiple staves at once, extend the caret to those staves.
- **4.** Start rest input in any of the following ways:
 - Press ,.
 - In the Notes toolbox, click **Rests !** .
- **5.** Activate **Force Duration** in any of the following ways:
 - Press O.
 - In the Notes toolbox, click Force Duration §.
- **6.** Select the rest duration you want.
- 7. Input rests in any of the following ways:
 - Press Y or any of the letters from A to G.
 - Click the staff at the rhythmic position of each rest you want to input.
 A shadow rest appears when inputting with the mouse to indicate where the rest will be input.
 - Play notes on a MIDI keyboard.
- 8. Optional: Press , or click **Rests ₹** again to stop rest input.
- **9.** Stop note input in any of the following ways:
 - Press Esc or Return.
 - In the Notes toolbox, click **Start Note Input** ...

RESULT

Rests of the selected duration are input. If **Force Duration** is not activated, Dorico Elements automatically combines adjacent rests as appropriate for their position in relation to notes and according to the current meter.

RELATED LINKS

Rests on page 1249

Implicit vs. explicit rests on page 1250
Note and rest grouping on page 841
Notes toolbox on page 192
Extending the caret to multiple staves on page 218
Selecting note/rest durations on page 254
Forcing the duration of notes/rests on page 257

Inputting bar rests into specific voices

When inputting music in multiple voices, rests are normally created automatically when there is a gap in the secondary voice. However, if you want secondary voices to begin with explicit bar rests in strict contrapuntal music, you can input a bar rest into those voices.

For music in a single voice, you do not have to input bar rests as they appear in each new bar automatically when you advance the caret. You can also hide/show bar rests in all empty bars in each layout independently.

PROCEDURE

- 1. In Write mode, start note input.
- **2.** Select the appropriate secondary voice by pressing **V** until the voice direction indicator shows the correct voice.

Alternatively, if you want to input bar rests into a new voice, press **Shift-V** until the voice direction indicator shows the correct voice.

- 3. Open the bars and barlines popover in any of the following ways:
 - Press Shift-B.
 - In the Notations toolbox, click Popovers , then Bars and Barlines .
- 4. Enter rest into the popover to add a bar rest.
- **5.** Press **Return** to close the popover.
- **6.** Press **Ctrl/Cmd-Right Arrow** to advance the caret to the start of the next bar after the bar rest.
- **7.** Optional: If you want to show bar rests in multiple bars for the selected voice, repeat steps 3 to 6 as many times as required.

TIP

If your notation options are set to show bar rests in additional voices, bar rests appear in all subsequent empty bars for the selected voice after you have input one bar rest.

RESULT

Bar rests are input into the selected voice at the caret position. If the caret position is within a bar that contains notes for the selected voice, these notes are replaced by the bar rest.

NOTE

Alternatively, you can click **Insert Bar Rest** in the **Insert Bar Rest** section of the Bars and Barlines panel to input bar rests during note input.

RELATED LINKS

Bars and barlines popover on page 294 Caret on page 214 Hiding/Showing bar rests in empty bars on page 1256 Hiding/Showing bar rests in additional voices on page 1256

Inputting ties

You can input ties manually to join two notes of the same pitch, both during note input and by joining two existing notes with a tie. You can tie existing notes in different voices or on different staves belonging to the same instrument, or that are not rhythmically adjacent.

For example, you might have input a melody across multiple voices in order to accommodate passing notes, but want to tie two notes together even though they are in different voices. Similarly, you might have written multiple notes before a chord that are all held down and want to reduce the number of tied notes.

TIP

Dorico Elements automatically creates ties as required for note durations in each meter. For example, if you want to input a tie between two quarter notes across a barline, you can input a half note at the rhythmic position where you want to input the first quarter note. Dorico Elements automatically splits the half note into two quarter notes, one on each side of the barline, and joins them with a tie.

PREREQUISITE

If you want to preserve the durations of existing notes, you have forced their duration. For example, if you want to specify subdivisions within a tie chain that are different than the prevailing meter.

We also recommend starting ties from the first note in the tie chain, as tied notes become a single note whose settings, including forced durations, come from the first note.

PROCEDURE

- **1.** In Write mode, do one of the following:
 - Start note input.
 - Select the note from which you want the tie to start. If you want to input a tie between two specific notes or between a grace note and a normal note, select those two notes.

NOTE

The two notes must be the same pitch, but can be in different voices or on different staves belonging to the same instrument.

- 2. Optional: During note input, input the note that you want at the start of the tie.
- **3.** Input a tie in any of the following ways:
 - Press T.
 - In the Notes toolbox, click **Tie** <u>U</u>.
- **4.** Optional: During note input, input the note that you want at the end of the tie.

NOTE

The second note must be the same pitch as the first note.

RESULT

During note input, the two notes input are joined by a tie.

If you selected a single existing note, it is joined by a tie to the next note of the same pitch in the same voice and staff. If you selected two existing notes, they are tied together, provided they are the same pitch and belong to the same instrument.

NOTE

- During note input, Dorico Elements ties the first note you input after inputting the tie to the previous note of the same pitch in the same voice and staff, even if there are other notes of other pitches between them.
- Depending on the prevailing time signature, the position of the start of the note in the bar, and your settings on the **Note Grouping** page in **Notation Options**, inputting a tie between two notes can instead create a single note of a different duration, such as a half note instead of two tied quarter notes. You can override your note grouping settings and fix your notated rhythm by forcing their duration. Dorico Elements then notates your input notes with the rhythmic durations specified, as long as they can fit inside the bar.

EXAMPLE



Ties between adjacent notes

Ties between non-adjacent notes

Ties between grace notes and normal notes

RELATED LINKS

Note and rest grouping on page 841
Hiding/Showing ties across beat boundaries on page 841
Forcing the duration of notes/rests on page 257
Notes toolbox on page 192
Inputting notes on page 219
Ties vs. slurs on page 1342

Inputting grace notes

You input grace notes in the same ways as normal notes, and they can have any rhythmic note value, accidental, and articulation.

NOTE

- These steps describe inputting notes with the default preference of duration before pitch. However, you can also specify the pitch before duration instead.
- You cannot add rhythm dots to grace notes.

PROCEDURE

- **1.** In Write mode, select an item on the staff and at the rhythmic position where you want to input grace notes.
- **2.** Start note input in any of the following ways:
 - Press Shift-N.

- In the Notes toolbox, click Start Note Input ...
- Double-click the staff.
- **3.** Optional: If you want to input grace notes onto multiple staves at once, extend the caret to those staves.
- **4.** Start grace note input in any of the following ways:
 - Press /.
 - In the Notes toolbox, click **Grace Notes** .
- **5.** Press the number for the note duration you want. For example, press **5** for eighth grace notes.
- **6.** Optional: Switch between inputting slashed/unslashed grace notes in any of the following ways:
 - Press Alt/Opt-/.

7. Input the grace notes you want.

TIP

There is no limit to the number of grace notes that can exist at the same rhythmic position.

8. Press **/** or click **Grace Notes** again to stop grace note input and return to normal note input.

RESULT

The pitches you enter are input as grace notes at the caret position.

TIP

- You can also change the type of grace notes after they have been input.
- Slashed and unslashed grace notes are handled differently in playback.

RELATED LINKS

Grace notes on page 983

Selecting note/rest durations on page 254

Notes toolbox on page 192

Extending the caret to multiple staves on page 218

Inputting notes on page 219

Changing the type of grace notes on page 987

Grace notes in playback on page 990

Creating grace note runs for percussion kits

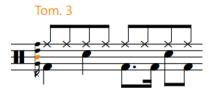
You can create runs of consecutive grace notes for different instruments in percussion kits; for example, to indicate a short drum fill.

PROCEDURE

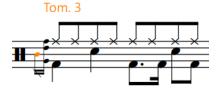
1. In Write mode, input the grace notes that you require for each instrument in the percussion kit.

NOTE

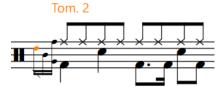
- When percussion kits use the grid or five-line staff presentation types, grace notes at the same rhythmic position appear as a chord by default.
- We recommend creating grace note runs by starting from the end of the run and working backwards.
- **2.** Select the grace note that you want to be the penultimate note in the run.



3. Press Alt/Opt-Left Arrow once.



- **4.** Select the grace note that you want to appear to the left of the previous note.
- 5. Press Alt/Opt-Left Arrow twice.



6. Optional: Repeat steps 4 to 5 as many time as required for the number of grace notes in your run.

NOTE

You must increase the number of **Alt/Opt-Left Arrow** presses by 1 each time.

RESULT

The grace notes at the selected rhythmic position are spread out and appear as a run. This affects both the grid and five-line staff presentation types.

EXAMPLE



Run of four grace notes on a five-line staff percussion kit

RELATED LINKS

Inputting notes for unpitched percussion on page 233 Percussion kit presentation types on page 1406

Inputting chords

You can input chords during note input when both note input and **Chords** are activated. You can input notes with a computer keyboard, with the mouse, using panels in the lower zone, or by playing notes with a MIDI keyboard.

NOTE

These steps describe inputting notes with the default preference of duration before pitch.
 However, you can also specify the pitch before duration instead.

When inputting chords using pitch before duration, you must use your computer keyboard or a MIDI keyboard and complete step 6 before step 5.

- You can only input chords in Insert mode when using a MIDI keyboard.
- You can input chords without activating **Chords** when using the Keyboard panel, Fretboard panel, or a MIDI keyboard.

PROCEDURE

- **1.** In Write mode, select an item on the staff and at the rhythmic position where you want to input chords.
- 2. Start note input in any of the following ways:
 - Press Shift-N.
 - In the Notes toolbox, click Start Note Input ...
 - Double-click the staff.
- 3. Start chord input in any of the following ways:
 - Press Q.
 - In the Notes toolbox, click **Chords 3**.

In chord input, a + sign appears at the top of the caret. This allows you to input multiple notes at the caret position.



- **4.** Optional: If you want to input chords onto multiple staves at once, extend the caret to those staves.
- **5.** Select a note duration in any of the following ways:
 - Press the number on your computer keyboard that corresponds to the duration you want.

For example, press **6** for quarter notes (crotchets). Press smaller numbers for smaller durations, such as **5** for eighth notes (quavers) and **4** for 16th notes (semiquavers). Press larger numbers for larger durations, such as **7** for half notes (minims).

- In the Notes panel, click the duration you want.
- In the Keyboard, Fretboard, or Drum Pads panel toolbar, click the duration you want.
- **6.** Input the pitches you want in any of the following ways:
 - Press the corresponding letters on your keyboard.

TIP

Dorico Elements automatically inputs notes above the highest note at the caret position when **Chords** is activated.

You can input notes below the lowest note at the caret position instead by pressing **Ctrl-Alt (Windows) or Ctrl (macOS)** as well as the letter for the note name; for example, **Ctrl-Alt-A (Windows) or Ctrl-A (macOS)**.

- Click the staff at the rhythmic positions where you want to input notes.
 A shadow notehead appears when inputting with the mouse to indicate where the note will be input.
- In the Keyboard, Fretboard, or Drum Pads panel, play the notes you want.
- Play the notes on a MIDI keyboard.
- **7.** Optional: Advance the caret to input chords at other rhythmic positions in any of the following ways:
 - Press Space.
 - In the Keyboard, Fretboard, or Drum Pads panel toolbar, click **Advance Caret**.

During chord input, notes are input at the same rhythmic position and above the previous note until you advance the caret manually.

TIP

You can also move the caret in different ways and by different increments.

- 8. Press **Q** or click **Chords** again to stop chord input.
- **9.** Stop note input in any of the following ways:
 - Press Esc or Return.
 - In the Notes toolbox, click Start Note Input ...

RESULT

Multiple notes are input at the caret position.

- If entering pitches by clicking with the mouse, you can put the same pitch into the chord twice by clicking again on the same line.
- If entering pitches with the keyboard, repeated notes are automatically input an octave above. You can change the register of notes by forcing the register selection during note input, or by transposing them after they have been input.

NOTE

- You can stop chord input and immediately continue inputting notes as before, with a single note at each rhythmic position and the caret advancing automatically to the next rhythmic position.
- When chords contain two pitches in the same register but with different accidentals, that is known as an altered unison. Altered unisons are shown with either single stems or with split stems, depending on your settings on the **Accidentals** page in **Notation Options**.
- When you input chords on tablature using pitch before duration with a MIDI keyboard, all
 notes in the chord are allocated to the same string. In such cases, the notes are shown next
 to each other on tablature and are colored green. You can then select them individually and
 make your own string allocation.

RELATED LINKS

Register selection during note input on page 222

Changing the note-based notation input setting on page 209

Notes toolbox on page 192

Notes panel on page 196

Keyboard panel on page 202

Fretboard panel on page 204

Drum Pads panel on page 205

Extending the caret to multiple staves on page 218

Moving the caret manually on page 218

Altered unisons on page 781

Adding notes above/below existing notes on page 253

Changing the allocated string for notes on tablature on page 1310

Chord mode

Chord mode changes how notes are input and how edits you make outside of note input affect the music. When Chord mode is activated, notes can overlap or stack on top of each other to create chords rather than overwriting existing notes. During chord input, the caret does not advance automatically.

Edits outside of chord input that are affected by Chord mode include copying/pasting notes or changing their duration. For example, if you copy four notes and paste them to a staff that already has notes with Chord mode activated, the existing notes are not overwritten but instead combine with the new notes to make chords.

• You can activate/deactivate Chord mode in Write mode by pressing **Q** or clicking **Chords** in the Notes toolbox.

NOTE

You cannot have both Insert mode and Chord mode activated simultaneously.

RELATED LINKS

Insert mode on page 439

Caret on page 214

Copying and pasting notes/items on page 445

Changing the duration of notes on page 255

Inputting notes with rhythm dots on page 225

Inputting tuplets

You can input all types of tuplets using the tuplets popover. Tuplets can contain notes of any duration, such as a quarter note at the start of an eighth note triplet.

NOTE

These steps describe inputting notes with the default preference of duration before pitch. However, you can also specify the pitch before duration instead.

When inputting tuplets using pitch before duration, Dorico Elements determines the base value of the tuplet on either the first note you input after specifying the tuplet or the note value included in your tuplet ratio.

PROCEDURE

- 1. In Write mode, select an item on the staff and at the rhythmic position where you want to input tuplets.
- **2.** Start note input in any of the following ways:
 - Press Shift-N.
 - In the Notes toolbox, click **Start Note Input** ...
 - Double-click the staff.
- **3.** Optional: If you want to input tuplets onto multiple staves at once, extend the caret to those staves.
- **4.** Open the tuplets popover in any of the following ways:
 - Press ;.

When inputting tuplets with the keyboard, Dorico Elements automatically continues inputting notes as the specified tuplet.

5. Enter the tuplet you want into the popover as a ratio followed by the beat unit. For example, enter **3:2e** to input eighth note triplets or **5:4x** to input sixteenth note quintuplets.

NOTE

If you do not specify the beat unit, the tuplet is based on the note value currently selected in the Notes panel.

6. Press **Return** to close the popover.

The tuplet is entered.

7. Optional: Change the selected note duration.

For example, you can input a tuplet based on eighth notes but input a quarter note within that tuplet.

8. Enter or play in the pitches you want.

When inputting tuplets with the keyboard, Dorico Elements automatically continues inputting notes as the specified tuplet.

- **9.** Optional: Advance the caret to continue inputting tuplets of the same ratio at later rhythmic positions in any of the following ways:
 - Press Space.
 - In the Keyboard, Fretboard, or Drum Pads panel toolbar, click **Advance Caret**.
- **10.** Stop tuplet input in one of the following ways:
 - To return to inputting normal notes, press: or move the caret with the arrow keys.
 - To stop note input completely, press **Esc**.

RESULT

The pitches you enter or play in are input as tuplets, starting from the caret position.

If you want to input a different type of tuplet immediately after inputting tuplets, you must stop the first type of tuplet before inputting the second type. If you do not stop the first type, the second type is input as a nested tuplet.

TIP

You can also input tuplets by clicking and holding **Tuplets** at in the Notes toolbox, then clicking the tuplet you want.

RELATED LINKS

Tuplets on page 1386

Nested tuplets on page 1386

Selecting note/rest durations on page 254

Notes toolbox on page 192

Notations toolbox on page 197

Keyboard panel on page 202

Fretboard panel on page 204

Drum Pads panel on page 205

Inputting notes on page 219

Extending the caret to multiple staves on page 218

Tuplets popover

The tuplets popover allows you to input tuplets of any ratio and based on any note duration. The table contains examples of what you can enter into the tuplets popover to input different types of tuplets.

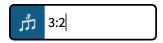
You can open the tuplets popover in Write mode during note input or when notes are selected in any of the following ways:

• Press ;.

As tuplets are often described in ratios, such as 3:2, the tuplets popover uses the semicolon key to be memorable.

- In the Notes toolbox, click and hold Tuplets , then click x:y ...
- Choose Write > Create Tuplet.

The icon on the left-hand side of the popover matches the corresponding button in the Notes toolbox on the right of the window.





Tuplets popover with an example entry

Tuplets button in the Notes toolbox

When inputting tuplets with the keyboard, Dorico Elements continues to input notes as the specified tuplet until any of the following happens:

- You press: to return to inputting normal notes.
- You move the caret with the arrow keys.
- You stop note input.

Type of tuplet	Popover entry
Triplet, three notes in the space of two	3, 3:2, 3/2, or 3 2
Triplet, three notes in the space of four	3:4, 3/4, or 3 4

Type of tuplet	Popover entry
Quadruplet, four notes in the space of three	4:3 , 4/3 , or 4 3
Quintuplet, five notes in the space of two	5:2, 5/2, or 5 2
Quintuplet, five notes in the space of four	5:4 , 5/4 , or 5 4
Sextuplet, six notes in the space of four	6:4 , 6/4 , or 6 4
Septuplet, seven notes in the space of four	7:4, 7/4, or 7 4
Nonuplet, nine notes in the space of eight	9:8 , 9/8 , or 9 8
Duplet, two notes in the space of three. Often used in compound meters.	2:3, 2/3, or 2 3
Quintuplet, five notes in the space of six. Often used in compound meters.	5:6 , 5/6 , or 5 6
Quintuplet, five dotted quarter notes in the space of four	5:4q. , 5/4q. , 5 4q. , or 5:4-6.
NOTE	
When using a number to specify the beat unit, you must separate the tuplet ratio from the beat unit using a space or hyphen.	

This list is not comprehensive. It is intended to illustrate how you can structure your entry to input different tuplets.

NOTE

Unless you specify a beat unit in your entry, the total duration of the tuplet depends on the note value selected when you open the popover. For example, if a quarter note is selected when you input a triplet, the triplet input is three quarter notes in the space of two.

Tuplet beat units

Tuplet beat unit	Popover entry
64th note	z or 2
32nd note	y or 3
16th note	x or 4
Eighth note	e or 5

Tuplet beat unit	Popover entry
Quarter note	q or 6
Half note	h or 7
Whole note	w or 8
Double whole note	2w or 9
Rhythm dot	. (period)

RELATED LINKS

Turning existing notes into tuplets on page 1388 Selecting note/rest durations on page 254

Adding notes above/below existing notes

You can add notes above/below existing notes. You can add multiple notes at the same time, according to their intervals relative to the existing notes.

PREREQUISITE

If you want to use the mouse, you have enabled mouse editing.

PROCEDURE

- 1. In Write mode, select the notes to which you want to add notes.
- 2. Open the note tools popover in any of the following ways:
 - Press Shift-I.
 - In the Notations toolbox, click Popovers = , then Note Tools ...
- Enter the intervals of the notes you want, relative to your selected notes.
 For example, enter -m3,4 to add notes a minor third below and a fourth above the selected notes.
- **4.** Press **Return** to close the popover.

RESULT

Notes are added to the selected notes according to the intervals specified.

TIP

You can also add notes above/below existing notes by **Alt/Opt**-dragging selected notes upwards/downwards.

When you drag notes, shadow noteheads indicate their destination pitches, and the affected region appears highlighted with the rhythmic grid shown above it.

RELATED LINKS

Note tools popover on page 473 Notations toolbox on page 197 Rhythmic grid on page 212 Arranging tools on page 443
Enabling/Disabling mouse editing on page 208

Note durations

In Dorico Elements, you can change note durations both during note input and for existing notes.

RELATED LINKS

Notes and rests in Dorico on page 22 Note and rest grouping on page 841 Played vs. notated note durations on page 671

Selecting note/rest durations

You can select different durations for notes/rests, both during note input and for existing notes/rests.

PROCEDURE

- Optional: If you want to select a note duration not shown in the Notes panel, click the Show/ Hide All Notes disclosure arrows at the top and bottom of the notes list to show more note durations.
- **2.** Select a note/rest duration in any of the following ways:
 - Press the number on your computer keyboard that corresponds to the duration you want
 - For example, press **6** for quarter notes (crotchets). Press smaller numbers for smaller durations, such as **5** for eighth notes (quavers) and **4** for 16th notes (semiquavers). Press larger numbers for larger durations, such as **7** for half notes (minims).
 - In the Notes panel, click the duration you want.
 - In the Keyboard, Fretboard, or Drum Pads panel toolbar, click the duration you want.
- **3.** Optional: Add rhythm dots to the duration in one of the following ways:
 - For a single rhythm dot, press ...
 - For multiple rhythm dots, press **Alt/Opt-.** to cycle through different numbers of rhythm dots. You can specify up to four rhythm dots.
 - In the Notes toolbox, click **Dotted Notes 1** to add the displayed number of rhythm dots.
 - In the Notes toolbox, click and hold **Dotted Notes I** to access different numbers of rhythm dots.

NOTE

You cannot add rhythm dots to grace notes.

RELATED LINKS

Notes toolbox on page 192 Notes panel on page 196 Keyboard panel on page 202 Fretboard panel on page 204 Drum Pads panel on page 205 Inputting notes on page 219

Changing the duration of notes

You can lengthen/shorten the duration of notes after they have been input.

PROCEDURE

1. In Write mode, select the notes whose duration you want to change.

NOTE

If you want to extend a note to the end of the current selection, select both that note and an item at the rhythmic position to which you want to extend the note.

- 2. Change the duration in any of the following ways:
 - Press the key command of the duration you want. For example, press 4 for a 16th note (semiquaver).
 - In the Notes panel, click the duration you want.
 - In the Keyboard, Fretboard, or Drum Pads panel toolbar, click the duration you want.
 - To lengthen notes by the current rhythmic grid resolution, press Shift-Alt/Opt-Right Arrow.
 - To shorten notes by the current rhythmic grid resolution, press Shift-Alt/Opt-Left Arrow.
 - To double the length of notes, press **Ctrl/Cmd-Shift-Alt/Opt-Right Arrow**.
 - To halve the length of notes, press Ctrl/Cmd-Shift-Alt/Opt-Left Arrow.
 - To lengthen notes by the current rhythmic grid resolution, choose Write > Edit
 Duration > Lengthen Duration by Grid Value.
 - To shorten notes by the current rhythmic grid resolution, choose Write > Edit
 Duration > Shorten Duration by Grid Value.
 - To double the length of notes, choose Write > Edit Duration > Double Note Duration.
 - To halve the length of notes, choose **Write** > **Edit Duration** > **Halve Note Duration**.
 - To lengthen notes up to the next existing note in their voice, choose Write > Edit
 Duration > Extend to Next Note.

NOTE

This does not apply to grace notes.

- To lengthen a single note up to the rhythmic position of the end of the current selection, choose **Write** > **Edit Duration** > **Extend to End of Selection**.
- To shorten overlapping notes in the same voice so that they no longer overlap, choose
 Write > Edit Duration > Shorten to Next Note.

RESULT

The duration of the selected notes is changed. Dorico Elements automatically notates and beams the notes appropriately according to their new duration, the prevailing time signature, and their position in the bar.

When extending notes, their duration fills in any intervening rests. Extending notes to the end of the current selection does not delete any intervening notes, instead they combine with the extended note to create chords where necessary.

TIP

You can assign your own key commands to lengthen/shorten notes by specific durations and to extend them. You can find these by searching for **Shorten duration by**, **Lengthen duration by**, and **Extend to** on the **Key Commands** page in **Preferences**.

RELATED LINKS

Changing the rhythmic grid resolution on page 213
Changing the voice of existing notes on page 453
Key Commands page in the Preferences dialog on page 58
Played vs. notated note durations on page 671
Lengthening/Shortening notes in the Key Editor on page 667
Lengthening/Shortening items on page 419

Splitting notes by duration

You can split notes by either a specific duration, the current rhythmic grid resolution, or the duration between the start of the note and the caret position; for example, to turn a long tie chain into a sequence of eighth notes.

PROCEDURE

- 1. In Write mode, select the notes you want to split.
- 2. Split the selected notes in any of the following ways:
 - To split them by the current rhythmic grid resolution, press **Alt/Opt-U** or choose **Write** > **Edit Duration** > **Split by Rhythmic Grid Resolution**.
 - To split them by the duration between the start of the note and the caret position, activate the caret, extend it across the required staves, move the caret to the required position, then press Alt/Opt-U.
 - To split them by a specific duration, choose Write > Edit Duration > Split by Note
 Duration > [Note duration].

RESULT

The selected notes, or notes across which the caret extends, are split into multiple, shorter notes of the corresponding duration. If multiples of the selected duration do not fit exactly into the original notes, the final note is shortened.

EXAMPLE





A phrase containing long notes

Up-stem notes split into eighth notes

RELATED LINKS

Caret on page 214
Changing the rhythmic grid resolution on page 213
Deleting ties on page 1350
Splitting tie chains on page 1351

Changing the voice of existing notes on page 453

Forcing the duration of notes/rests

Dorico Elements automatically notates and beams notes/rests appropriately according to the prevailing time signature and their position in the bar. You can force the duration of notes/rests to specify their notation.

For example, if you input a half note at the start of a 6/8 bar, it is notated as a dotted quarter note (crotchet) tied to an eighth note (quaver). This is because, according to convention, 6/8 bars are subdivided into two groups of three eighth notes. To reflect this for a half note (four eighth notes), Dorico Elements automatically divides the note to show the correct grouping, but you can force the note duration to show a half note instead.

TIP

If you want to force the duration of all notes on a staff to imply a different meter, for example, to show three quarter note groups in 6/8 to indicate a hemiola, you can also input a time signature only on those staves to group notes according to that meter. You can then hide the time signatures if required.

PROCEDURE

- **1.** In Write mode, do one of the following:
 - Start note input.
 - Select existing notes whose duration you want to force.

TIP

If you later want to tie notes together, we recommend forcing the duration of all notes you want in the tie chain.

- **2.** Optional: If you want input rests with forced durations, start rest input in any of the following ways:
 - Press ,.
 - In the Notes toolbox, click **Rests** 1.
- **3.** Activate **Force Duration** in any of the following ways:
 - Press O.
 - In the Notes toolbox, click **Force Duration \mathbb{G}**.
- **4.** Select the note/rest duration you want.

TIP

If you want tie chains to appear as single noteheads with the same total duration, you must first reduce their duration, then change it to the duration you want.

5. Optional: During note or rest input, input the notes or rests you want.

RESULT

During note or rest input, any notes you input are notated with their whole rhythmic value, whatever their position in the bar. If you move them later, they keep the same notation. Rests are input as explicit rests. Notes that cross barlines are notated as tied notes.

Forcing the duration of existing notes or rests preserves their current duration or any duration to which you subsequently change them.

TIP

- **Force position and duration** in the **Notes and Rests** group of the Properties panel is activated automatically for rests input with forced durations. You can also use this property to force the duration and position of rests.
- You can choose whether or not **Force Duration** retains its previous state when you stop and restart note input in **Preferences** > **Note Input and Editing** > **Note Input**.
- You can change how notes are grouped in different contexts project-wide on the Note
 Grouping page in Notation Options.

EXAMPLE





Default notation of notes in 6/8

Notes in the down-stem voice input with forced durations

RELATED LINKS

Notes toolbox on page 192

Inputting notes on page 219

Inputting rests on page 241

Inputting ties on page 243

Notation Options dialog on page 730

Implicit vs. explicit rests on page 1250

Beam grouping according to meters on page 822

Hiding/Showing ties across beat boundaries on page 841

Creating custom beat groupings for meters on page 842

Changing the voice of existing notes on page 453

MIDI recording

MIDI recording is a way of inputting notes into Dorico Elements by playing them in real time on a MIDI device. This can be particularly useful if, for example, you prefer to improvise your music rather than plan pitches and note durations in advance.

In Dorico Elements, you can record MIDI notes using any MIDI device.

Dorico Elements automatically transcribes multiple simultaneous parts into separate voices, such as in contrapuntal piano music. Depending on your settings for MIDI recording and quantization, Dorico Elements can also detect slurs, tremolos, trills, pedal lines, tuplets, and grace notes.

Outside of note input, Dorico Elements uses the instrument sounds of your most recent selection for the notes you play on your MIDI device. In Play mode, this is the most recent track header you clicked, while in Write mode, this is the last instrument staff on which you selected an item, started note input, or into which you recorded MIDI. During note input, Dorico Elements always uses the instrument sounds of the instrument into which you are recording notes.

TIP

You can enable/disable MIDI thru on the **Play** page in **Preferences**. For example, if you do not want to hear sounds in Dorico Elements when playing on your MIDI keyboard.

As you play notes on your MIDI device, Dorico Elements uses an algorithm to produce the correct enharmonic spelling for those notes.

RELATED LINKS

Optimization for MIDI recording on page 263 Quantization options on page 91 MIDI Import Options dialog on page 84 Enabling/Disabling MIDI thru on page 212

Inputting notes using MIDI recording

You can input notes by recording what you play on a MIDI device in real time. You can record notes in both concert and transposed pitch.

PREREQUISITE

- You have connected the MIDI device you want to use.
- You have set the quantization and recording options on the **Play** page in **Preferences** as required for the music you intend to record.
- You have input enough bars or empty rhythmic space for the amount of music you want to record. Dorico Elements does not automatically add extra bars or rhythmic space.
- If you want to hear a click during your recording, you have input a time signature. There is no click in open meter or when there is no time signature.
- You have chosen the appropriate input pitch setting.

PROCEDURE

1. Select a note or rest on the staff/instrument track into which you want to record notes, at the position from which you want to record. You can do this in Write mode and Play mode.

NOTE

- In Play mode you cannot select rests, meaning you can only record into instrument tracks that already contain at least one note.
- You can also record MIDI during note input, but this prevents Dorico Elements from using both staves in grand staff instruments.
- **2.** Optional: If you want to record notes without overwriting any existing notes on the staff, activate Chord mode in any of the following ways:
 - Press Q.
 - In the Notes toolbox, click **Chords 3**.
- **3.** Optional: If you want to record into a specific voice on the staff, in Write mode, press **Shift-N** to start note input, then do one of the following:
 - If the voice you want already exists on the staff, press **V** until the note symbol beside the caret indicates the correct voice.
 - If the voice you want does not exist on the staff yet, press **Shift-V** until the note symbol beside the caret indicates the correct voice.

4. Press Ctrl/Cmd-R to start recording.

During recording, the playhead appears red and moves along in time. By default, there is one bar of count-in before the playhead reaches the rhythmic position of either your original selection or the caret.

5. Play the notes you want on your MIDI device.

NOTE

Notes do not appear until you stop recording.

6. Press Space or Enter or Ctrl/Cmd-R to stop recording.

RESULT

The notes you played on the MIDI device are input onto the selected staff.

If you did not specify the voice, notes are recorded into voices according to what you played. For example, if you played notes in rhythmic unison, they are recorded into a single voice. If you played notes with different rhythms, they are recorded into separate voices, up to two voices per staff.

If you activated **Chords**, the notes you played are merged into the first available voice on the staff without overwriting any existing notes.

The notated duration of the notes follows your quantization options, but their played durations are retained for playback.

AFTER COMPLETING THIS TASK

- If the notes you played in are not notated as you intended, you can requantize them.
- If you do not want to retain played durations for playback, you can reset playback overrides.

RELATED LINKS

Optimization for MIDI recording on page 263

Enabling/Disabling MIDI thru on page 212

Changing the input pitch setting on page 210

Input methods for bars, beats, and barlines on page 294

Input methods for time signatures and pick-up bars on page 277

Changing the voice of existing notes on page 453

Turning existing notes into grace notes on page 985

Resetting playback overrides on page 673

Preferences dialog on page 57

Retrieving played notes that you did not record

During playback, you can play notes on your MIDI keyboard and hear them without recording them into the score. You can use retrospective recording to retrieve these notes and input them into the project without previously explicitly recording them. For example, if you only intended to experiment with ideas, but afterwards decided you wanted to keep them.

PREREQUISITE

You have started playback, played notes on a MIDI device alongside playback, then stopped playback.

PROCEDURE

1. In Write mode, select a note or rest on the staff where you want to input the retrieved notes.

- **2.** Optional: If you want to input retrieved notes without overwriting any existing notes on the staff, press **Q** to activate **Chords**.
- 3. Retrieve the notes you played in any of the following ways:
 - Press Ctrl/Cmd-Alt/Opt-R.
 - In the Transport window, click Retrospective Record ...

RESULT

All the notes you played on your MIDI device during the previous playback are input on the selected staff, starting from the selected rhythmic position. They are input into the first available voice on the staff and overwrite any existing notes in that voice by default. If you activated **Chords**, the retrieved notes are merged into the first available voice on the staff without overwriting any existing notes.

NOTE

The retrospective recording buffer is cleared each time you start playback, meaning you cannot retrieve music you played before the most recent playback.

RELATED LINKS

Playing back music on page 525 Transport window on page 540

Repeats in MIDI recording

When recording MIDI into flows that contain repeat structures, such as repeat barlines, Dorico Elements records the notes you play during each playthrough and merges them together into the same voice.

Any differences in rhythms between the recordings are notated according to the current meter.

Requantizing notes

You can requantize notes using different quantization options. For example, if you want to change notated rhythms after importing MIDI or recording notes using a MIDI device. This does not affect the played duration of notes in playback.

PROCEDURE

- 1. Select all the notes you want to requantize. You can do this in Write mode and Play mode.
- 2. Choose **Edit** > **Requantize** to open the **Requantize** dialog.
- 3. Change the quantization options as required.
- **4.** Click **OK** to save your changes and close the dialog.

RESULT

The notated durations of all selected notes are changed according to the quantization options. This does not affect their played duration in playback.

RELATED LINKS

Quantization options on page 91 Resetting playback overrides on page 673 Selecting notes/items on page 410

Changing the click settings

You can change the sound, volume, and subdivision of the metronome click, which is always used during MIDI recording. During playback, the click only sounds if the metronome is activated.

By default, Dorico Elements only subdivides the beat in the metronome click in compound time signatures, and uses a click for the metronome click sound. The click uses different tones for the first beat in each bar, subsequent beats, and further beat subdivisions.

NOTE

- There is no click in open meter or when there is no time signature.
- The click is produced by a tone generator called DoricoBeep. You can use the Tempo track in Play mode to change the device used for the click.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-P to open Playback Options.
- **2.** In the category list, click **Click**.
- In the Metronome Click section, activate/deactivate the following options for Beat subdivisions:
 - Subdivide beats in simple time signatures
 - Subdivide beats in compound time signatures
- 4. Choose one of the following options for Click sound:
 - **Click** (unpitched)
 - Beep (pitched)
 - Wood Block
- **5.** For **Pitch and velocity**, change the **MIDI pitch** and/or **Velocity** values for any of the following types of beat:
 - First beat
 - Subsequent beats
 - Beat subdivisions
- 6. Click Apply, then Close.

RESULT

The sound, volume, and subdivision settings for the metronome click in the current project are changed.

RELATED LINKS

Types of time signatures on page 1360
Input methods for time signatures and pick-up bars on page 277
Playback templates on page 543
Playing back music on page 525
Tempo track on page 517
Changing the sound used for the click on page 518
Playback Options dialog on page 732

Changing the count-in duration

For each project, you can change the default number of bars used in the count-in before you start recording. By default, Dorico Elements provides a one bar count-in.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-P to open Playback Options.
- 2. In the category list, click Click.
- 3. In the **Count-in** section, change the value for **Number of bars count-in**.
- 4. Click Apply, then Close.

RESULT

The default duration of the count-in is changed in the current project.

Optimization for MIDI recording

Depending on your operating system and the MIDI devices you use for recording, you might find that the notes you record are not notated with the durations or at the rhythmic positions you expected. Optimizing the settings related to MIDI recording can help you achieve better results.

You can find options that affect MIDI recording on the Play page in Preferences.

Because there can be a time latency between you pressing keys on a MIDI device and the notes being picked up by Dorico Elements, we recommend that you check the latency by inputting a simple rhythm against the click; for example, recording quarter notes in a 4/4 time signature.

Depending on the results, there are different settings you can change:

- If your notes are notated with incorrect durations, such as sixteenth notes notated as eighth notes, we recommend that you change the quantization options.
- If notes are input with missing or incorrect notations, we recommend that you change the detected notations in **Preferences** > **Play** > **Recording**.

NOTE

Notation settings are linked between **Preferences** and the **MIDI Import Options** dialog.

- If your notes are notated ahead of the beat, we recommend that you increase the latency compensation value.
- If your notes are notated behind the beat, we recommend that you reduce the buffer size for your audio device to the lowest possible value that still produces stable playback with no drop-outs.

NOTE

The built-in audio device on Windows computers cannot always achieve a low enough latency for reliable input in real time. In such cases, we recommend that you use an external USB audio interface with ASIO support.

RELATED LINKS

Preferences dialog on page 57 Quantization options on page 91 MIDI Import Options dialog on page 84 Turning existing notes into grace notes on page 985 Changing the sound used for the click on page 518 Enabling/Disabling MIDI thru on page 212

Changing the MIDI latency compensation value

You can change the MIDI latency compensation value to correct any discrepancy between when you press keys during MIDI recording and where the corresponding notes are notated relative to the beat.

PROCEDURE

- 1. Press Ctrl/Cmd-, to open Preferences.
- 2. In the category list, click Play.
- 3. In the **Recording** subsection, change the value for **MIDI** input latency compensation.
- 4. Click Apply, then Close.

RESULT

Increasing the latency compensation value increases the time between pressing the key and the note being notated. This is useful if the notes you record were previously notated ahead of the beat.

Decreasing the latency compensation value decreases the time between pressing the key and the note being notated. This is useful if the notes you record were previously notated behind the beat.

Changing the audio device buffer size

You can change the audio buffer size; for example, if the current buffer size is causing notes input using MIDI recording appear significantly after the beat.

NOTE

- If the notes you play when recording MIDI are notated behind the beat, we recommend that you reduce the buffer size for your audio device to the lowest possible value that still produces stable playback with no drop-outs.
- The built-in audio device on Windows computers cannot always achieve a low enough latency for reliable input in real time. In such cases, we recommend that you use an external USB audio interface with ASIO support.

PROCEDURE

- 1. Choose **Edit** > **Device Setup** to open the **Device Setup** dialog.
- 2. Select the audio device whose buffer size you want to change from the ASIO Driver menu.
- 3. Click **Device Control Panel** to open the device settings dialog for the selected audio device.
- **4.** In the audio device settings dialog, change the buffer size in one of the following ways, as appropriate for your operating system:
 - For Windows systems, in the Audio buffer size section, either drag the slider to a
 different position or activate User definable and change the value in the Selected
 buffer size field.
 - For macOS systems, select a sample rate from the Buffer Size menu.
- 5. Click **OK** (Windows)/**Close** (macOS) to close the audio device settings dialog.

6. Click Close to close the Device Setup dialog.

Changing the sustain pedal controller settings for MIDI recording/ import

You can change your default setting for whether Dorico Elements interprets sustain pedal controllers as pedal lines when recording MIDI and importing or opening MIDI files.

PROCEDURE

- 1. Press Ctrl/Cmd-, to open Preferences.
- 2. In the category list, click Play.
- 3. In the Recording subsection, activate/deactivate Import CC64 as pedal lines.
- **4.** Optional: If you activated **Import CC64 as pedal lines**, activate/deactivate **Snap pedal lines to previous beat**.
- 5. Click Apply, then Close.

RESULT

When **Import CC64** as **pedal lines** is activated, the MIDI controller CC64 is interpreted as pedal lines.

When **Snap pedal lines to previous beat** is activated, the start of pedal lines is automatically moved back to the start of the beat.

NOTE

These options are also available in the **MIDI Import Options** dialog, and your settings are linked between this dialog and **Preferences**.

RELATED LINKS

MIDI Import Options dialog on page 84 Preferences dialog on page 57

Enabling/Disabling MIDI input devices

By default, Dorico Elements accepts MIDI input from all connected MIDI devices, including virtual MIDI cables and inter-application buses. You can enable/disable MIDI devices individually; for example, if you are using devices that continuously output MIDI data or if you want particular devices to remain routed exclusively to another application.

PROCEDURE

- 1. Press Ctrl/Cmd-, to open Preferences.
- **2.** In the category list, click **Play**.
- **3.** In the **MIDI Input Devices** subsection, activate/deactivate the checkbox for each MIDI input device.
- 4. Click Apply, then Close.

Notations input

You can input many types of notations, both during note input and by adding them to existing notes and music. In Dorico Elements, "notation" is a broad term that includes many different items, including articulations, slurs, dynamics, and more.

In Dorico Elements, you can input most notations with the keyboard by using popovers and with the mouse by using panels.

RELATED LINKS

Popovers on page 22

Inputting articulations

You can input notes with articulations during note input, and you can add articulations to notes after they have been input.

NOTE

These steps describe selecting articulations before inputting notes. However, you can change this setting if you prefer to specify articulations after inputting notes.

PROCEDURE

- 1. In Write mode, do one of the following:
 - Start note input.
 - Select the existing notes to which you want to add articulations.
- **2.** Optional: If you want to input notes with articulations onto multiple staves at once, extend the caret to those staves.
- 3. Select the articulations you want to input in any of the following ways:
 - Press the key commands for the articulations you want.
 - In the Notes panel, click the articulations you want.
 - In the Keyboard panel toolbar, click the articulations you want.
- **4.** Optional: During note input, input the notes or chords you want with your selected articulations.

RESULT

The selected articulations are added to the selected notes. They are positioned between noteheads or stems and tuplet brackets, so they are closer to the notes than tuplet brackets or tuplet numbers/ratios.

During note input, the selected articulations are added to all notes that are input until the articulations are deactivated.

NOTE

Some combinations of articulations on the same notes are not possible. For example, you cannot have both staccato and staccatissimo marks on the same notes, as both articulations indicate that notes are played shorter.

AFTER COMPLETING THIS TASK

You can enable independent voice playback for individual instruments to hear different sounds in different voices simultaneously; for example, if you have slurs in one voice and staccatos in another voice.

RELATED LINKS

Articulations on page 787

Note input on page 219

Notes panel on page 196

Keyboard panel on page 202

Extending the caret to multiple staves on page 218

Copying and pasting articulations on page 788

Enabling independent voice playback on page 530

Key commands for articulations

In addition to clicking them in the Notes panel, you can input common articulations by pressing key commands on your computer keyboard.

You can use the following key commands to input articulations with the keyboard:

Type of articulation	Key command
Accent: 3	î
Marcato: '	1
Stressed: ′	E
Unstressed: ~	@ (Windows) or " (macOS)
Staccato:	i
Tenuto: -	# (Windows) or \ (macOS)
Staccatissimo: ', ', or '	B
Combined tenuto and staccato: -	~ (Windows) or (macOS)

Inputting slurs

You can input slurs, both during note input and by adding them to existing notes. You can also add slurs to existing notes on multiple staves at the same time, and to notes in different voices or on different staves belonging to the same instrument; for example, when phrases span both staves of grand staff instruments.

PROCEDURE

- 1. In Write mode, do one of the following:
 - Start note input.
 - Select the notes to which you want to add slurs.

TIP

- If you only select a single note, the slur connects that note to the next note in the same voice on the staff. To input slurs between notes in different voices, you must select both notes; for example, by selecting the first note then **Ctrl/Cmd** -clicking the second note.
- For instruments with multiple staves, such as piano and harp, you can select two existing notes, each on a different staff, to create cross-staff slurs. However, you cannot create cross-staff slurs between different instruments.
- **2.** Optional: During note input, if you want to input notes and notations onto multiple staves, extend the caret to those staves.
- **3.** Input a slur in any of the following ways:
 - Press S.

 - In the Keyboard panel toolbar, click **Slur**.

NOTE

If you added slurs to existing notes, stop here.

- **4.** During note input, input the notes you want.
 - The slur extends automatically, even if there are rests between the notes you input.
- 5. During note input, end the slur on the currently selected note in any of the following ways:
 - Press Shift-S.
 - In the Keyboard panel toolbar, click **Slur**.

RESULT

During note input, slurs begin from the currently selected note on all staves across which the caret extends, not from the caret position. Slurs extend automatically as you input notes, and end on the currently selected note.

When adding slurs to existing notes, the selected notes are connected by slurs. For example, if you select two notes belonging to one instrument and two notes belonging to another, two slurs are input connecting the notes on each selected staff. If you selected notes on different staves belonging to the same instrument, a cross-staff slur is input.

Slurs are placed either above or below the notes, depending on the stem direction of the notes within the selection.

TIP

When nothing is selected, you can also click **Slur** in the Notes panel or Keyboard panel toolbar, and then click and drag to input a slur and extend it to your preferred length.

AFTER COMPLETING THIS TASK

- You can enable independent voice playback for individual instruments to hear different sounds in different voices simultaneously; for example, if you have slurs in one voice and staccatos in another voice.
- You can change the curvature direction and style of individual slurs; for example, to make them appear dashed and S-shaped.

RELATED LINKS

Slurs on page 1261

Notes panel on page 196

Keyboard panel on page 202

Inputting notes on page 219

Extending the caret to multiple staves on page 218

Enabling independent voice playback on page 530

Changing the curvature direction of slurs on page 1271

Changing the style of slurs on page 1268

Inputting fingerings

You can input fingerings on existing notes using the fingerings popover, both during note input and by adding them to existing notes.

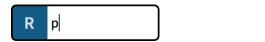
NOTE

- You can only add fingerings to notes at one rhythmic position at a time, and you can only
 input as many fingerings as there are notes at each rhythmic position. For example, you can
 input three fingerings at the rhythmic position of a chord containing three notes, but only
 one fingering at the rhythmic position of a single note.
- If you select notes in multiple voices, fingerings are only input into the top voice.
- Although they contain two numbers, substitution fingerings are considered one fingering, meaning you can add substitution fingerings to single notes.

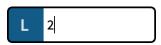
PROCEDURE

- **1.** In Write mode, do one of the following:
 - Start note input.
 - Select an existing note on a single staff to which you want to add fingering.
 If you want to add fingerings to all notes in a chord, select all the notes in the chord.
- **2.** Optional: During note input, input at least one note.
- **3.** Open the fingerings popover in any of the following ways:
 - Press Shift-F.
 - In the Notations toolbox, click **Popovers** , then **Fingerings** .
- **4.** Optional: If you are inputting fingerings for fretted instruments, change the hand in one of the following ways:
 - To switch to the right hand, press **Down Arrow**.
 - To switch to the left hand, press **Up Arrow**.

The popover icon updates to show the current hand.



Fingerings popover when inputting right-hand fingerings



Fingerings popover when inputting left-hand fingerings

5. Enter the fingerings you want into the popover.

For example, enter:

- 3-2 for a substitution fingering from the third finger to the second finger.
- **1,3,5** for a chord.
- 12 to show the first two valves should be depressed on a valved brass instrument.
- p for a right-hand thumb fingering or t for a left-hand thumb fingering.
- 2/ for a fingering with a shift indicator.
- **6.** Optional: When adding fingerings to existing notes, move the popover in one of the following ways:
 - To advance the popover to the next note/chord in the current voice, press **Space**.
 - To move the popover back to the previous note/chord in the current voice, press Shift-Space.
 - To advance the popover to the first note/chord in the current voice in the next bar, press
 Tab.
 - To move the popover back to the first note/chord in the current voice in the previous bar, press **Shift-Tab**.
 - To move the cursor and popover to the right/left and to the next/previous note/fingering in the current voice, press **Right Arrow** / **Left Arrow** .
- 7. Press **Return** to close the popover.

RESULT

The fingerings are input on the selected notes, including during note input. The popover advances through notes in the voice as indicated by the caret or in the same voice as your initial selection.

RELATED LINKS
Fingering on page 952
Deleting fingerings on page 959
Hiding/Showing fingerings in chord diagrams on page 882

Fingerings popover

The following tables contain examples of what you can enter into the fingerings popover to input the different types of fingerings available. The fingerings popover behaves differently for fretted instruments compared to other instruments, so there is a separate table for fretted instrument fingerings.

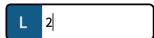
You can open the fingerings popover in Write mode in any of the following ways when either a note is selected or the caret is active:

- Press Shift-F.
- In the Notations toolbox, click **Popovers** , then **Fingerings** .
- Choose Write > Create Fingerings.

When inputting fingerings for non-fretted instruments, the icon on the left-hand side of the popover matches the corresponding button in the Notations toolbox. When inputting fingerings for fretted instruments, the icon on the left-hand side of the popover indicates whether you are inputting left-hand or right-hand fingerings.



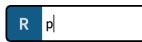
Fingerings popover with an example entry for inputting a non-fretted instrument fingering



Fingerings popover with an example entry for a left-hand fretted instrument fingering



Fingering button in the Notations toolbox



Fingerings popover with an example entry for a right-hand fretted instrument fingering

Non-fretted instruments

Type of fingering	Example popover entry
Single fingerings for individual notes, including for brass valve numbers and trombone slide positions	1, 2, 3 , and so on
Valved brass instruments	12
Single fingerings for each note in chords	1,3,5
For keyboard instruments, Dorico Elements automatically orders numbers appropriately according to the hand playing the notes. The default is:	
Right hand for the upper staff	
Left hand for the lower staff	
Left-hand fingerings (non-fretted instruments)	L2, G2, S5, I2, or H2
Right-hand fingerings (non-fretted instruments)	R5 , D5 , or M5
Thumb indicator (non-fretted instruments)	т
Multiple fingerings for individual notes; for example, for ornaments such as mordents or turns	2343
Single fingerings for multiple notes: enter the same fingering number for two adjacent notes.	1,1
For example, in keyboard music the thumb may depress two keys simultaneously.	
Alternative fingerings	2(3)

Type of fingering	Example popover entry
Editorial fingerings	[4]
Finger substitutions	1-3
Fingering shift indicator (string instruments)	2/

NOTE

Finger substitutions are shown as immediate by default, but you can change the rhythmic position of the substitution by changing the deferral duration.

Fretted instruments

Type of fingering	Example popover entries
Left-hand fingerings	0, 1, 2, 3, 4, 5
Left-hand thumb	t
Right-hand fingerings	1, 2, 3, 4, 5
	p, i, m, a, e
Right-hand thumb	p , t , or 1
Right-hand pinky finger	e, x, c, o, or 5

These lists are not comprehensive as there are many possible fingerings. It is intended to illustrate how you can structure your entries to input different types of fingerings.

RELATED LINKS

Notations toolbox on page 197

Fingering on page 952

Changing the rhythmic position of substitution fingerings on page 954

Fingerings for valved brass instruments on page 970

Fingerings for fretted instruments on page 962

Input methods for key signatures

You can input key signatures with the keyboard by using the key signatures popover, and with the mouse by using the Key Signatures, Tonality Systems, and Accidentals panel.

Inputting key signatures with the popover

You can input key signatures using the key signatures popover, both during note input and by adding them to existing music. You can also input key signatures only on specific staves.

NOTE

It is not necessary to input different key signatures for transposing instruments, as Dorico Elements automatically shows the appropriate key signatures for transposing instruments in transposing layouts.

PROCEDURE

- **1.** In Write mode, do one of the following:
 - Start note input.
 - Select an item at the rhythmic position where you want to input a key signature. If you
 want to input a key signature on specific staves, select items that only belong to those
 staves.
- **2.** Optional: During note input, if you want to input notes and notations onto multiple staves, extend the caret to those staves.
- 3. Open the key signatures popover in any of the following ways:
 - Press Shift-K.
 - In the Notations toolbox, click **Popovers** , then **Key Signatures**
- **4.** Enter the key signature you want into the popover.
 - For major keys, enter capital letters or the corresponding number of sharps/flats, such as **G** or **1s** for G major.
 - For minor keys, enter lowercase letters, such as **g** for G minor.
 - For an atonal key signature, enter **open**.
- **5.** Input the key signature and close the popover in one of the following ways:
 - To input a key signature on all staves, press Return.
 - To input a key signature only on the selected staves or staves across which the caret extends, press **Alt/Opt-Return**.

RESULT

During note input, key signatures are input at the caret position, even if this is in the middle of a bar.

When adding key signatures to existing music, they are added at the rhythmic position of the earliest selected item. If you selected an existing key signature, the new key signature directly replaces the existing one.

All subsequently input notes follow the input key signature, until the next existing key signature or the end of the flow, whichever comes first. When you input notes using a MIDI keyboard, accidentals are spelled according to the key signature.

Key signatures that do not show accidentals, such as A minor or open key signatures, are indicated by signposts.

NOTE

An individual key signature on a single staff is not intended for transposing instruments. Transpositions of notes and key signatures are done automatically for transposing instruments.

RELATED LINKS

Key signatures on page 1000
Notations toolbox on page 197
Accidental selection during MIDI input on page 240
Extending the caret to multiple staves on page 218
Transposing instruments on page 130
Transposing tools on page 454
Mapping notes to scales on page 471
Signposts on page 438

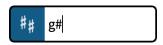
Key signatures popover

The table contains the entries for the key signatures popover that you can use to input the different key signatures available.

You can open the key signatures popover in Write mode in any of the following ways when either an item is selected or the caret is active:

- Press Shift-K.
- In the Notations toolbox, click **Popovers** , then **Key Signatures** .
- Select an existing key signature and press Return.
- Choose Write > Create Key Signature.

The icon on the left-hand side of the popover matches the corresponding button in the Notations toolbox on the right of the window.





Key signatures popover with an example entry

Key Signatures, Tonality Systems, and Accidentals button in the Notations toolbox

Type of key signature	Popover entry
Open or atonal key signature	open or atonal
Major keys (capital letters)	C , D , G# , Ab , and so on
Minor keys (lowercase letters)	g , d , f# , bb , and so on
Number of sharps	3s , 2# , and so on
NOTE	
Assumes the major key for that many sharps.	

Type of key signature	Popover entry
Number of flats	4f , 5b , and so on
NOTE	
Assumes the major key for that many flats.	

This list is not comprehensive as you can input every possible key signature. It is intended to illustrate how you can structure your entry to input different types of key signatures.

RELATED LINKS

Notations toolbox on page 197 Types of key signatures on page 1002

Inputting key signatures with the panel

You can input key signatures using the Key Signatures, Tonality Systems, and Accidentals panel, both during note input and by adding them to existing music. You can also input key signatures only on specific staves.

NOTE

- These steps describe inputting with the default mouse input preference Create item at selection.
- It is not necessary to input different key signatures for transposing instruments, as Dorico Elements automatically shows the appropriate key signatures for transposing instruments in transposing layouts.

PROCEDURE

- **1.** In Write mode, do one of the following:
 - Start note input.
 - Select an item at the rhythmic position where you want to input a key signature. If you
 want to input a key signature on specific staves, select items that only belong to those
 staves.
- 2. In the Notations toolbox, click Panels , then Key Signatures, Tonality Systems, and Accidentals to show the Key Signatures, Tonality Systems, and Accidentals panel.
- **3.** Optional: If you have not already used the key signature you want in the current flow, create the key signature you want using the **Key Signatures** editor in the Key Signatures, Tonality Systems, and Accidentals panel.
- **4.** Input the key signature you want in one of the following ways:
 - To input a key signature on all staves, click it in the Key Signatures, Tonality Systems, and Accidentals panel.
 - To input a key signature only on the selected staves or staff on which the caret is active, **Alt/Opt**-click it in the Key Signatures, Tonality Systems, and Accidentals panel.

RESULT

During note input, key signatures are input at the caret position, even if this is in the middle of a bar.

When adding key signatures to existing music, they are added at the rhythmic position of the earliest selected item. If you selected an existing key signature, the new key signature directly replaces the existing one.

All subsequently input notes follow the input key signature, until the next existing key signature or the end of the flow, whichever comes first. When you input notes using a MIDI keyboard, accidentals are spelled according to the key signature.

Key signatures that do not show accidentals, such as A minor or open key signatures, are indicated by signposts.

NOTE

An individual key signature on a single staff is not intended for transposing instruments. Transpositions of notes and key signatures are done automatically for transposing instruments.

RELATED LINKS

Key signatures on page 1000
Notations toolbox on page 197
Accidental selection during MIDI input on page 240
Changing your mouse input settings on page 207
Transposing instruments on page 130
Transposing tools on page 454
Mapping notes to scales on page 471
Signposts on page 438

Key Signatures, Tonality Systems, and Accidentals panel

The Key Signatures, Tonality Systems, and Accidentals panel allows you to create and input common key signatures. It is located in the right zone in Write mode.

 You can hide/show the Key Signatures, Tonality Systems, and Accidentals panel by clicking Panels , then Key Signatures, Tonality Systems, and Accidentals in the Notations toolbox.

You can also hide/show the right zone by pressing Ctrl/Cmd-9.

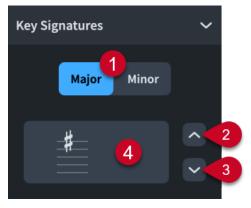
The Key Signatures, Tonality Systems, and Accidentals panel contains the following sections:

Used in This Flow

Contains all the key signatures currently used in the flow.

Key Signatures

Allows you to create key signatures.



The **Key Signatures** section contains the following parts:

1 Major/Minor

Allow you to choose whether your key signature is **Major** or **Minor**.

2 More Sharps/Fewer Flats

Each time you click, you add one sharp accidental to the key signature, or remove one flat accidental from the key signature.

3 Fewer Sharps/More Flats

Each time you click, you remove one sharp accidental from the key signature, or add one flat accidental to the key signature.

4 Input key signature

Shows how the key signature looks on a staff. Clicking this button inputs the displayed key signature. If nothing in the project is selected, the key signature is loaded onto the mouse pointer.

Accidentals

Contains all accidentals available in the currently selected tonality system.

RELATED LINKS

Notations toolbox on page 197 Key signatures on page 1000 Tonality systems on page 1009

Input methods for time signatures and pick-up bars

You can input time signatures, including time signatures with pick-up bars, with the keyboard by using the time signatures popover, and with the mouse by using the Time Signatures (Meter) panel.

NOTE

You can create most types of custom time signatures using the **Create Time Signature** section of the Time Signatures (Meter) panel, but certain time signatures are only possible using the time signatures popover. For example, you can only specify beat subdivisions with the time signatures popover.

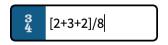
Time signatures popover

The table contains the entries for the time signatures popover that you can use to input the different types of time signatures available.

You can open the time signatures popover in Write mode in any of the following ways when either an item is selected or the caret is active:

- Press Shift-M.
- In the Notations toolbox, click **Popovers** , then **Time Signatures (Meter)** .
- Select an existing time signature and press **Return**.
- Choose Write > Create Time Signature.

The icon on the left-hand side of the popover matches the corresponding button in the Notations toolbox on the right of the window.





Time signatures popover with an example entry

Time Signatures (Meter) button in the Notations toolbox

Time signatures

Type of time signature	Popover entry
Simple time signatures	2/2 , 2/4 , 6/8 , 3/4 , 5/4 , and so on
For example, 2/2 (two half notes per bar), 2/4 (two quarter notes per bar), 6/8 (six eighth notes per bar), 3/4, 5/4, and so on	
Alternating time signatures, such as 6/8+3/4	6/8 + 3/4
	NOTE
	You must include spaces either side of the plus sign.
Common time, the equivalent of 4/4	c
Cut common time, the equivalent of 2/2	cutc, cut, or ¢
Open meter indicated by X	X or x
Open meter with no indication	open
NOTE	
A time signature signpost is shown at the position of the open meter.	
Additive time signature with explicit beat grouping	3+2+2/8, 3+2/4 , and so on
Beat grouping specified but not shown in the time signature	[2+3+2]/8
For example, a time signature of 7/8 is shown but beams are subdivided into 2+3+2 eighth notes.	
Aggregate time signature with dashed barlines shown in each bar, indicating the divisions between the different meters	2/4 6/8
Aggregate time signature without dashed barlines shown in each bar	2/4:6/8

Type of time signature	Popover entry
Interchangeable time signature with different styles: parenthesized, slash, equals sign, and dashed	2/4 (6/8), 2/4 / 6/8, 2/4 = 6/8, or 2/4 - 6/8
	NOTE
	You must include spaces either side of the slashes, equals signs, or dashes, and before opening parentheses.

Pick-up bars

Example time signature with pick-up bar	Popover entry
4/4 time signature with a quarter note (crotchet) pick-up	4/4,1
4/4 time signature with a dotted quarter note pick-up	4/4,1.5
4/4 time signature with a sixteenth note (semiquaver) pick-up	4/4,0.25
3/4 time signature with a dotted eighth note (dotted quaver) pick-up	3/4,0.75
6/8 time signature with a pick-up of two eighth notes (quavers)	6/8,2
2/2 time signature with a quarter note pick-up	2/2,0.5

TIP

The number after the comma indicates a fraction/multiple of the rhythmic unit specified by the time signature denominator. For example, **1** indicates a quarter note in 4/4, or an eighth note in 6/8.

These lists are not comprehensive, as there are many possible time signatures and pick-up bars. They are intended to illustrate how you can structure your entry to input different time signatures and pick-up bars.

RELATED LINKS

Notations toolbox on page 197
Time signatures on page 1359
Types of time signatures on page 1360
Time signature styles on page 1367
Creating custom beat groupings for meters on page 842
Ending interchangeable time signatures on page 1375

Time Signatures (Meter) panel

The Time Signatures (Meter) panel allows you to input different time signatures. In the **Create Time Signature** section of the panel, you can create uncommon time signatures. It is located in the right zone in Write mode.

• You can hide/show the Time Signatures (Meter) panel by clicking **Panels**, then **Time Signatures** (**Meter**) **1** in the Notations toolbox.

You can also hide/show the right zone by pressing Ctrl/Cmd-9.

The Time Signatures (Meter) panel contains the following sections:

Used in This Flow

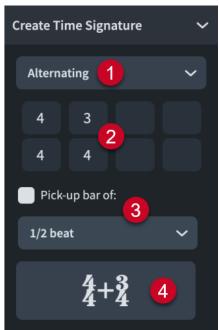
Contains any time signatures already used in the current flow.

Common

Contains common time signatures, such as 4/4, 3/4, 6/8, and 7/8.

Create Time Signature

Allows you to design your own time signatures, including alternating time signatures and aggregate time signatures.



The **Create Time Signature** section contains the following parts:

1 Time signature type menu

Allows you to select one of the following types of time signatures:

- Regular
- Additive
- Interchangeable
- Aggregate
- Alternating

2 Time signature spaces

Allows you to combine up to four time signatures. For example, you can specify only one time signature for a regular time signature, but for an alternating time signature, you might want to include three time signatures.

3 Pick-up bar of

Allows you to include a pick-up bar before the time signature. A pick-up bar is not a complete bar, and so allows you to include only a few beats before the first complete bar.

You can select one of the following options for the number of beats in a pick-up bar:

- 1/2 beat
- 1 beat
- 2 beats
- 3 beats

4 Input time signature button

Click the button that displays the time signature to input it. If nothing in the project is selected, the time signature is loaded onto the mouse pointer.

RELATED LINKS

Notations toolbox on page 197 Time signatures on page 1359 Types of time signatures on page 1360

Inputting time signatures with the popover

You can input time signatures using the time signatures popover, both during note input and by adding them to existing music. You can also input time signatures only on specific staves.

NOTE

Dorico Elements does not automatically add beats to fill bars according to the new time signature at the end of the affected region unless Insert mode is activated.

PROCEDURE

- 1. In Write mode, do one of the following:
 - Start note input.
 - Select an item at the rhythmic position where you want to input a time signature. If you
 want to input a time signature on specific staves, select items that only belong to those
 staves.
- **2.** Optional: During note input, if you want to input notes and notations onto multiple staves, extend the caret to those staves.
- **3.** Optional: If you want Dorico Elements to add beats at the end of the region affected by the new time signature if required, activate Insert mode in any of the following ways:
 - Press I.
 - In the Notes toolbox, click Insert [1].
- **4.** Open the time signatures popover in any of the following ways:
 - Press Shift-M.
 - In the Notations toolbox, click **Popovers** , then **Time Signatures (Meter) 1**.
- **5.** Enter the time signature you want into the popover.

For example, enter **4/4** for a 4/4 time signature or **[2+2+3]/8** for a 7/8 time signature with a custom beat grouping.

- **6.** Input the time signature and close the popover in one of the following ways:
 - To input a time signature on all staves, press **Return**.
 - To input a time signature only on the selected staves or staves across which the caret extends, press **Alt/Opt-Return**.

RESULT

During note input, time signatures are input at the caret position, even if this is in the middle of an existing bar.

When adding time signatures to existing music, they are added at the rhythmic position of the earliest selected item. If you selected an existing time signature, the new time signature directly replaces the existing one.

All subsequent bars follow the input time signature, until the next existing time signature or the end of the flow, whichever comes first. Dorico Elements automatically inputs and moves barlines as required so that subsequent music is barred correctly. However, in open meters, you must input barlines and add beats manually.

Any time signatures you input after an interchangeable time signature that are specified in it are hidden automatically until you end the interchangeable time signature.

RELATED LINKS

Time signatures popover on page 277
Extending the caret to multiple staves on page 218
Insert mode on page 439
Time signatures on page 1359
Ending interchangeable time signatures on page 1375
Input methods for bars, beats, and barlines on page 294
Note and rest grouping on page 841

Inputting time signatures with the panel

You can input time signatures using the Time Signatures (Meter) panel, both during note input and by adding them to existing music. You can also input time signatures only on specific staves.

NOTE

- These steps describe inputting with the default mouse input preference Create item at selection.
- Dorico Elements does not automatically add beats to fill bars according to the new time signature at the end of the affected region unless Insert mode is activated.

PROCEDURE

- **1.** In Write mode, do one of the following:
 - Start note input.
 - Select an item at the rhythmic position where you want to input a time signature. If you
 want to input a time signature on specific staves, select items that only belong to those
 staves.
- **2.** Optional: If you want Dorico Elements to add beats at the end of the region affected by the new time signature if required, activate Insert mode in any of the following ways:
 - Press I.
 - In the Notes toolbox, click Insert [1].

- 3. In the Notations toolbox, click **Panels** , then **Time Signatures (Meter)** to show the Time Signatures (Meter) panel.
- **4.** Optional: If you want to input a time signature that is not available in the **Used in This Flow** or **Common** sections, select the type of time signature you want to input from the menu in the **Create Time Signature** section.
- **5.** Optional: Enter the time signatures you want into the available spaces.
- **6.** Input the time signature you want in one of the following ways:
 - To input a time signature on all staves, click it in the Time Signatures (Meter) panel.
 - To input a time signature only on the selected staves or staff on which the caret is active,
 Alt/Opt -click it in the Time Signatures (Meter) panel.

RESULT

During note input, time signatures are input at the caret position, even if this is in the middle of an existing bar.

When adding time signatures to existing music, they are added at the rhythmic position of the earliest selected item. If you selected an existing time signature, the new time signature directly replaces the existing one.

All subsequent bars follow the input time signature, until the next existing time signature or the end of the flow, whichever comes first. Dorico Elements automatically inputs and moves barlines as required so that subsequent music is barred correctly. However, in open meters, you must input barlines and add beats manually.

Any time signatures you input after an interchangeable time signature that are specified in it are hidden automatically until you end the interchangeable time signature.

RELATED LINKS

Notations toolbox on page 197
Time Signatures (Meter) panel on page 280
Insert mode on page 439
Changing your mouse input settings on page 207
Time signatures on page 1359
Input methods for bars, beats, and barlines on page 294
Ending interchangeable time signatures on page 1375
Note and rest grouping on page 841

Inputting pick-up bars with the popover

You can input pick-up bars as part of time signatures using the time signatures popover, both during note input and by adding them to existing music. You can also input time signatures with pick-up bars only on specific staves.

NOTE

Dorico Elements does not automatically add beats to fill bars according to the new time signature at the end of the affected region unless Insert mode is activated.

PROCEDURE

- **1.** In Write mode, do one of the following:
 - Start note input.

- Select an item at the rhythmic position where you want to input a pick-up bar. If you
 want to input a pick-up bar on specific staves, select items that only belong to those
 staves.
- **2.** Optional: During note input, if you want to input notes and notations onto multiple staves, extend the caret to those staves.
- **3.** Optional: If you want Dorico Elements to add beats at the end of the region affected by the pick-up bar if required, activate Insert mode in any of the following ways:
 - Press I.
 - In the Notes toolbox, click Insert IJ.
- **4.** Open the time signatures popover in any of the following ways:
 - Press Shift-M.
 - In the Notations toolbox, click **Popovers** , then **Time Signatures (Meter) 2**.
- **5.** Enter the time signature and the number of pick-up beats you want into the popover. For example, enter:
 - 3/4,0.75 for a 3/4 time signature with a dotted eighth note (dotted quaver) upbeat.
 - 4/4,1 for a 4/4 time signature with one quarter note (crotchet) upbeat.
 - 6/8,2 for a 6/8 time signature with a pick-up of two eighth notes (quavers).

The number after the comma indicates multiples of the rhythmic unit specified by the denominator of the time signature.

- **6.** Input the pick-up bar and close the popover in one of the following ways:
 - To input a pick-up bar on all staves, press **Return**.
 - To input a pick-up bar only on the selected staves or staves across which the caret extends, press **Alt/Opt-Return**.

RESULT

During note input, pick-up bars are added at the caret position as part of the specified time signature, even if this is in the middle of an existing bar.

When adding pick-up bars to existing music, they are added at the rhythmic position of the earliest selected item as part of the specified time signature. If you selected an existing time signature, the new time signature with pick-up bar directly replaces the existing one.

All subsequent bars follow the input time signature, until the next existing time signature or the end of the flow, whichever comes first. Dorico Elements automatically inputs and moves barlines as required so that subsequent music is barred correctly. However, in open meters, you must input barlines and add beats manually.

Any time signatures you input after an interchangeable time signature that are specified in it are hidden automatically until you end the interchangeable time signature.

NOTE

- Dorico Elements does not automatically insert beats at the start of existing music to which you add time signatures with pick-up bars. If you add a pick-up bar at the start of a flow, that flow now begins in the pick-up bar, not in the first full bar. You can insert beats at the start to push existing music to later rhythmic positions.
- You can use the **Global Adjustment of Current Bar** Insert mode scope to create and delete pick-up bars by deleting notes/rests in the first bar in the flow. You can also use it to shorten the last bar in flows that start with a pick-up bar.

RELATED LINKS

Time signatures popover on page 277
Extending the caret to multiple staves on page 218
Pick-up bars on page 1364
Ending interchangeable time signatures on page 1375
Input methods for bars, beats, and barlines on page 294
Insert mode on page 439
Insert mode scopes on page 440

Inputting pick-up bars with the panel

You can input pick-up bars as part of time signatures using the Time Signatures (Meter) panel, both during note input and by adding them to existing music. You can also input time signatures only on specific staves.

NOTE

- These steps describe inputting with the default mouse input preference Create item at selection.
- Dorico Elements does not automatically add beats to fill bars according to the new time signature at the end of the affected region unless Insert mode is activated.

PROCEDURE

- 1. In Write mode, do one of the following:
 - Start note input.
 - Select an item at the rhythmic position where you want to input a pick-up bar. If you
 want to input a pick-up bar on specific staves, select items that only belong to those
 staves.
- **2.** Optional: If you want Dorico Elements to add beats at the end of the region affected by the pick-up bar if required, activate Insert mode in any of the following ways:
 - Press I.
 - In the Notes toolbox, click **Insert** **I.
- 3. In the Notations toolbox, click **Panels** then **Time Signatures (Meter)** to show the Time Signatures (Meter) panel. to show the Time Signatures (Meter) panel.
- **4.** In the **Create Time Signature** section, select the type of time signature you want from the menu.
- **5.** Enter the time signatures you want into the available spaces.
- **6.** Activate **Pick-up bar of** and select one of the following options:
 - 1/2 beat
 - 1 beat
 - 2 beats
 - 3 beats

NOTE

Not all pick-up bar lengths are possible when using the panel. For example, you cannot produce a single eighth note upbeat in 6/8 with the available options. In such cases, you must use the time signatures popover.

7. Input the pick-up bar in one of the following ways:

- To input a pick-up bar on all staves, click the input time signature button in the Create
 Time Signature section.
- To input a pick-up bar only on the selected staves or staff on which the caret is active,
 Alt/Opt -click the input time signature button in the Create Time Signature section.

RESULT

During note input, pick-up bars are added at the caret position as part of the specified time signature, even if this is in the middle of an existing bar.

When adding pick-up bars to existing music, they are added at the rhythmic position of the earliest selected item as part of the specified time signature. If you selected an existing time signature, the new time signature with pick-up bar directly replaces the existing one.

All subsequent bars follow the input time signature, until the next existing time signature or the end of the flow, whichever comes first. Dorico Elements automatically inputs and moves barlines as required so that subsequent music is barred correctly. However, in open meters, you must input barlines and add beats manually.

Any time signatures you input after an interchangeable time signature that are specified in it are hidden automatically until you end the interchangeable time signature.

NOTE

- Dorico Elements does not automatically insert beats at the start of existing music to which you add time signatures with pick-up bars. If you add a pick-up bar at the start of a flow, that flow now begins in the pick-up bar, not in the first full bar. You can insert beats at the start to push existing music to later rhythmic positions.
- You can use the **Global Adjustment of Current Bar** Insert mode scope to create and delete pick-up bars by deleting notes/rests in the first bar in the flow. You can also use it to shorten the last bar in flows that start with a pick-up bar.

RELATED LINKS

Notations toolbox on page 197
Time Signatures (Meter) panel on page 280
Pick-up bars on page 1364
Changing your mouse input settings on page 207
Input methods for bars, beats, and barlines on page 294
Insert mode on page 439
Insert mode scopes on page 440
Ending interchangeable time signatures on page 1375

Input methods for tempo marks

You can input tempo marks with the keyboard by using the tempo popover, with the mouse by using the Tempo panel, and in the Tempo editor. You can input a tempo mark containing just a text instruction, just a metronome mark, or a combination of the two.

You can also input tempo equations using the tempo popover and Tempo panel.

RELATED LINKS
Tempo marks on page 1313
Tempo editor on page 689

Inputting tempo marks with the popover

You can input tempo marks using the tempo popover, both during note input and by adding them to existing music.

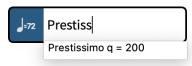
PROCEDURE

- 1. In Write mode, do one of the following:
 - Start note input.
 - Select an item at the rhythmic position where you want to input a tempo mark. If you want to input a gradual tempo change across a duration, select items that span the required duration.
- 2. Open the tempo popover in any of the following ways:
 - Press Shift-T.
 - In the Notations toolbox, click **Popovers** , then **Tempo** ...
- 3. Enter the tempo you want into the popover.

For example, enter q=72 or Allegretto.

When you start entering a tempo into the tempo popover, a menu appears that shows suggested tempos containing the letters/words you enter. You can select one of these suggestions, or you can enter your own tempo into the popover.

To input a hidden tempo mark, enclose its entry in parentheses, such as (q=96).



NOTE

If you want to show gradual tempo changes separated into syllables spread across their duration, such as *rit-ar-dan-do*, we recommend selecting a suggested entry from the menu. Only gradual tempo changes with valid full text appear separated into syllables automatically.

You can change the text of existing gradual tempo changes, including adding hyphens manually to control how they are separated into syllables.

4. Press Return to close the popover.

RESULT

During note input, tempo marks are input at the caret position. Gradual tempo changes, such as *rallentando*, are also input at the caret position with a default duration of a quarter note. Gradual tempo changes do not extend as you input notes.

When adding tempo marks to existing music, they are added at the rhythmic position of the earliest selected item. Gradual tempo changes span the duration of the selected items.

NOTE

Metronome mark values appear as integers without decimal places, even if you input decimal places. However, the exact metronome mark value you input is always reflected in playback.

AFTER COMPLETING THIS TASK

You can lengthen/shorten gradual tempo changes.

RELATED LINKS

Tempo marks on page 1313
Tempo editor on page 689
Lengthening/Shortening items on page 419
Hiding/Showing tempo marks on page 1318
Changing the order of metronome marks on page 1322

Tempo popover

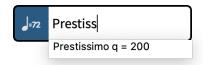
The following tables contain examples of what you can enter into the tempo popover to input tempo marks, tempo equations, and rhythmic feels for swing playback.

When you start entering a tempo into the tempo popover, a menu appears with suggestions containing the letters/words you enter. You can select one of these suggestions to input, or enter your own tempo into the popover.

You can open the tempo popover in Write mode in any of the following ways when either an item is selected or the caret is active:

- Press Shift-T.
- Select an existing tempo mark and press **Return**.
- Choose Write > Create Tempo.

The icon on the left-hand side of the popover matches the corresponding button in the Notations toolbox on the right of the window.





Tempo button in the Notations toolbox

Tempo popover with an example entry

Tempo marks

Example tempo mark	Popover entry
Adagio	Adagio
<i>Presto J</i> = 176	Presto q = 176 or Presto q=176
Largo (J = 52)	Largo (q = 52) or Largo (q=52)
J= 96-112	q = 96-112, q=96-112, 6 = 96-112, or 6=96-112
J. = 84	q. = 84 , q. = 84 , 6. = 84 , or 6. = 84
J = 60	h = 60, h=60, 7 = 60, or 7=60
<i>»</i> = 120	e = 120, e=120, 5 = 120, or 5=120

Example tempo mark	Popover entry
rit.	rit.
ritardando	ritardando
rit. with continuation line (property override)	rit
accel.	accel.
accelerando	accelerando
accel. with continuation line (property override)	accel
più	più
meno	meno
Rubato	Rubato
Faster, with energy	Faster, with energy

This list is not comprehensive as you can enter tempos freely and there are many possible metronome marks and tempo marks. It is intended to illustrate how you can structure your entry to input different types of tempo marks and metronome marks.

NOTE

- The tempo popover is case-sensitive. If you want your tempo mark to start with a capital letter, you must enter a capital letter into the popover.
- To input hidden tempo marks, enclose your popover entry in parentheses, such as (q=96).

Metronome mark beat units

Metronome mark beat unit	Popover entry
64th note	z or 2
32nd note	y or 3
16th note	x or 4
Eighth note	e or 5
Quarter note	q or 6
Half note	h or 7
Whole note	w or 8

Metronome mark beat unit	Popover entry
Double whole note	2w or 9
Rhythm dot	. (period)

Tempo equations

Example tempo equation	Popover entry
$\mathcal{J} = \mathcal{J}$.	e = e . or e = e .
Y = Y	q = e or q=e
Ţ = Ŋ	q. = h or q.=h

This list is not comprehensive as there are many possible tempo equations, using all available beat units. It is intended to illustrate how you can structure your entry to input different tempo equations.

NOTE

Tempo equations do not yet include tuplet durations. This is planned for future versions.

Rhythmic feels for swing playback

Rhythmic feel	Popover entry
Light 16th note swing rhythmic feel	light swing 16ths
Light eighth note swing rhythmic feel	light swing 8ths
Medium 16th note swing rhythmic feel	medium swing 16ths
Medium eighth note swing rhythmic feel	medium swing 8ths
Heavy 16th note swing rhythmic feel	heavy swing 16ths
Heavy eighth note swing rhythmic feel	heavy swing 8ths
Straight rhythmic feel	straight (no swing)
Triplet 16th fixed rhythmic feel	2:1 swing 16ths (fixed)
Triplet 8th fixed rhythmic feel	2:1 swing 8ths (fixed)
Dotted 16th-32nd fixed rhythmic feel	3:1 swing 16ths (fixed)

Rhythmic feel	Popover entry
---------------	---------------

Dotted 8th-16th fixed rhythmic feel 3:1 swing 8ths (fixed)

RELATED LINKS

Notations toolbox on page 197
Tempo marks on page 1313
Gradual tempo changes on page 1323
Metronome marks on page 1319
Tempo equations on page 1327

Changing the style of gradual tempo changes on page 1324

Swing playback on page 537

Inputting tempo marks with the panel

You can input tempo marks using the Tempo panel, both during note input and by adding them to existing music.

NOTE

- These steps describe inputting with the default mouse input preference Create item at selection.
- You cannot specify decimal places for metronome marks using the panel. You can specify
 decimal places using the popover or by changing the metronome mark value of existing
 tempo marks.

PROCEDURE

- **1.** In Write mode, do one of the following:
 - Start note input.
 - Select an item at the rhythmic position where you want to input a tempo mark. If you want to input a gradual tempo change across a duration, select items that span the required duration.
- 2. In the Notations toolbox, click **Panels** , then **Tempo** to show the Tempo panel.
- 3. In the Tempo panel, click the tempo mark you want.

TIP

If you want Dorico Elements to calculate the metronome mark for you, you can click **Tap** in the **Tap Tempo** section multiple times at the required speed.

4. Optional: Select a modifier from the available options.

NOTE

You can only add modifiers to a **Gradual Tempo Change** or a **Relative Tempo Change**.

RESULT

During note input, tempo marks are input at the caret position. Gradual tempo changes, such as *rallentando*, are also input at the caret position with a default duration of a quarter note. Gradual tempo changes do not extend as you input notes.

When adding tempo marks to existing music, they are added at the rhythmic position of the earliest selected item. Gradual tempo changes span the duration of the selected items.

AFTER COMPLETING THIS TASK

You can lengthen/shorten gradual tempo changes.

RELATED LINKS

Notations toolbox on page 197

Changing your mouse input settings on page 207

Tempo marks on page 1313

Changing the style of gradual tempo changes on page 1324

Changing the order of metronome marks on page 1322

Tempo panel

The Tempo panel contains the different types of tempo marks available in Dorico Elements, organized into sections. It is located in the right zone in Write mode.

• You can hide/show the Tempo panel by clicking **Panels** 🚱, then **Tempo** 🜆 in the Notations toolbox.

You can also hide/show the right zone by pressing Ctrl/Cmd-9.

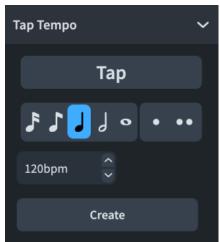
Used in This Flow

Contains any tempo marks already used in the flow, including custom tempo marks added using the tempo popover.

Tap Tempo

Allows you to create an absolute tempo change based on the speed with which you click the **Tap** button. It appears as a metronome mark with no text by default. The metronome mark value is always rounded to the nearest integer.

You can use the available options to set the beat unit on which you want to base the tempo.



Absolute Tempo Change

Contains a range of tempos with both an Italian tempo indication and a metronome mark. You can later choose to show or hide the metronome mark for individual tempo marks.

You can change the range shown in the list by adjusting the slider at the top.



Gradual Tempo Change

Contains tempo marks that indicate a change in tempo over a defined period of time, such as *rallentando* or *accelerando*.

You can add modifiers to gradual tempo changes. Available modifiers are shown at the top of the section.

Relative Tempo Change

Contains tempo marks that indicate a change in tempo that is relative to the previous tempo, such as *mosso* (movement, or with movement). They often include modifiers that qualify the change, such as *poco meno mosso* (a little less movement), and are not defined by a metronome mark.

You can add modifiers to relative tempo changes. Available modifiers are shown at the top of the section.

You can later set a relative metronome mark change as a percentage of the previous metronome mark for individual tempo marks.

Reset Tempo

Contains tempo marks that indicate a return to the previous tempo, such as *A tempo*, or a previously defined tempo, such as *Tempo primo*.

Tempo Equation

Allows you to input a tempo equation, using beat units from 16th notes to whole notes and up to two rhythm dots.



RELATED LINKS

Notations toolbox on page 197

Tempo marks on page 1313

Gradual tempo changes on page 1323

Metronome marks on page 1319

Tempo equations on page 1327

Input methods for bars, beats, and barlines

You can input both bars and barlines with the keyboard by using the bars and barlines popover, and also with the mouse by using the available options in the Bars and Barlines panel. The bars and barlines popover also allows you to input beats. Additionally, you can input bars and beats using the system track.

Normally you do not need to create bars in Dorico Elements, as they are created automatically as needed when you input music. However, you can add bars in advance if, for example, you are copying or arranging an existing piece of music.

Bars and barlines popover

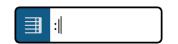
The following tables contain examples of what you can enter into the bars and barlines popover to add and delete bars and beats, and the entries you can use to input the different barlines available.

You can open the bars and barlines popover in Write mode in any of the following ways when either an item is selected or the caret is active:

- Press Shift-B.
- In the Notations toolbox, click **Popovers** , then **Bars and Barlines** .
- Choose Write > Create Bar or Barline.

The icon on the left-hand side of the popover matches the corresponding button in the Notations toolbox on the right of the window.







example entry for inputting bars

Bars and barlines popover with an Bars and barlines popover with an example entry for a barline

Bars and Barlines button in the Notations toolbox

Bars

Example action	Popover entry
Add two bars	2 or +2
Add fourteen bars	14 or +14
Delete one bar	-1
Delete six bars	-6
Add a bar rest	rest
Delete empty bars at the end of the flow	trim

This list is not comprehensive, as you can add and delete any number of bars using the popover. This table is intended to illustrate how you can structure your entry to input and delete bars, and input bar rests.

Beats

You can specify a number of beats that you want to add/delete by entering the number of beats you want followed by either the number that corresponds to the beat unit, such as 5 for eighth notes, or the letter that corresponds to the beat unit, such as **h** for half notes. When using numbers for both the number of beats and the beat unit, you must separate them with a space or hyphen. You can also specify beats in the form of a time signature, such as 3/4 for three quarter note beats.

Example action	Popover entry
Add one whole note beat	1w, 1-8, 1 8, or 4/4
Add two quarter note beats	2q, 2-6, 2 6, or 2/4
Add four eighth note beats	4e , 4-5 , 4 5 , 4/8 , or 2/4
Delete two quarter note beats	-2 q, -2-6 , -2 6 , or -2/4
Delete empty beats at the end of the flow	trim

This list is not comprehensive, as you can add and delete any number of beats using the popover. This table is intended to illustrate how you can structure your entry to input and delete beats.

Beat unit	Popover entry
64th note	z or 2
32nd note	y or 3
16th note	x or 4
Eighth note	e or 5
Quarter note	q or 6
Half note	h or 7
Whole note	w or 8
Double whole note	2w or 9
Rhythm dot	. (period)

Barlines

Type of barline	Popover entry
Normal (Single)	, single, or normal
Double	or double
Final] or final
Start repeat	: or start
End repeat	: or end
End/Start repeat	: :,: :, end-start, or endstart

RELATED LINKS
Notations toolbox on page 197
Bars on page 793
Barlines on page 798
Deleting bars/beats on page 793
Repeats in playback on page 534

Bars and Barlines panel

The Bars and Barlines panel allows you to input bars, bar rests, and different types of barlines. It is located in the right zone in Write mode.

• You can hide/show the Bars and Barlines panel by clicking **Panels** (a), then **Bars and Barlines** in the Notations toolbox.

You can also hide/show the right zone by pressing Ctrl/Cmd-9.

The Bars and Barlines panel contains the following sections:

Insert Bars

Allows you to determine how many bars you want to insert and where to insert them, such as at the end of the flow.

Insert Bar Rest

Allows you to insert a bar rest.

Create Barline

Contains the different barlines you can input.

RELATED LINKS

Notations toolbox on page 197 Repeats in playback on page 534

Inputting bars/beats with the popover

You can input bars/beats using the bars and barlines popover, both during note input and by adding them to or inserting them into existing music. For example, if you want to extend a cadenza in an open meter.

PREREQUISITE

If you want to input bars, you have input a time signature.

PROCEDURE

- **1.** In Write mode, do one of the following:
 - Start note input.
 - Select an item at the rhythmic position where you want to add bars/beats. If you want to add bars/beats to specific staves, select items that only belong to those staves.
- **2.** Optional: During note input, if you want to input notes and notations onto multiple staves, extend the caret to those staves.
- 3. Open the bars and barlines popover in any of the following ways:
 - Press Shift-B.
 - In the Notations toolbox, click **Popovers** , then **Bars and Barlines** .
- **4.** Enter the number of bars/beats you want to input.

For example, enter 2 to input two bars or 2q to input two quarter note beats.

- **5.** Input the bars/beats and close the popover in one of the following ways:
 - To input bars/beats for all staves, press Return.
 - To input bars/beats only on the selected staves or staves across which the caret extends, press Alt/Opt-Return.

RESULT

The number of bars or beats specified is input.

During note input, bars/beats are input from the caret position on all staves across which the caret extends. If the caret is in the middle of the bar when inputting bars, sufficient beats are added to ensure that the final bar created has the correct number of beats.

When you add bars/beats to existing music, they are added after selected barlines and before other selected items, including time signatures.

TIP

- Another way to add bars is by choosing a note duration, such as a whole note when in a 4/4 time signature, and pressing **Space** repeatedly during note input.
- You can assign a key command for Add Bar at End of Flow on the Key Commands page in Preferences.

RELATED LINKS

Bars and barlines popover on page 294

Bars on page 793

Extending the caret to multiple staves on page 218

Inputting time signatures with the popover on page 281

Key Commands page in the Preferences dialog on page 58

Inputting bars with the panel

You can input bars using the Bars and Barlines panel, both during note input and by inserting them into existing music.

PREREQUISITE

You have input a time signature.

PROCEDURE

- 1. In Write mode, do one of the following:
 - Start note input.
 - Select an existing barline after which you want to input bars.
 - Select an existing item before which you want to input bars.
- 2. In the Notations toolbox, click **Panels** , then **Bars and Barlines** to show the Bars and Barlines panel.
- **3.** In the **Insert Bars** section of the Bars and Barlines panel, change the number of bars you want to input by changing the value in the value field.
- **4.** Select one of the following options for where you want to input bars:
 - Start of Flow: Bars are input at the beginning of the flow.
 - Start of Selection: Bars are input from the selected note or rest.
 - End of Flow: Bars are input at the end of the flow.

NOTE

If you want to input bars from the caret position, make sure that you have selected **Start of Selection** from the menu.

5. Click Insert Bars.

RESULT

The number of bars specified is input. During note input, bars are input from the caret position. If you selected **Start of Selection**, bars are input directly after a selected barline, and directly before a selected note, bar, or time signature.

RELATED LINKS

Notations toolbox on page 197

Bars on page 793

Inputting time signatures with the panel on page 282

Inputting bars/beats with the system track

You can insert bars/beats into existing music using the system track; for example, if you decide you want to repeat several bars before the next section. You can insert whole bars and just a few beats.

NOTE

You cannot use the system track during note input.

PREREQUISITE

The system track is shown.

PROCEDURE

- 1. In the system track, select the region whose duration you want to insert.

 For example, if you want to insert two bars, select two bars in the system track immediately before where you want the two new bars to be input.
- 2. Click **Add** above the system track.

Add • appears highlighted when you hover your mouse pointer over it.

RESULT

The rhythmic duration selected in the system track is added immediately after the end of the selection. Existing music after the selection is pushed back after the inserted bars/beats.

RELATED LINKS

System track on page 414

Selecting bars with the system track on page 416

Selecting beats with the system track on page 417

Inputting barlines with the popover

You can input barlines using the bars and barlines popover, both during note input and by adding them to existing music. You can also change the type of existing barlines.

PREREQUISITE

If you want to input barlines onto specific staves only, you have input an independent time signature on those staves.

PROCEDURE

- 1. In Write mode, do one of the following:
 - Start note input.
 - Select an item at the rhythmic position where you want to input a barline. If you want to input a barline on specific staves, select items that only belong to those staves.

TIP

If you want to add repeat barlines at the start/end of a region simultaneously, select items that span the required duration.

- **2.** Optional: During note input, if you want to input notes and notations onto multiple staves, extend the caret to those staves.
- **3.** Open the bars and barlines popover in any of the following ways:
 - Press Shift-B.
 - In the Notations toolbox, click **Popovers** , then **Bars and Barlines** .
- **4.** Enter the barline you want into the popover.

For example, enter | | for a double barline, or |: for a start repeat barline.

- 5. Input the barline and close the popover in one of the following ways:
 - To input a barline on all staves, press Return.
 - To input a barline only on the selected staves or staves across which the caret extends, press Alt/Opt-Return.

NOTE

You can only input barlines onto single staves that already have an independent time signature.

RESULT

During note input, barlines are input at the caret position.

When you add barlines to existing music, they are added at the rhythmic position of the earliest selected item. If you selected an existing barline, the new barline directly replaces the existing one. However, inputting repeat barlines at the positions of existing repeat barlines produces combined end/start repeat barline as applicable.

When you add start repeat barlines with a range of items selected, end repeat barlines are also added at the end of the selection.

Surrounding music automatically adjusts to accommodate the barline. For example, note grouping, rests, and tied notes all adjust if necessary. Inputting final barlines at the end of the last bar of flows can automatically trim the flow if there is no further music and depending on the time signature.

NOTE

Normal barlines that you have input directly, such as to replace an existing double barline, are still considered explicit barlines and break multi-bar rests. Deleting barlines resets them completely.

Explicit single barlines appear with time signature signposts.

RELATED LINKS

Bars and barlines popover on page 294
Barlines on page 798
Signposts on page 438
Extending the caret to multiple staves on page 218
Inputting notes on page 219
Inputting time signatures with the popover on page 281

Deleting notes/items on page 443
Deleting bars/beats on page 793
Repeats in playback on page 534
Changing the number of playthroughs at repeat barlines on page 536

Inputting barlines with the panel

You can input barlines using the Bars and Barlines panel, both during note input and by adding them to existing music. You can also change the type of existing barlines.

NOTE

These steps describe inputting with the default mouse input preference **Create item at selection**.

PREREQUISITE

If you want to input barlines onto specific staves only, you have input an independent time signature on those staves.

PROCEDURE

- **1.** In Write mode, do one of the following:
 - Start note input.
 - Select an item at the rhythmic position where you want to input a barline. If you want to input a barline on specific staves, select items that only belong to those staves.

TIP

If you want to add repeat barlines at the start/end of a region simultaneously, select items that span the required duration.

- 2. In the Notations toolbox, click **Panels** , then **Bars and Barlines** to show the Bars and Barlines panel.
- **3.** Input the barline you want in one of the following ways:
 - To input a barline on all staves, click it in the Create Barline section.
 - To input a barline only on the selected staves or staff on which the caret is active, Alt/
 Opt -click it in the Create Barline section.

NOTE

You can only input barlines onto single staves that already have an independent time signature.

RESULT

During note input, barlines are input at the caret position.

When you add barlines to existing music, they are added at the rhythmic position of the earliest selected item. If you selected an existing barline, the new barline directly replaces the existing one. However, inputting repeat barlines at the positions of existing repeat barlines produces combined end/start repeat barline as applicable.

When you add start repeat barlines with a range of items selected, end repeat barlines are also added at the end of the selection.

Surrounding music automatically adjusts to accommodate the barline. For example, note grouping, rests, and tied notes all adjust if necessary. Inputting final barlines at the end of the last bar of flows can automatically trim the flow if there is no further music and depending on the time signature.

NOTE

Normal barlines that you have input directly, such as to replace an existing double barline, are still considered explicit barlines and break multi-bar rests. Deleting barlines resets them completely.

Explicit single barlines appear with time signature signposts.

RELATED LINKS

Notations toolbox on page 197

Bars and barlines popover on page 294

Barlines on page 798

Signposts on page 438

Inputting notes on page 219

Inputting time signatures with the panel on page 282

Changing your mouse input settings on page 207

Repeats in playback on page 534

Changing the number of playthroughs at repeat barlines on page 536

Input methods for dynamics

You can input dynamics with the keyboard by using the dynamics popover, and with the mouse by using the Dynamics panel. When using the dynamics popover, you can input whole dynamic phrases containing immediate and gradual dynamics simultaneously, such as **p<f>p**.

You can also input dynamic points that affect playback, but do not appear in the music, in the Dynamics editor.

RELATED LINKS

Dynamics on page 903

Niente markings on page 928

Adding modifiers to existing dynamics on page 914

Dynamics editor on page 677

Inputting dynamics with the popover

You can input dynamics and modifiers using the dynamics popover, both during note input and by adding them to existing music, including inputting whole dynamic phrases. You can also input different dynamics into each voice independently in multiple-voice contexts; for example, to give the separate staves of grand staff instruments different dynamics.

TIP

- You can input dynamics in the middle of tie chains by starting note input, then moving the caret to the required rhythmic position.
- You can also change dynamics during note input by following these steps when the caret is at the rhythmic position of the dynamic you want to change.

PROCEDURE

- **1.** In Write mode, do one of the following:
 - Start note input.

NOTE

If you want to input voice-specific dynamics, the caret must be active.

- Select an item on each staff at the rhythmic position where you want to input dynamics.
 If you want to input dynamics across a duration, select items that span the required duration.
- **2.** Optional: During note input, if you want to input notes and notations onto multiple staves, extend the caret to those staves.
- **3.** Open the dynamics popover in any of the following ways:
 - Press Shift-D.
 - In the Notations toolbox, click Popovers = , then Dynamics /.
- **4.** Enter the dynamics you want into the popover.

For example, **p**, **p<f>p**, or **f>**.

- **5.** Input the dynamics and close the popover in one of the following ways:
 - To input the dynamics for all voices/staves belonging to the selected instruments, press
 Return.
 - During note input, input the dynamics only into the voice indicated by the caret indicator by pressing **Alt/Opt-Return**.
- **6.** Optional: During note input, advance the caret and extend open-ended gradual dynamics, such as **p<**, in any of the following ways:
 - Press Space.
 - In the Keyboard, Fretboard, or Drum Pads panel toolbar, click **Advance Caret** ...

Open-ended gradual dynamics also extend automatically as you continue inputting notes.

- 7. Optional: During note input, stop open-ended dynamics in any of the following ways:
 - Press?.
 - Open the dynamics popover and input an immediate dynamic, such as **f**.

RESULT

The specified dynamics are input. Unless you input voice-specific dynamics, dynamics apply to all voices on all staves belonging to a single instrument, including grand staff instruments. Voice-specific dynamics are placed on the default side of the staff for the instrument type, regardless of the voice's stem direction.

Adjoining dynamics, or dynamics that were input together or in sequence, are automatically grouped together, both during note input and when adding dynamics to existing music.

During note input, dynamics are input at the caret position on all staves across which the caret extends. If you included an open-ended gradual dynamic, it extends automatically when you advance the caret or input notes. Voice-specific dynamics are input in the voice indicated by the quarter note symbol beside the caret.

Dynamics added to existing music are input at the rhythmic position of, or span the duration of, either only notes or any items on each selected staff, according to your item input position setting.

Gradual dynamics added to existing music end at either the start or end of the last selected note, according to your gradual dynamic input position setting.

NOTE

- If you entered a dynamic phrase into the popover during note input, such as **p<f>p**, each gradual dynamic lasts a quarter note (crotchet). You can lengthen/shorten gradual dynamics and groups of dynamics later.
- Some modifiers, such as molto, appear before immediate dynamics rather than after them, even if you do not enter them in that order. This follows the generally accepted practice for the placement of that text.
 - You can add modifiers before and after existing dynamics. You can also hide immediate dynamics later if you only want to show the modifier.
- Pairs of separate hairpins are treated differently than messa di voce hairpins. For example, separate hairpins each have start and end handles in Write mode, whereas messa di voce hairpins share a single center handle.
- You can input hairpins and *messa di voce* hairpins directly, without using the popover.
 - For a crescendo hairpin, press <.
 - For a diminuendo hairpin, press >.
 - For a crescendo/diminuendo messa di voce hairpin, press Shift-Alt/Opt-,.
 - For a diminuendo/crescendo messa di voce hairpin, press Shift-Alt/Opt-.

AFTER COMPLETING THIS TASK

You can move dynamics within dynamic phrases and change the placement of dynamics relative to the staff.

RELATED LINKS

Dynamics on page 903

Notations toolbox on page 197

Changing the item input position setting on page 209

Extending the caret to multiple staves on page 218

Voice-specific dynamics on page 913

Adding modifiers to existing dynamics on page 914

Showing consecutive hairpins as continuous on page 921

Hiding/Showing immediate dynamics on page 909

Changing the staff-relative placement of items on page 423

Lengthening/Shortening items on page 419

Dynamics popover

The dynamics popover allows you to input all types of dynamics, including whole dynamic phrases containing immediate and gradual dynamics simultaneously, such as **p<f>p**.

You can open the dynamics popover in Write mode in any of the following ways when either an item is selected or the caret is active:

- Press Shift-D.
- In the Notations toolbox, click **Popovers** , then **Dynamics** f.
- Select an existing dynamic and press Return.
- Choose Write > Create Dynamic.

The icon on the left-hand side of the popover matches the corresponding button in the Notations toolbox on the right of the window.





Dynamics popover with an example entry

Dynamics button in the Notations toolbox

Dynamics popover entries

Dynamic or modifier	Popover entry
pianissimo: pp	рр
piano: $oldsymbol{p}$	p
mezzo piano: mp	тр
mezzo forte: mf	mf
forte: f	f
fortissimo: ff	ff
fortepiano without separator: fp	fp
fortepiano with separator, such as $ extbf{ extit{f-p}}$	f-p , f:p , or f/p
subito	subito, sub, or sub.
possibile	possibile, poss, or poss.
росо	росо
molto	molto
più	piu or più
meno	meno
mosso	mosso
crescendo (appears as ← by default)	<
cresc. text only (property override)	cresc
<i>cresc.</i> text with continuation line (property override)	cresc

Dynamic or modifier	Popover entry
diminuendo (appears as → by default)	>
dim. text only (property override)	dim
dim. text with continuation line (property override)	dim
messa di voce hairpin: <>> (crescendo then diminuendo)	<>
messa di voce hairpin: > (diminuendo then crescendo)	><
A pair of grouped hairpins that looks like a messa di voce hairpin	<>or><
NOTE	
You must separate hairpins with a space.	
niente hairpins that start/end with a small circle	o < or > o
niente hairpins that start/end with the letter "n"	n< or > n
sforzando: s f z	sfz
rinforzando: rf z	rfz

This list is not comprehensive as you can enter anything as a dynamic modifier. It is intended to illustrate how you can structure your entry to input different types of dynamics.

NOTE

- Pairs of separate hairpins are treated differently than messa di voce hairpins. For example, separate hairpins each have start and end handles in Write mode, whereas messa di voce hairpins share a single center handle.
- You can input hairpins and *messa di voce* hairpins directly, without using the popover.
 - For a crescendo hairpin, press <.
 - For a diminuendo hairpin, press >.
 - For a crescendo/diminuendo messa di voce hairpin, press Shift-Alt/Opt-,.
 - For a diminuendo/crescendo messa di voce hairpin, press Shift-Alt/Opt-..
- You can also change the appearance of individual gradual dynamics after they have been input.

Inputting modifiers into the dynamics popover

You can enter modifiers into the dynamics popover, such as *poco*, *molto*, *subito*, *espressivo*, or *dolce*. Modifiers appear in the correct italic font beside the dynamic. However, you must also

enter an accompanying immediate dynamic, such as **p** or **f**, and separate the two with a space; for example, **f molto** or **p espressivo**.

You can hide immediate dynamics if you only want to show the modifier.

RELATED LINKS

Notations toolbox on page 197

Dynamics on page 903

Dynamic modifiers on page 914

Gradual dynamics on page 918

Messa di voce hairpins on page 925

Niente markings on page 928

Groups of dynamics on page 930

Hiding/Showing immediate dynamics on page 909

Changing the appearance of gradual dynamics on page 920

Hiding/Showing combined dynamic separators on page 909

Changing the appearance of sforzando/rinforzando dynamics on page 911

Changing the appearance/position of subito modifiers on page 916

Inputting dynamics with the panel

You can input dynamics and modifiers using the Dynamics panel, both during note input and by adding them to existing music. You can also input different dynamics into each voice independently in multiple-voice contexts; for example, to give the separate staves of grand staff instruments different dynamics.

NOTE

- You can input dynamics in the middle of tie chains by starting note input, then moving the caret to the required rhythmic position.
- You can also change dynamics during note input by following these steps when the caret is at the rhythmic position of the dynamic you want to change.
- These steps describe inputting with the default mouse input preference Create item at selection.

PROCEDURE

- **1.** In Write mode, do one of the following:
 - Start note input.

NOTE

If you want to input voice-specific dynamics, the caret must be active.

- Select an item on each staff at the rhythmic position where you want to input dynamics.
 If you want to input dynamics across a duration, select items that span the required duration.
- 2. In the Notations toolbox, click **Panels** 🚱, then **Dynamics** 🖍 to show the Dynamics panel.
- **3.** Input the dynamics you want in one of the following ways:
 - To input dynamics for all voices/staves belonging to the selected instruments, click them in the Dynamics panel.
 - During note input, input the dynamics only into the voice indicated by the caret indicator by Alt/Opt-clicking them in the Dynamics panel.

NOTE

- If you want to add expressive or qualifying text to the dynamics, do not deselect them.
- When inputting voice-specific dynamics, you can release **Alt/Opt** once you have input the dynamic level, such as **f**.
- Gradual dynamics have a default duration of a quarter note. You can lengthen/shorten gradual dynamics later.
- **4.** Optional: In the Dynamics panel, click the expressive/qualifying texts you want in the **Immediate Dynamics** and **Gradual Dynamics** sections.

RESULT

The specified dynamics are input. Unless you input voice-specific dynamics, dynamics apply to all voices on all staves belonging to a single instrument, including grand staff instruments. Voice-specific dynamics are placed on the default side of the staff for the instrument type, regardless of the voice's stem direction.

Adjoining dynamics, or dynamics that were input together or in sequence, are automatically grouped together, both during note input and when adding dynamics to existing music.

During note input, dynamics are input at the caret position. Gradual dynamics are input with a default duration of a quarter note. Voice-specific dynamics are input in the voice indicated by the quarter note symbol beside the caret.

Dynamics added to existing music are input at the rhythmic position of, or span the duration of, either only notes or any items on each selected staff, according to your item input position setting.

Gradual dynamics added to existing music end at either the start or end of the last selected note, according to your gradual dynamic input position setting.

NOTE

- Some modifiers, such as molto, appear before immediate dynamics rather than after them, even if you do not enter them in that order. This follows the generally accepted practice for the placement of that text.
 - You can add modifiers before and after existing dynamics. You can also hide immediate dynamics later if you only want to show the modifier.
- Pairs of separate hairpins are treated differently than messa di voce hairpins. For example, separate hairpins each have start and end handles in Write mode, whereas messa di voce hairpins share a single center handle.
- You can also input gradual dynamics by clicking the gradual dynamic you want in the Dynamics panel when nothing is selected in the music area. Then click and drag to input the gradual dynamic and extend it to the length you want.

AFTER COMPLETING THIS TASK

You can move dynamics within dynamic phrases and change the placement of dynamics relative to the staff.

RELATED LINKS

Notations toolbox on page 197 Dynamics on page 903 Changing your mouse input settings on page 207 Hiding/Showing immediate dynamics on page 909

Dynamics panel

The Dynamics panel contains the different dynamics available in Dorico Elements, including gradual dynamics and dynamic modifiers, such as *poco* and *possibile*. It is located in the right zone in Write mode.

• You can hide/show the Dynamics panel by clicking **Panels** 🚱, then **Dynamics** 🖊 in the Notations toolbox.

You can also hide/show the right zone by pressing **Ctrl/Cmd-9**.

The Dynamics panel contains the following sections:

Immediate Dynamics

Contains dynamics such as pp and f, and modifiers, such as subito and possibile. Available modifiers are shown at the top of the section in boxes.

You can only input modifiers alongside a dynamic.

Gradual Dynamics

Contains dynamics such as \sim and \rightarrow , and modifiers, such as *poco* and *niente*. Available modifiers are shown at the top of the section in boxes.

You can only input modifiers alongside a dynamic.

NOTE

Pairs of separate hairpins are treated differently than *messa di voce* hairpins. For example, separate hairpins each have start and end handles in Write mode, whereas *messa di voce* hairpins share a single center handle.

Force/Intensity of Attack

Contains dynamics such as sfz and fz.

Combined Dynamics

Allows you to create custom combinations of dynamics, such as *ffff pp*. The controls allow you to increase and decrease the dynamic on each side, and to swap their order.



RELATED LINKS

Notations toolbox on page 197 Dynamics on page 903

Dynamic modifiers on page 914

Gradual dynamics on page 918

Messa di voce hairpins on page 925

Niente markings on page 928

Hiding/Showing combined dynamic separators on page 909

Changing the gradual dynamic input position setting

By default, Dorico Elements inputs gradual dynamics spanning the full duration of selected notes/items. You can change this setting if you prefer gradual dynamics to end at the start of the last selected note.

PROCEDURE

- 1. Press Ctrl/Cmd-, to open Preferences.
- 2. In the category list, click Note Input and Editing.
- 3. In the Editing section, activate/deactivate End gradual dynamics at start of last note in multiple selections.
- 4. Click Apply, then Close.

RESULT

When **End gradual dynamics at start of last note in multiple selections** is activated, gradual dynamics end at the start of the last selected note. Immediate dynamics at the end of gradual dynamics are attached to the last selected note.

When **End gradual dynamics at start of last note in multiple selections** is deactivated, gradual dynamics end at the end of the last selected note. Immediate dynamics at the end of gradual dynamics are attached to the next note/rest.

EXAMPLE







Notes selected

Dynamic phrase input with setting activated

Dynamic phrase input with setting deactivated

RELATED LINKS

Preferences dialog on page 57 Changing the item input position setting on page 209 Selecting notes/items on page 410

Inputting chord symbols

You can input chord symbols using the chord symbols popover with the computer keyboard and any connected MIDI keyboard, both for all instruments or only for individual instruments. You can also open the chord symbols popover during note input; however, inputting a chord symbol stops note input.

PREREQUISITE

If you want to input chord symbols using a MIDI device, you have connected the MIDI device you want to use.

PROCEDURE

- **1.** In Write mode, select an item on the staff and at the rhythmic position where you want to input a chord symbol.
- 2. Open the chord symbols popover in any of the following ways:

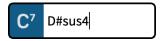
- Press Shift-Q.
- In the Notations toolbox, click **Popovers** , then **Chord Symbols** .

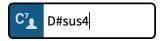
NOTE

If you selected an item on a staff that has local chord symbols at earlier rhythmic positions, the chord symbols popover is automatically set to input local chord symbols when it opens.

- 3. Optional: Change the type of chord symbol you want to enter in one of the following ways:
 - To input local chord symbols, press Alt/Opt-L.
 - To input global chord symbols, press Alt/Opt-G.

The popover icon updates to show the current type.





Chord symbols popover when inputting a global chord symbol

Chord symbols popover when inputting a local chord symbol

- **4.** Enter the chord symbol you want into the chord symbols popover in any of the following ways:
 - Enter the appropriate letters and numbers using the computer keyboard. For example, enter **D#sus4** for a D#sus4 chord symbol or **CM7** | **D** for a Cmaj7/D polychord chord symbol.
 - Play the chord in the Keyboard panel.
 - Play the chord using a MIDI keyboard.

TIP

- To input a polychord chord symbol, play the first chord and keep the keys depressed, then play the second chord.
- To input a chord symbol that consists only of the root note, just play a single note.
- You can indicate root notes in any of the following ways:
 - First play the root with one finger, and then play the remaining notes of the chord while still holding down the root.
 - Play all the notes of the chord together, then release them all, then replay the root note.
- You can indicate altered bass notes in any of the following ways:
 - Play all notes of the chord together with the altered bass note at the bottom.
 - Play the chord and its altered bass note separately: Hold down the keys for the chord, then play the altered bass note while keeping the rest of the keys of the chord depressed.
- **5.** Optional: Press **Space** to advance the popover to the next beat according to the prevailing time signature.

TIP

You can also navigate the popover forwards and backwards by different amounts.

- **6.** Optional: To input an individual local chord symbol when the popover is set to global, and vice versa, press **Alt/Opt-Return** to input the chord symbol.
- **7.** Press **Return** to close the popover.

RESULT

The chord symbol specified is input. If you selected an item belonging to an instrument that was not already set to show chord symbols in the current layout, the corresponding player is automatically updated to show chord symbols for all instruments.

Global chord symbols apply to all instruments in the project and appear on all staves set to show chord symbols. Local chord symbols only apply to the selected instrument. Local chord symbols always appear, even if global chord symbols exist at the same rhythmic positions.

NOTE

- The chord symbol may look different to what you entered into the popover. For example, entering D | C7 may result in two chords placed directly above each other or two chords placed beside each other, depending on your settings in the Chord Symbols Options dialog.
- When you input chord symbols using a MIDI keyboard, the voicing you used is retained for chord symbol playback. You can reset the voicing of chord symbols input using MIDI keyboards.

AFTER COMPLETING THIS TASK

You can hide/show chord symbols above specific staves and hide/show chord diagrams alongside them.

RELATED LINKS

Notations toolbox on page 197

Keyboard panel on page 202

Chord symbols on page 852

Hiding/Showing chord symbols on page 859

Hiding/Showing chord diagrams on page 877

Inputting slash regions on page 406

Enabling/Disabling MIDI input devices on page 265

Enabling chord symbol playback on page 520

Resetting the voicing of chord symbols on page 521

Chord symbol appearance presets on page 853

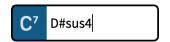
Chord symbols popover

The following tables contain examples of what you can enter into the chord symbols popover to input the different possible chord symbol components. You can enter them in any combination.

You can open the chord symbols popover in Write mode in any of the following ways when either an item is selected or the caret is active:

- Press Shift-Q.
- In the Notations toolbox, click Popovers , then Chord Symbols .
- Select an existing chord symbol and press **Return**.
- Choose Write > Create Chord Symbol.

When inputting global chord symbols, the icon on the left-hand side of the popover matches the corresponding button in the Notations toolbox. When inputting local chord symbols, the icon on the left-hand side of the popover appears smaller and includes the icon for a single player.







Chord symbols popover with an example entry for a global chord symbol

Chord symbols popover with an example entry for a local chord symbol

Chord Symbols button in the Notations toolbox

NOTE

You can combine multiple types of entries to create more complex chord symbols if you enter them one after another into the chord symbols popover without spaces between them. For example, enter **Eblocrian** for the following chord symbol:

EbLoc.

Chord symbol roots

Type of chord symbol root	Popover entry
English note names	C , Db , F# , B , and so on
C, Db, F#, B, and so on	
German note names	C, Des, Fis, H, and so on
C, Db, F‡, H, and so on	
Fixed-do solfège	do, reb, fa, fa#, ti, and so on
C, Db, F, F#, B, and so on	
Nashville numbers representing scale degrees	1 , 2b , 4 #, 7 , and so on
Assuming C major:	
C, Db, F‡, B, and so on	

TIP

When using a MIDI keyboard, you can also indicate root notes in any of the following ways:

- First play the root with one finger, and then play the remaining notes of the chord while still holding down the root.
- Play all the notes of the chord together, then release them all, then replay the root note.

Chord symbol accidentals

Type of accidental	Popover entry
Sharp	#
Flat	b

Type of accidental	Popover entry
Double sharp	x or ##
Triple sharp	x #, #x , or ## #
Double flat	bb
Triple flat	bbb

Chord symbol qualities

Chord symbol quality	Popover entry
Major	maj, M, ma, or nothing after entering the root.
Minor	m, min, or mi
Diminished	dim, di, or o
Augmented	aug, au, ag, or +
Half-diminished	half-dim, halfdim, or hd
6/9	6/9 , 69 , or %

NOTE

 \boldsymbol{M} and \boldsymbol{m} entries for major and minor are case-sensitive.

Chord symbol intervals

Interval	Popover entry
Scale degrees	1 , 2 , 3 , and so on
Major 7th	^ 7 or ^
Major 9th	^9, maj9, or 9maj7

Chord symbol alterations

Type of chord symbol alteration	Popover entry
Alterations	b5 , -5 , #9 , +9 , b10 , and so on

Type of chord symbol alteration	Popover entry
Added notes	add#11, add+11, addb9, add-9, addF#, addBb, and so on
Suspensions	sus4, sus9, and so on
Omissions	omit3, no7, and so on

Chord symbols with altered bass notes

Example altered bass note chord symbols	Popover entry
G7/D	G7/D, G7,D, Gmaj7/D or Gmaj7,D
С(Ь5)/ЕЬ	CMb5/Eb, CMb5,Eb, Cmajb5/Eb, or Cmajb5,Eb
Fm/D#	Fm/D#, Fm,D#, Fmi/D#, or Fmi,D#

TIP

When using a MIDI keyboard, you can also indicate altered bass notes in any of the following ways:

- Play all notes of the chord together with the altered bass note at the bottom.
- Play the chord and its altered bass note separately: Hold down the keys for the chord, then
 play the altered bass note while keeping the rest of the keys of the chord depressed.

Polychord chord symbols

Example polychord chord symbols	Popover entry
G/E	G E, G;E, Gmaj E, or Gmaj;E
Cmaj7/D	CM7 D, CM7;D, Cmaj7 D, or Cmaj7;D
Fm/D#	Fm D#, Fm;D#, Fmi D#, or Fmi;D#

TIP

When using a MIDI keyboard, you can also input polychord symbols by playing the first chord and keeping the keys depressed, then playing the second chord.

No chord symbols

No chord Popover entry

No chord N.C., NC, no chord, or none

Modal chord symbols

Modal chord symbol Popover entry

Ionian ionian

Dorian **dorian**

Phrygian **phrygian**

Lydian **lydian**

Mixolydian **mixolydian**

Aeolian aeolian

Locrian **locrian**

Melodic minor melodicminor

Harmonic minor harmonicminor

Whole tone wholetone

Half-whole diminished or octatonic diminishedhalfwhole,

diminishedsemitonetone, octatonichalfwhole, or octatonicsemitonetone

Whole-half diminished or octatonic diminishedwholehalf,

diminishedtonesemitone, octatonicwholehalf, or octatonictonesemitone

This list is not comprehensive, as there are many possible chord symbols. It is intended to illustrate the different components you can use to input different chord symbols.

NOTE

The appearance of the resulting chord symbols is determined by Dorico Elements's default settings. The structure of your entry in the chord symbols popover is not considered. For example, entering a C major chord as **C**, **Cmaj**, or **CM** results in the same chord symbol.

Parenthesized chord symbols

Example parenthesized chord symbol	Popover entry
(Cmaj7)	(Cmaj7)

Chord symbol regions

Chord symbol region	Popover entry
New chord symbol region	reg

RELATED LINKS

Notations toolbox on page 197

Chord symbols on page 852

Parenthesized chord symbols on page 870

Navigation during chord symbol input

You can move the chord symbols popover manually by different amounts to input chord symbols at other positions without closing and reopening the popover each time.

Navigating with a computer keyboard

Popover navigation	Key command
Advance the popover to the next beat, according to the prevailing time signature.	Space
Move the popover back to the previous beat, according to the prevailing time signature.	Shift-Space
Advance the popover to the start of the next bar.	Tab
Move the popover back to the start of the previous bar.	Shift-Tab
Move the cursor and popover to one of the following positions, whichever is closest:	Right Arrow/Left Arrow
Next/Previous note or rest	
Next/Previous rhythmic grid position	
 Next/Previous character in existing chord symbol's entry 	
Move the popover to the next/previous chord symbol.	Ctrl/Cmd-Right Arrow / Ctrl/Cmd-Left Arrow

Navigating with a MIDI keyboard

When inputting chord symbols using a MIDI keyboard, by default the popover advances automatically to the next beat after you play a chord.

You can define specific keys or buttons on your MIDI keyboard to trigger different navigation behaviors. Use the **MIDI Learn** button on the **Key Commands** page in **Preferences** to assign specific keys to the **Note Input** > **Advance Chord Symbol Input** commands.

RELATED LINKS

Key Commands page in the Preferences dialog on page 58 Assigning MIDI commands on page 62 Assigning key commands on page 62

Inputting chord symbol regions

You can input specific regions in which you want to show chord symbols; for example, if an instrument that does not need chord symbols for most of the project has an improvisation section that requires chord symbols to be shown.

PROCEDURE

- **1.** In Write mode, do one of the following:
 - Start note input.
 - On each staff where you want to input a chord symbol region, select items that span the required duration.
- 2. Open the chord symbols popover in any of the following ways:
 - Press Shift-Q.
 - In the Notations toolbox, click **Popovers** , then **Chord Symbols** .
- 3. Enter reg into the popover.
- **4.** Press **Return** to close the popover.

RESULT

During note input, chord symbol regions are input spanning the duration of the selected note or item, which is usually the last input note.

When adding chord symbol regions to existing music, they span the selected duration on each selected staff.

The players holding the corresponding instruments are automatically set to show chord symbols in chord symbol regions and slash regions, even if they were previously set to hide all chord symbols.

TIP

You can also input chord symbol regions by choosing **Write** > **Create Chord Symbol Region**. You can assign a key command for this option on the **Key Commands** page in **Preferences**.

RELATED LINKS

Chord symbols popover on page 312
Chord symbol regions on page 863
Hiding/Showing chord symbols on page 859
Inputting slash regions on page 406
Key Commands page in the Preferences dialog on page 58

Generating chord symbols from notes

You can automatically generate chord symbols based on the harmony of notes you have already input. You can specify the musical context you want to consider in the calculation, such as which note durations and inversions to include.

PROCEDURE

1. In Write mode, select the notes from which you want to generate chord symbols.

TIP

You can select notes on multiple staves.

- Choose Edit > Notations > Chord Symbols and Diagrams > Generate Chord Symbols from Selection to open the Generate Chord Symbols From Notes dialog. You can also choose this option from the context menu.
- **3.** Change the settings as required.
 - For example, you can change the minimum note duration you want to include in chord symbols, and disallow the creation of open fifth chord symbols.
- **4.** Click **OK** to save your changes and close the dialog.

RESULT

Chord symbols are generated based on the selected notes and your settings. Chord symbols are input at the rhythmic positions of chords comprising at least two or three notes, depending on your settings.

All instruments included in your selection are set to show chord symbols.

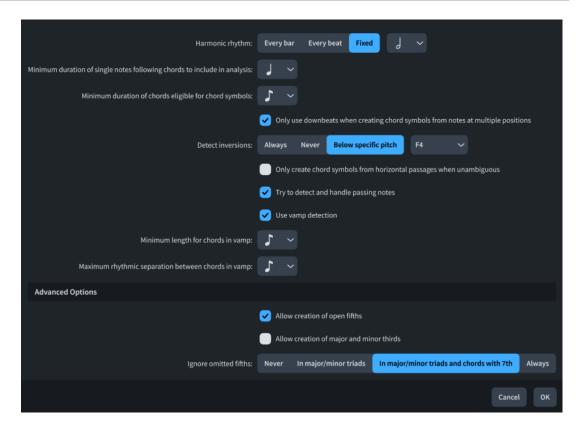
RELATED LINKS

Hiding/Showing chord symbols on page 859
Calculating harp pedal diagrams based on existing music on page 371

Generate Chord Symbols From Selection dialog

The **Generate Chord Symbols From Selection** dialog allows you to generate chord symbols based on the harmony of notes you have already input, and specify the musical context you want to consider in the calculation.

• You can open the **Generate Chord Symbols From Selection** dialog in Write mode when at least one chord is selected in the music area by choosing **Edit** > **Notations** > **Chord Symbols and Diagrams** > **Generate Chord Symbols from Selection**. You can also choose this option from the context menu.



The **Generate Chord Symbols From Selection** dialog contains the following options:

Harmonic rhythm

Allows you to set the minimum rhythmic interval between generated chord symbols.

- **Every bar**: Chord symbols are created at least every bar.
- **Every beat**: Chord symbols are created at least every beat, according to the prevailing time signature.
- **Fixed**: Chord symbols are created at the specified interval.

Minimum duration of single notes following chords to include in analysis

Allows you to set the shortest note value for single notes that you want to include in the chord symbol calculation. This allows you to exclude passing notes shorter than the set duration.

Minimum duration of chords eligible for chord symbols

Allows you to set the shortest note value for chords that you want to include in the chord symbol calculation. This allows you to exclude transitory chords shorter than the set duration.

Only use downbeats when creating chord symbols from notes at multiple positions

When activated, only notes that start on strong beats in each bar are included in the chord symbol calculation.

Detect inversions

Allows you to change how inversions are handled in the chord symbol calculation.

- Always: Inversions are always considered.
- **Never**: Inversions are never considered. This is particularly useful when calculating chord symbols from notes belonging to multiple instruments.
- Below specific pitch: Inversions are only considered for notes below the specified pitch.

Only create chord symbols from horizontal passages when unambiguous

When activated, chord symbols are only created from notes at multiple rhythmic positions if the resulting chord is simple.

Try to detect and handle passing notes

When activated, Dorico Elements detects passing notes where possible and excludes them from the chord symbol calculation.

Use vamp detection

When activated, Dorico Elements detects rhythmic patterns and textures often used when vamping and considers them in the chord symbol calculation.

Minimum length for chords in vamp

Allows you to change the minimum note value for chords in vamp sections.

Maximum rhythmic separation between chords in vamp

Allows you to change the maximum gap between chords in vamp sections.

Allow creation of open fifths

When activated, Dorico Elements creates chord symbols from chords comprising only two notes, a fifth apart.

Allow creation of major and minor thirds

When activated, Dorico Elements creates chord symbols from chords comprising only two notes, a third apart.

Ignore omitted fifths

Allows you to change how chords with omitted fifths are handled.

- **Never**: Omitted fifths are never ignored, meaning chords are considered according to the notes available.
- **In major/minor triads**: Omitted fifths are only ignored in chords comprising only two notes, a third apart.
- In major/minor triads and chords with 7th: Omitted fifths are ignored in chords comprising only two notes, a third apart, and chords with a seventh.
- Always: Omitted fifths are always ignored, meaning chord symbols are created as
 if the fifth were present.

RELATED LINKS

Chord symbols on page 852 Hiding/Showing chord symbols on page 859 Types of time signatures on page 1360

Input methods for clefs and octave lines

You can input clefs and octave lines with the keyboard by using the clefs and octave lines popover, and also with the mouse by using the Clefs panel.

Clefs and octave lines share the same popover and panel as both affect the pitch and register of notes

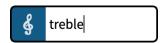
Clefs and octave lines popover

The following tables contain the entries for the clefs and octave lines popover that you can use to input the different clefs and octave lines available.

You can open the clefs and octave lines popover in Write mode in any of the following ways when either an item is selected or the caret is active:

- Press Shift-C.
- In the Notations toolbox, click **Popovers** , then **Clefs** .
- Select an existing clef or octave line and press Return.
- Choose Write > Create Clef.

The icon on the left-hand side of the popover matches the corresponding button in the Notations toolbox on the right of the window.







Clefs and octave lines popover with an example entry for a clef

Clefs and octave lines popover with an example entry for an octave line

Clefs button in the Notations toolbox

Clefs

Type of clef	Popover entry
Treble G clef	g, G, g2, sol, or treble
Bass F clef	f, F, f4, fa, or bass
Tenor C clef	ct, CT, c4, ut4, or tenor
Alto C clef	ca, CA, c3, ut3, or alto
Treble G clef, octave below	g8ba, G8ba, g8d, G8d, treble8ba, or treble8d
Unpitched percussion	perc
4-string tablature	tab4
6-string tablature	tab6

TIP

The rectangular percussion clef is available in the Clefs panel.

Octave shifts for clefs

Function of octave shifts	Popover entry
Shift notes up by one octave	+1
Shift notes up by two octaves	+2
Shift notes down by one octave	-1
Shift notes down by two octaves	-2
Set octave shift for concert pitch	с
Set octave shift for transposed pitch	t

For example, enter **treble+1t** for a treble clef shifted up one octave in transposed pitch layouts, causing notes after the clef in transposed pitch layouts to appear an octave lower than they appear with a normal treble clef.

Octave lines

Function of octave line	Popover entry
Shift notes up by one octave	8va, 8, 8u, or 1u
Shift notes up by two octaves	15ma , 15 , 15u , or 2u
Shift notes up by three octaves	22ma , 22 , 22u , or 3u
Shift notes down by one octave	8ba, 8vb, 8d, or 1d
Shift notes down by two octaves	15ba, 15vb, 15d, or 2d
Shift notes down by three octaves	22ba, 22vb, 22d , or 3d
Loco indication	loco
End of octave line	or stop
For example, enter stop to specify where an octave line ends during note input.	

RELATED LINKS

Notations toolbox on page 197

Clefs on page 889

Octave lines on page 897

Changing the octave of clefs on page 894

Respecting/Ignoring clef octave indicators on page 895

Clefs panel

The Clefs panel contains the different types of clefs and octave lines available in Dorico Elements. It is located in the right zone in Write mode.

 You can hide/show the Clefs panel by clicking Panels &, then Clefs in the Notations toolbox.

You can also hide/show the right zone by pressing Ctrl/Cmd-9.

The Clefs panel contains the following sections:

Common Clefs

Contains the clefs you are most likely to need, including treble clef and bass clef.

Octave Lines

Contains octave lines, indicating up to three octaves above and below, and a *loco* line.

RELATED LINKS

Notations toolbox on page 197 Clefs on page 889 Octave lines on page 897 Universal Indian Drum Notation on page 1414

Inputting clefs with the popover

You can input clefs using the clefs and octave lines popover, both during note input and by adding them to existing music. You can also use the popover to change the type of existing clefs.

NOTE

Many instruments in Dorico Elements have variants that show alternative clefs according to the layout transposition by default. You can select the appropriate instrument variant from the instrument picker when adding or changing instruments.

PROCEDURE

- **1.** In Write mode, do one of the following:
 - Start note input.
 - Select an item on each staff at the rhythmic position where you want to input a clef. If you want to add restorative clefs at later positions, select items that span the required duration.
- **2.** Optional: During note input, if you want to input notes and notations onto multiple staves, extend the caret to those staves.
- 3. Open the clefs and octave lines popover in any of the following ways:
 - Press Shift-C.
 - In the Notations toolbox, click Popovers , then Clefs §.
- **4.** Enter the appropriate entry for the clef you want into the popover.

For example, enter:

- bass for a bass clef.
- alto for an alto clef.
- **treble+1t** for a treble clef shifted up one octave in transposed pitch layouts.

5. Press **Return** to close the popover.

RESULT

During note input, clefs are input at the caret position on all staves across which the caret extends.

Clefs added to existing music are input on each selected staff, at the rhythmic position of the earliest selected either note or item, according to your item input position setting. When you add clefs to a range of selected items, restorative clefs are also added at the end of the selection.

Clefs apply to all notes on the staff until the next clef or the end of the flow, whichever comes first.

RELATED LINKS

Clefs on page 889

Changing the item input position setting on page 209 Extending the caret to multiple staves on page 218

Hiding/Showing clefs on page 892

Respecting/Ignoring clef octave indicators on page 895

Instrument picker on page 110

Inputting clefs with the panel

You can input clefs using the Clefs panel, both during note input and by adding them to existing music.

NOTE

- These steps describe inputting with the default mouse input preference Create item at selection.
- Many instruments in Dorico Elements have variants that show alternative clefs according to the layout transposition by default. You can select the appropriate instrument variant from the instrument picker when adding or changing instruments.

PROCEDURE

- **1.** In Write mode, do one of the following:
 - Start note input.
 - Select an item on each staff at the rhythmic position where you want to input a clef. If you want to add restorative clefs at later positions, select items that span the required duration.
- 2. In the Notations toolbox, click **Panels** 🚯, then **Clefs** 🐇 to show the Clefs panel.
- 3. In the Clefs panel, click the clef you want.

RESULT

During note input, clefs are input at the caret position.

Clefs added to existing music are input on each selected staff, at the rhythmic position of the earliest selected either note or item, according to your item input position setting. When you add clefs to a range of selected items, restorative clefs are also added at the end of the selection.

Clefs apply to all notes on the staff until the next clef or the end of the flow, whichever comes first.

RELATED LINKS

Notations toolbox on page 197

Clefs on page 889

Changing your mouse input settings on page 207

Hiding/Showing clefs on page 892

Instrument picker on page 110

Inputting octave lines with the popover

You can input octave lines using the clefs and octave lines popover, both during note input and by adding them to existing music. You can also input octave lines only into specific voices in multiple-voice contexts.

PROCEDURE

- **1.** In Write mode, do one of the following:
 - Start note input.
 - Select the notes to which you want to add an octave line. If you want to add an octave line for a single voice, only select notes in that voice.
- **2.** Optional: During note input, if you want to input notes and notations onto multiple staves, extend the caret to those staves.
- **3.** Open the clefs and octave lines popover in any of the following ways:
 - Press Shift-C.
 - In the Notations toolbox, click **Popovers** , then **Clefs** .
- **4.** Enter the appropriate entry for the octave line you want into the popover.

For example, enter **8va** for an octave line that shifts notes up one octave.

- **5.** Input the octave line and close the popover in one of the following ways:
 - To input an octave line for all voices on each selected staff, press **Return**.
 - To input an octave line only for the currently selected voice, press **Alt/Opt-Return**.
- **6.** Optional: During note input, advance the caret and extend the octave line in any of the following ways:
 - Press Space.
 - In the Keyboard, Fretboard, or Drum Pads panel toolbar, click Advance Caret ...

The octave line also extends automatically as you continue inputting notes.

7. Optional: During note input, stop any octave line by opening the clefs and octave lines popover again and entering | or **stop**.

RESULT

During note input, octave lines are input from the caret position, on all staves across which the caret extends. When you stop octave lines, they end at the caret position.

Octave lines added to existing music span the duration of either only notes or any items on each selected staff, according to your item input position setting.

Octave lines appear either above or below your selection, depending on whether they indicate that notes are played higher or lower than notated.

The pitches of notes within octave lines are adjusted automatically. For example, notes within octave above lines appear an octave lower than they do without the octave above line.

TIP

You can also lengthen/shorten octave lines after they have been input.

RELATED LINKS

Clefs and octave lines popover on page 322

Notations toolbox on page 197

Changing the item input position setting on page 209

Extending the caret to multiple staves on page 218

Octave lines on page 897

Hiding/Showing octave lines on page 899

Lengthening/Shortening items on page 419

Transposing tools on page 454

Inputting octave lines with the panel

You can input octave lines using the Clefs panel, both during note input and by adding them to existing music. You can also input octave lines only into specific voices in multiple-voice contexts.

NOTE

These steps describe inputting with the default mouse input preference **Create item at selection**.

PROCEDURE

- **1.** In Write mode, do one of the following:
 - Start note input.
 - Select the notes to which you want to add an octave line. If you want to add an octave line for a single voice, only select notes in that voice.
- 2. In the Notations toolbox, click **Panels** , then **Clefs** to show the Clefs panel.
- 3. Input the octave line you want in one of the following ways:
 - To input an octave line for all voices on the selected staves, click it in the **Octave Lines** section.
 - To input an octave line only for the currently selected voice, Alt/Opt -click it in the Octave Lines section.

Alternatively, when adding octave lines to existing music, you can click the octave line you want in the Clefs panel first, and then click and drag it to the length you want.

RESULT

During note input, octave lines are input at the caret position. They are input with a default duration of a quarter note.

Octave lines added to existing music span the duration of either only notes or any items on each selected staff, according to your item input position setting.

Octave lines appear either above or below your selection, depending on whether they indicate that notes are played higher or lower than notated.

The pitches of notes within octave lines are adjusted automatically. For example, notes within octave above lines appear an octave lower than they do without the octave above line.

TIP

You can also lengthen/shorten octave lines after they have been input.

RELATED LINKS

Notations toolbox on page 197 Changing your mouse input settings on page 207 Octave lines on page 897 Lengthening/Shortening items on page 419 Transposing tools on page 454

Input methods for holds and pauses

You can input holds and pauses with the keyboard by using the holds and pauses popover in Write mode, and with the mouse by using the Holds and Pauses panel.

Inputting holds and pauses with the popover

You can input holds and pauses using the holds and pauses popover, both during note input and by adding them to existing music.

PROCEDURE

- 1. In Write mode, do one of the following:
 - Start note input.
 - Select an item at the rhythmic position where you want to input a fermata or caesura.
 - Select an item on each staff at the rhythmic position where you want to input a breath mark.
- **2.** Optional: During note input, if you want to input notes and notations onto multiple staves, extend the caret to those staves.
- **3.** Open the holds and pauses popover in any of the following ways:
 - Press Shift-H.
 - In the Notations toolbox, click **Popovers** , then **Holds and Pauses** .
- **4.** Enter the hold or pause you want into the popover.

For example, enter **fermata** for a pause or **caesura** for a caesura.

5. Press **Return** to close the popover.

RESULT

During note input, the specified hold or pause is input at the caret position. Breath marks are input at the caret position on all staves across which the caret extends.

Breath marks added to existing music are input on each selected staff, at the rhythmic position of the earliest selected either note or item, according to your item input position setting.

Fermatas and caesuras added to existing music are input at the rhythmic position of the earliest selected item.

- Fermatas appear on all staves at the rhythmic position of the note, chord, or rest that corresponds with the end of the fermata.
- Breath marks appear to the right of the caret or selected note.
- Caesuras appear on all staves to the left of the caret or selected note.

RELATED LINKS

Notations toolbox on page 197

Changing the item input position setting on page 209

Extending the caret to multiple staves on page 218

Holds and pauses on page 991

Holds and pauses in playback on page 997

Positions of holds and pauses on page 993

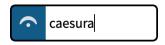
Holds and pauses popover

The table contains the entries for the holds and pauses popover that you can use to input the different holds and pauses available.

You can open the holds and pauses popover in Write mode in any of the following ways when either an item is selected or the caret is active:

- Press Shift-H.
- In the Notations toolbox, click Popovers = , then Holds and Pauses .
- Select an existing hold or pause and press **Return**.
- Choose Write > Create Hold or Pause.

The icon on the left-hand side of the popover matches the corresponding button in the Notations toolbox on the right of the window.





Holds and pauses popover with an example entry

Holds and Pauses button in the Notations toolbox

Fermatas

Type of fermata	Popover entry
Fermata 🏠	fer, fermata, or pause
Very long fermata 📻	verylongfermata or verylongfer
Long fermata 🙃	longfermata or longfer
Short fermata \Lambda	shortfermata or shortfer
Very short fermata 🔈	veryshortfermata or veryshortfer
Short fermata (Henze) 💪	shorthenzefermata or shorthenzefer
Long fermata (Henze) 🍙	longhenzefermata or longhenzefer
Curlew (Britten) ←	curlew

NOTE

The Curlew mark was originally devised by Benjamin Britten for "Curlew River", a parable for church performance inspired by Japanese Noh theater. It indicates that a player should hold a note or a rest until a synchronization point in asynchronous music.

Caesuras

Type of caesura	Popover entry
Caesura <u>#</u>	caes, caesura, or //
Thick caesura <u>#</u>	caesurathick, thickcaesura, or thick//
Curved caesura <u>#</u>	caesuracurved, curvedcaesura, or curved//
Short caesura <u>—</u>	caesurashort, shortcaesura, or short//
Single-stroke caesura <u>—</u>	caesurasingle, singlecaesura, or single//

Breath marks

Type of breath mark	Popover entry
Breath mark (Comma-like) •	breathmarkcomma, comma, or , (comma)
Breath mark (Tick-like) ✓	breathmarktick
Breath mark (Upbow-like) V	breathmarkupbow
Breath mark (Salzedo) 😙	breathmarksalzedo

RELATED LINKS

Notations toolbox on page 197 Holds and pauses on page 991

Inputting holds and pauses with the panel

You can input holds and pauses using the Holds and Pauses panel, both during note input and by adding them to existing music.

NOTE

These steps describe inputting with the default mouse input preference **Create item at selection**.

PROCEDURE

1. In Write mode, do one of the following:

- Start note input.
- Select an item at the rhythmic position where you want to input a fermata or caesura.
- Select an item on each staff at the rhythmic position where you want to input a breath mark.
- 2. In the Notations toolbox, click **Panels** (a), then **Holds and Pauses** (b) to show the Holds and Pauses panel.
- 3. In the Holds and Pauses panel, click the hold or pause you want.

RESULT

During note input, the specified hold or pause is input at the caret position.

Breath marks added to existing music are input on each selected staff, at the rhythmic position of the earliest selected either note or item, according to your item input position setting.

Fermatas and caesuras added to existing music are input at the rhythmic position of the earliest selected item.

- Fermatas appear on all staves at the rhythmic position of the note, chord, or rest that corresponds with the end of the fermata.
- Breath marks appear to the right of the caret or selected note.
- Caesuras appear on all staves to the left of the caret or selected note.

RELATED LINKS

Notations toolbox on page 197

Changing your mouse input settings on page 207

Changing the item input position setting on page 209

Holds and pauses on page 991

Holds and pauses in playback on page 997

Positions of holds and pauses on page 993

Holds and Pauses panel

The Holds and Pauses panel allows you to input all the different types of holds and pauses available in Dorico Elements, including alternative versions of fermatas. It is located in the right zone in Write mode.

• You can hide/show the Holds and Pauses panel by clicking **Panels and Pauses a** in the Notations toolbox.

You can also hide/show the right zone by pressing **Ctrl/Cmd-9**.

The Holds and Pauses panel contains the following sections:

- Fermatas
- Breath Marks
- Caesuras

NOTE

Holds and pauses do not currently have an effect in playback, but this is planned for future versions.

RELATED LINKS

Notations toolbox on page 197

Inputting holds and pauses with the panel on page 330

Holds and pauses on page 991 Types of fermatas on page 992 Types of caesuras on page 993 Types of breath marks on page 993

Correct positioning for caesura input

Caesuras are commonly placed at the end of a bar, before a barline. In Dorico Elements, caesuras must be attached to the note immediately after the position where you want it to appear, as then Dorico Elements can automatically position them correctly.

If you input caesuras with your mouse input preference set to **Load pointer with item**, you must click the first note in the next bar for a caesura to appear to the left of the barline. You can also click directly on the barline.





A correctly input caesura. The dotted attachment lines are attached to the notehead after the barline, meaning the caesura is correctly positioned before the barline.

An incorrectly input caesura. By clicking to the left of the barline, the caesura is attached to the last eighth note in the bar.

When input correctly, the dotted attachment lines link the caesura to the notehead immediately after the barline.

If your dotted attachment lines do not link the caesura to the notehead immediately after the barline, delete the caesura and re-input it. Caesuras can cause spacing issues when input incorrectly.

RELATED LINKS

Holds and pauses on page 991
Positions of holds and pauses on page 993
Types of caesuras on page 993
Hiding/Showing attachment lines on page 426

Input methods for ornaments, arpeggio signs, glissando lines, and jazz articulations

You can input ornaments, including arpeggio signs, glissando lines, and jazz articulations with the keyboard by using the ornaments popover, and with the mouse by using the Ornaments panel.

You can input ornaments and arpeggio signs during note input and by adding them to existing notes, but you cannot input glissando lines during note input. You can only input glissando lines by adding them to existing notes.

You can specify the type/length of jazz articulations when using the Ornaments panel but not when using the ornaments popover.

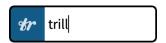
Ornaments popover

The following tables contain the entries for the ornaments popover that you can use to input the different ornaments, arpeggio signs, glissando lines, and jazz articulations available.

You can open the ornaments popover in Write mode in any of the following ways when either an item is selected or the caret is active:

- Press Shift-O.
- In the Notations toolbox, click **Popovers** , then **Ornaments** ...
- Select an existing ornament and press Return.
- Choose Write > Create Ornament.

The icon on the left-hand side of the popover matches the corresponding button in the Notations toolbox on the right of the window.





Ornaments popover with an example entry

Ornaments button in the Notations toolbox

Ornaments

Type of ornament	Popover entry
Trill: €r	tr or trill
Short trill: 🏎	shorttr
Mordent: 🦇	mor or mordent
Turn: ∞	turn
Inverted turn: ∞	invturn or invertedturn

Trill intervals

Trill interval or quality	Popover entry
Interval degree	1, 2, 3, 4, 5, 6, 7, 8
Unison, second, third, fourth, fifth, sixth, seventh, octave	
Major	M, maj, or major
Minor	m, min, or minor
Perfect	p, per, or perf

Trill interval or quality	Popover entry
Diminished	d, dim, or diminished
Augmented	a, aug, or augmented
EXAMPLE	

To input a trill with a perfect fifth interval, enter **tr p5**.

Jazz ornaments

Type of jazz ornament	Popover entry
Bend ∪	brassbend
Flip ►	flip
Jazz turn 🖇	jazz or shake
Smear ∼	smear

Jazz articulations

Type of jazz articulation	Popover entry
Plop (bend)	plop
Plop (smooth)	plopsmooth
Scoop	scoop
Doit (bend)	doit
Doit (smooth)	doitsmooth
Fall (bend)	fall
Fall (smooth)	fallsmooth

TIP

Other ornaments are available in the Ornaments panel. You can specify the type/length of jazz articulations when using the Ornaments panel but not when using the ornaments popover.

Arpeggio signs

Type of arpeggio sign	Popover entry
Up arpeggio sign	arp, arpup, or arpeggioup
Down arpeggio sign	arpdown or arpeggiodown
Non arpeggio sign	nonarp or nonarpeggio
Curved arpeggio sign	slurarp

Glissando lines

Type of glissando line	Popover entry
Default style glissando line	gliss
Straight glissando line	glissstraight
Wavy glissando line	glisswavy

Guitar techniques

Type of guitar technique	Popover entry
Guitar bend	bend
Vibrato bar dive and return	vibbend
Vibrato bar scoop	vibscoop
Vibrato bar dip	vibdip
Vibrato bar line	wbar or w/bar
NOTE	
Must have duration to show its line.	
Hammer-on	ho or hammer
NOTE	
You must select at least two notes assigned to the same string with ascending pitch directions, such as C-D.	

Type of guitar technique **Popover entry** Pull-off po or pull NOTE You must select at least two notes assigned to the same string with descending pitch directions, such as D-C. Hammer-on then pull-off or pull-off then hp, hopo, hammerpull, lig, or ligado hammer-on (ligado) NOTE You must select at least three notes assigned to the same string with alternating pitch directions, such as C-D-C or D-C-D. Right-hand tapping tap Right-hand tapping with pull-off tappull NOTE You must select at least two notes assigned to the same string with descending pitch directions, such as D-C. Left-hand tapping **Ihtap** Left-hand tapping with pull-off Ihtappull NOTE You must select at least two notes assigned to the same string with descending pitch directions, such as D-C.

RELATED LINKS

Notations toolbox on page 197

Inputting guitar bends with the popover on page 345

Inputting vibrato bar dives on page 348

Inputting vibrato bar dives and returns with the popover on page 349

Inputting vibrato bar scoops with the popover on page 351

Inputting vibrato bar dips with the popover on page 353

Inputting hammer-ons/pull-offs on page 355

Inputting tapping on page 357

Ornaments panel

The Ornaments panel allows you to input all the different types of ornaments available, including jazz articulations, as well as arpeggio signs, glissando lines, guitar bends, and vibrato bar techniques. It is located in the right zone in Write mode.

• You can hide/show the Ornaments panel by clicking **Panels** (a), then **Ornaments** (b) in the Notations toolbox.

You can also hide/show the right zone by pressing Ctrl/Cmd-9.

The Ornaments panel contains the following sections:

Jazz

Contains ornaments and pitch alterations commonly used in jazz music, such as bends, scoops, and falls.

Baroque and Classical

Contains ornaments commonly used in Baroque and Classical music, such as mordents, turns, and trills.

Arpeggiation

Contains the different types of arpeggio signs.

NOTE

You cannot input arpeggio signs with the panel during note input.

Glissandi

Contains the different types of glissando lines.

Guitar

Contains techniques and pitch alterations commonly associated with guitars, such as guitar bends and vibrato bar scoops.

RELATED LINKS

Notations toolbox on page 197

Input methods for guitar bends and guitar techniques on page 344

Inputting ornaments/trills with the popover

You can input ornaments, trills, and jazz ornaments using the ornaments popover, both during note input and by adding them to existing notes. When inputting trills, you can specify the trill interval, such as a minor third.

PROCEDURE

- **1.** In Write mode, do one of the following:
 - Start note input.
 - Select an item on each staff at the rhythmic position where you want to input an ornament. If you want to input a trill with a specific duration, select items that span the required duration.
- **2.** Optional: During note input, if you want to input notes and notations onto multiple staves, extend the caret to those staves.
- 3. Open the ornaments popover in any of the following ways:
 - Press Shift-O.

- In the Notations toolbox, click **Popovers** , then **Ornaments** ...
- **4.** Enter the appropriate entry for the ornament you want into the popover. For example, enter **tr m3** for a trill with a minor third interval or **mor** for a mordent.
- **5.** Press **Return** to close the popover.
- **6.** Optional: When inputting trills during note input, input a note or press **Space** to advance the caret and input the trill.

RESULT

During note input, ornaments are input at the caret position on all staves across which the caret extends. Trills span the duration of the rhythmic value of the note input at the caret position or the duration by which the caret advanced.

Ornaments added to existing music are input on each selected staff, at the rhythmic position of the earliest selected either note or item, according to your item input position setting. Trills span the duration of either only notes or any items on each selected staff, according to your item input position setting.

Trills have a default interval of a second, either major or minor depending on the context. If you specified an interval for your trill, the interval applies only to the first note in the selection, but you can also change the interval partway through trills.

TIP

You can choose to input a separate trill for each selected note in **Preferences** > **Note Input and Editing** > **Editing**.

RELATED LINKS

Extending the caret to multiple staves on page 218
Changing the item input position setting on page 209
Ornaments on page 1071
Trills on page 1075
Trill intervals on page 1078
Trill interval appearance on page 1083

Inputting ornaments/trills with the panel

You can input ornaments, trills, and jazz ornaments using the Ornaments panel, both during note input and by adding them to existing notes.

NOTE

These steps describe inputting with the default mouse input preference **Create item at selection**.

PROCEDURE

- **1.** In Write mode, do one of the following:
 - Start note input.
 - Select an item on each staff at the rhythmic position where you want to input an ornament. If you want to input a trill with a specific duration, select items that span the required duration.
- 2. In the Notations toolbox, click **Panels** (4), then **Ornaments** (4) to show the Ornaments panel.

3. In the Ornaments panel, click the ornament you want.

RESULT

During note input, ornaments are input at the caret position. Trills are input with a default duration of a quarter note.

Ornaments added to existing music are input on each selected staff, at the rhythmic position of the earliest selected either note or item, according to your item input position setting. Trills span the duration of either only notes or any items on each selected staff, according to your item input position setting.

TIP

- You can specify trill intervals when inputting trills using the popover.
- You can choose to input a separate trill for each selected note in Preferences > Note Input and Editing > Editing.

RELATED LINKS

Notations toolbox on page 197 Ornaments panel on page 337

Changing your mouse input settings on page 207

Inputting arpeggio signs with the popover

You can input arpeggio signs using the ornaments popover, both during note input and by adding them to existing notes. You can also input arpeggio signs across notes in multiple voices and on different staves that belong to the same instrument, such as piano or harp.

PROCEDURE

- **1.** In Write mode, do one of the following:
 - Start note input.
 - Select at least one note in each voice to which you want to add an arpeggio sign.

NOTE

- For instruments with multiple staves, such as piano and harp, you can select existing notes on multiple staves to create cross-staff arpeggio signs. However, you cannot create cross-staff arpeggio signs between different instruments.
- Arpeggio signs are added to all notes in the selected voices at the selected rhythmic positions.
- 2. Optional: If you started note input, press **Q** to start chord input.

NOTE

You can only input arpeggio signs during chord input.

- **3.** Optional: During note input, if you want to input notes and notations onto multiple staves, extend the caret to those staves.
- **4.** Open the ornaments popover in any of the following ways:
 - Press **Shift-O**.
- **5.** Enter the appropriate entry for the arpeggio sign you want into the popover.

For example, enter **arpup** for an up arpeggio sign or **arpdown** for a down arpeggio sign.

- **6.** Press **Return** to close the popover.
- 7. Optional: During chord input, input the notes you want.

RESULT

During chord input, arpeggio signs are input at the caret position on all staves across which the caret extends.

When adding arpeggio signs to existing notes, they are input to the left of the selected notes.

Arpeggio signs automatically span the pitch range of all notes at that rhythmic position in the current voice during chord input, and all notes in the selected voices/staves when adding arpeggio signs to existing notes.

RELATED LINKS

Ornaments popover on page 333
Extending the caret to multiple staves on page 218
Arpeggio signs on page 1089
Arpeggios in playback on page 1093
Inputting chords on page 247

Inputting arpeggio signs with the panel

You can input arpeggio signs on existing notes using the Ornaments panel. You can also input arpeggio signs across notes in multiple voices and on different staves that belong to the same instrument, such as piano or harp.

NOTE

- You cannot input arpeggio signs with the panel during note input.
- These steps describe inputting with the default mouse input preference Create item at selection. You cannot create cross-staff and cross-voice arpeggio signs if your preference is set to Load pointer with item.

PROCEDURE

1. In Write mode, select at least one note in each voice to which you want to add an arpeggio sign.

NOTE

- For instruments with multiple staves, such as piano and harp, you can select existing notes on multiple staves to create cross-staff arpeggio signs. However, you cannot create cross-staff arpeggio signs between different instruments.
- Arpeggio signs are added to all notes in the selected voices at the selected rhythmic positions.
- 2. In the Notations toolbox, click **Panels** (3), then **Ornaments** (4) to show the Ornaments panel.
- **3.** In the **Arpeggiation** section, click the arpeggio sign you want.

RESULT

The arpeggio sign specified is input to the left of the selected note or chord. Arpeggio signs automatically span the pitch range of all notes in the selected voices/staves at that rhythmic position.

RELATED LINKS

Notations toolbox on page 197
Ornaments panel on page 337
Changing your mouse input settings on page 207
Arpeggio signs on page 1089
Arpeggios in playback on page 1093

Inputting glissando lines with the popover

You can input glissando lines between existing notes using the ornaments popover. You can input glissando lines between both adjacent and non-adjacent notes.

NOTE

You cannot input glissando lines during note input or on the last note on a staff. Instead, you can input a jazz articulation.

PREREQUISITE

You have input at least two notes that you want to join with a glissando.

PROCEDURE

- In Write mode, select the notes you want to join with glissando lines.
 For example, select a grace note and a normal note, two notes in different voices, or two notes on different staves belonging to the same instrument.
- **2.** Open the ornaments popover in any of the following ways:
 - Press Shift-O.
 - In the Notations toolbox, click **Popovers** , then **Ornaments** ...
- **3.** Enter the appropriate entry for the glissando line you want into the popover.
 - For a default style glissando line, enter gliss.
 - For a straight glissando line, enter glissstraight.
 - For a wavy glissando line, enter glisswavy.
- **4.** Press **Return** to close the popover.

RESULT

The glissando line specified is input between all selected notes.

NOTE

- If you select a single note and input a glissando line, the glissando line specified starts from
 the selected note and ends at the next note in the same voice on the staff, even if this
 crosses rests.
- Glissando lines do not automatically adjust around any notes or rests between the selected notes. If glissando text is shown, the text can collide with notes or rests, in which case we recommend that you make further adjustments, such as not showing glissando text for that glissando line.
- By default, glissando line text is hidden on staves belonging to fretted instruments. However, you can show glissando line text manually.

RELATED LINKS

Ornaments popover on page 333

Glissando lines on page 1096 Changing glissando line text on page 1098 Changing the style of glissando lines on page 1097

Inputting glissando lines with the panel

You can input glissando lines between existing notes using the Ornaments panel. You can input glissando lines between both adjacent and non-adjacent notes.

NOTE

- These steps describe inputting with the default mouse input preference Create item at selection. If your preference is set to Load pointer with item, you can only input glissando lines between the note you click on and the note immediately following it.
- You cannot input glissando lines during note input or on the last note on a staff. Instead, you can input a jazz articulation.

PREREQUISITE

You have input at least two notes that you want to join with a glissando.

PROCEDURE

- In Write mode, select the notes you want to join with glissando lines.
 For example, select a grace note and a normal note, two notes in different voices, or two notes on different staves belonging to the same instrument.
- 2. In the Notations toolbox, click **Panels** , then **Ornaments** to show the Ornaments panel.
- 3. In the Glissandi section, click the style of glissando line you want.
 - Glissando (Straight)
 - Glissando (Wavy) 🖊

RESULT

The glissando line specified is input between all selected notes.

NOTE

- If you select a single note and input a glissando line, the glissando line specified starts from the selected note and ends at the next note in the same voice on the staff, even if this crosses rests.
- Glissando lines do not automatically adjust around any notes or rests between the selected notes. If glissando text is shown, the text can collide with notes or rests, in which case we recommend that you make further adjustments, such as not showing glissando text for that glissando line.
- By default, glissando line text is hidden on staves belonging to fretted instruments. However, you can show glissando line text manually.

RELATED LINKS

Notations toolbox on page 197
Ornaments panel on page 337
Changing your mouse input settings on page 207
Glissando lines on page 1096
Changing glissando line text on page 1098

Inputting jazz articulations with the popover

You can input jazz articulations using the ornaments popover, both during note input and by adding them to existing notes.

NOTE

You can input jazz ornaments, such as flips or jazz turns, in the same ways as inputting ornaments.

PROCEDURE

- 1. In Write mode, do one of the following:
 - Start note input.

TIP

During note input, you can select additional notes before/after the last input note without deactivating the caret by pressing **Shift-Right Arrow** / **Shift-Left Arrow** .

- Select the notes to which you want to add jazz articulations.
- **2.** Optional: If you want to input notes with jazz articulations onto multiple staves at once, extend the caret to those staves.
- **3.** Optional: During note input, input at least one note.
- **4.** Open the ornaments popover in any of the following ways:
 - Press Shift-O.
 - In the Notations toolbox, click **Popovers** , then **Ornaments** ...
- **5.** Enter the appropriate entry for the jazz articulation you want into the popover. For example, enter **scoop** for a scoop or **fall** for a fall.
- **6.** Press **Return** to close the popover.

RESULT

The jazz articulation you specify is input on all selected notes. During note input, this is usually the last note you input.

NOTE

When using the popover, all jazz articulations are input with a default line style for their type. You can change their type/length after they have been input.

When using the panel, you can specify the line style of jazz articulations when you input them.

AFTER COMPLETING THIS TASK

You can enable independent voice playback for individual instruments to hear different jazz articulations in different voices simultaneously.

RELATED LINKS

Ornaments popover on page 333
Extending the caret to multiple staves on page 218
Jazz articulations on page 1125
Enabling independent voice playback on page 530
Playback techniques on page 770

Inputting jazz articulations with the panel

You can input jazz articulations using the Ornaments panel, both during note input and by adding them to existing notes.

NOTE

- You can input jazz ornaments, such as flips or jazz turns, in the same ways as inputting ornaments.
- These steps describe inputting with the default mouse input preference Create item at selection.

PROCEDURE

- **1.** In Write mode, do one of the following:
 - Start note input.

TIP

During note input, you can select additional notes before/after the last input note without deactivating the caret by pressing **Shift-Right Arrow** / **Shift-Left Arrow** .

- Select the notes to which you want to add jazz articulations.
- **2.** Optional: If you want to input notes with jazz articulations onto multiple staves at once, extend the caret to those staves.
- **3.** Optional: During note input, input at least one note.
- **4.** In the Notations toolbox, click **Panels 8**, then **Ornaments 17** to show the Ornaments panel.
- 5. In the Jazz section, click the jazz articulation you want.

RESULT

The jazz articulation you specify is input on all selected notes. During note input, this is usually the last note you input.

AFTER COMPLETING THIS TASK

You can enable independent voice playback for individual instruments to hear different jazz articulations in different voices simultaneously.

RELATED LINKS

Notations toolbox on page 197

Ornaments panel on page 337

Changing your mouse input settings on page 207

Extending the caret to multiple staves on page 218

Enabling independent voice playback on page 530

Playback techniques on page 770

Input methods for guitar bends and guitar techniques

You can input guitar bends (including pre-bends and post-bends), vibrato bar techniques (including dips, dives, scoops, and dives and returns) and tapping, hammer-on, and pull-off

indications with the keyboard by using the ornaments popover, and with the mouse by using the Ornaments panel.

You can also input guitar pre-bends, post-bends, and vibrato bar pre-dives using properties in the Properties panel.

You can input guitar techniques during note input and by adding them to existing notes, but you cannot input guitar bends during note input. You can only input guitar bends by adding them to existing notes.

RELATED LINKS

Ornaments popover on page 333 Ornaments panel on page 337

Inputting guitar bends with the popover

You can input guitar bends between existing notes, including between grace notes and normal notes, using the ornaments popover. You can input guitar bends between both adjacent and non-adjacent notes.

NOTE

You cannot input guitar bends during note input or on the last note on a staff.

PREREQUISITE

You have input at least two notes that you want to join with a guitar bend.

PROCEDURE

- **1.** In Write mode, select the two notes you want to join with a guitar bend. For example, select a grace note and a normal note or two notes in different voices.
- **2.** Open the ornaments popover in any of the following ways:
 - Press Shift-O.
 - In the Notations toolbox, click Popovers = , then Ornaments #.
- **3.** Enter **bend** into the popover.
- **4.** Press **Return** to close the popover.

RESULT

The guitar bend is input between the selected notes.

Guitar bends automatically appear as guitar bends or returns on tablature according to the pitch direction of the notes they join.

TIP

- If you select a single note and input a guitar bend, the guitar bend starts from the selected note and ends at the next note in the same voice on the staff, even if this crosses rests.
- You can assign a key command for Create Guitar Bend on the Key Commands page in Preferences.

RELATED LINKS

Ornaments popover on page 333 Guitar bends on page 1103 Key Commands page in the Preferences dialog on page 58

Inputting guitar bends with the panel

You can input guitar bends between existing notes, including between grace notes and normal notes, using the Ornaments panel. You can input guitar bends between both adjacent and non-adjacent notes.

NOTE

- These steps describe inputting with the default mouse input preference Create item at selection. If your preference is set to Load pointer with item, you can only input guitar bends between the note you click on and the note immediately following it.
- You cannot input guitar bends during note input or on the last note on a staff.

PREREQUISITE

You have input at least two notes that you want to join with a guitar bend.

PROCEDURE

- **1.** In Write mode, select the two notes you want to join with a guitar bend. For example, select a grace note and a normal note or two notes in different voices.
- 2. In the Notations toolbox, click **Panels 8**, then **Ornaments 17** to show the Ornaments panel.
- 3. In the **Guitar** section, click **Guitar Bend** .

RESULT

The guitar bend is input between the selected notes.

Guitar bends automatically appear as guitar bends or returns on tablature according to the pitch direction of the notes they join.

TIP

- If you select a single note and input a guitar bend, the guitar bend starts from the selected note and ends at the next note in the same voice on the staff, even if this crosses rests.
- You can assign a key command for Create Guitar Bend on the Key Commands page in Preferences.

RELATED LINKS

Notations toolbox on page 197
Ornaments panel on page 337
Changing your mouse input settings on page 207
Guitar bends on page 1103

Inputting guitar pre-bends/pre-dives

You can input guitar pre-bends on any existing notes belonging to fretted instruments. You can also specify that pre-bends should be played using the vibrato bar, a technique that is known as a "pre-dive".

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, Graphic Editing 3 is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the notes before which you want to input guitar pre-bends/pre-dives. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Pre-bend interval** in the **Guitar Pre-bends** group.
- **3.** Change the interval as required.
- **4.** Optional: To turn the guitar pre-bends into guitar pre-dives, activate **Vibrato bar pre-bend** and the corresponding checkbox in the **Guitar Pre-bends** group.

RESULT

Guitar pre-bends of the specified interval are input before the selected notes. They are shown as guitar pre-dives when **Vibrato bar pre-bend** and the corresponding checkbox are both activated.

RELATED LINKS

Guitar pre-bends and pre-dives on page 1105 Vibrato bar techniques on page 1118 Properties panel on page 646 Engrave toolbox on page 490

Inputting guitar post-bends

You can input guitar post-bends on any existing notes belonging to fretted instruments. You can also specify that post-bends are microtonal.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the notes after which you want to input guitar post-bends. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Post-bend interval** in the **Guitar Post-bends** group.
- **3.** Do one of the following:
 - Change the interval as required.
 - To turn the guitar post-bends into microtonal post-bends, activate **Microtone bend** in the **Guitar Post-bends** group.

RESULT

Guitar post-bends of the specified interval are input after the selected notes. They are shown as microtonal when **Microtone bend** is activated.

RELATED LINKS

Guitar post-bends on page 1107 Properties panel on page 646 Engrave toolbox on page 490

Inputting vibrato bar dives

You can input vibrato bar dives, both during note input and by adding them to existing notes.

Vibrato bar dives are notated using a smooth fall jazz articulation combined with a vibrato bar indication.

PROCEDURE

- **1.** In Write mode, do one of the following:
 - Start note input.

TIP

During note input, you can select additional notes before/after the last input note without deactivating the caret by pressing **Shift-Right Arrow** / **Shift-Left Arrow** .

- Select the notes to which you want to add vibrato bar dives.
- **2.** Optional: During note input, if you want to input notes and notations onto multiple staves, extend the caret to those staves.
- 3. Optional: During note input, input at least one note.
- **4.** Open the ornaments popover in any of the following ways:
 - Press Shift-O.
 - In the Notations toolbox, click **Popovers** , then **Ornaments** #.
- **5.** Enter **fallsmooth** into the popover to input a smooth fall jazz articulation.
- **6.** Press **Return** to close the popover.
- 7. Optional: During note input, move the caret back to the position of the note with the smooth fall
- **8.** Open the ornaments popover in any of the following ways:
 - Press Shift-O.
 - In the Notations toolbox, click **Popovers** , then **Ornaments** ...
- **9.** Enter **wbar** into the popover to input a vibrato bar indication.
- **10.** Press **Return** to close the popover.
- **11.** Optional: During note input, input a note or press **Space** to advance the caret and input the vibrato bar indication.

RESULT

The smooth fall jazz articulation is input on all selected notes. During note input, this is usually the last note you input.

During note input, vibrato bar indications are input at the caret position on all staves across which the caret extends.

Vibrato bar indications added to existing music are input at the rhythmic position of, or span the duration of, either only notes or any items on each selected staff, according to your item input position setting.

By default, vibrato bar indications/lines are placed below the staff and only appear on notation staves, not tablature.

NOTE

When using the popover, all jazz articulations are input with a default line style for their type. You can change their type/length after they have been input.

You can also input both smooth fall jazz articulations and vibrato bar indications using the Ornaments panel. When using the panel, you can specify the line style of jazz articulations when you input them.

AFTER COMPLETING THIS TASK

If you want vibrato bar indications to show a line, you can lengthen them to give them duration.

RELATED LINKS

Notations toolbox on page 197

Ornaments popover on page 333

Extending the caret to multiple staves on page 218

Changing the item input position setting on page 209

Vibrato bar techniques on page 1118

Jazz articulations on page 1125

Playing technique duration on page 1167

Lengthening/Shortening items on page 419

Inputting vibrato bar dives and returns with the popover

You can input vibrato bar dives and returns between both adjacent and non-adjacent existing notes using the ornaments popover.

NOTE

You cannot input vibrato bar dives and returns during note input or on the last note on a staff.

PREREQUISITE

You have input at least three notes with alternating pitch directions, such as D-C-D, that you want to join with a vibrato bar dive and return.

PROCEDURE

1. In Write mode, select the two notes you want to join with a vibrato bar dive.

NOTE

The notes must be on the same staff and have a descending pitch direction, such as D-C.

- **2.** Open the ornaments popover in any of the following ways:
 - Press Shift-O.
 - In the Notations toolbox, click Popovers , then Ornaments ...
- 3. Enter vibbend into the popover to input the dive.
- **4.** Press **Return** to close the popover.
- **5.** Select the two notes you want to join with a vibrato bar return.

NOTE

The notes must be on the same staff and have an ascending pitch direction, such as C-D.

- **6.** Open the ornaments popover in any of the following ways:
 - Press Shift-O.
 - In the Notations toolbox, click Popovers , then Ornaments w.
- **7.** Enter **vibbend** into the popover to input the return.
- 8. Press Return to close the popover.

RESULT

Vibrato bar dives are input between notes with descending pitch directions, and vibrato bar returns are input between notes with ascending pitch directions.

If a vibrato bar dive ends on the same note that a vibrato bar return starts on, they appear as a V on tablature with the bend interval shown at the point.

If you input vibrato bar dives on consecutive notes with the same pitch direction, such as E-D-C, they are notated on tablature with an additional line protrusion beyond the staff and bend interval for each vibrato bar dive.

Vibrato bar dives and returns automatically point upwards or downwards on tablature according to the pitch direction of the notes they join.

RELATED LINKS

Ornaments popover on page 333
Vibrato bar dives and returns on page 1108
Vibrato bar techniques on page 1118

Inputting vibrato bar dives and returns with the panel

You can input vibrato bar dives and returns between both adjacent and non-adjacent existing notes using the Ornaments panel.

NOTE

- These steps describe inputting with the default mouse input preference Create item at selection. If your preference is set to Load pointer with item, you can only input vibrato bar dives and returns between the note you click on and the note immediately following it.
- You cannot input vibrato bar dives and returns during note input or on the last note on a staff.

PREREQUISITE

You have input at least three notes with alternating pitch directions, such as D-C-D, that you want to join with a vibrato bar dive and return.

PROCEDURE

1. In Write mode, select the two notes you want to join with a vibrato bar dive.

NOTE

The notes must be on the same staff and have a descending pitch direction, such as D-C.

- 2. In the Notations toolbox, click **Panels** (4), then **Ornaments** (4) to show the Ornaments panel.
- 3. In the **Guitar** section, click **Guitar Bend with Vibrato Bar** to input the vibrato bar dive.
- **4.** Select the two notes you want to join with a vibrato bar return.

NOTE

The notes must be on the same staff and have an ascending pitch direction, such as C-D.

5. Click **Guitar Bend with Vibrato Bar** to input the vibrato bar return.

RESULT

Vibrato bar dives are input between notes with descending pitch directions, and vibrato bar returns are input between notes with ascending pitch directions.

If a vibrato bar dive ends on the same note that a vibrato bar return starts on, they appear as a V on tablature with the bend interval shown at the point.

If you input vibrato bar dives on consecutive notes with the same pitch direction, such as E-D-C, they are notated on tablature with an additional line protrusion beyond the staff and bend interval for each vibrato bar dive.

Vibrato bar dives and returns automatically point upwards or downwards on tablature according to the pitch direction of the notes they join.

RELATED LINKS

Notations toolbox on page 197
Ornaments panel on page 337
Changing your mouse input settings on page 207
Vibrato bar dives and returns on page 1108
Vibrato bar techniques on page 1118

Inputting vibrato bar scoops with the popover

You can input vibrato bar scoops using the ornaments popover, both during note input and by adding them to existing notes.

PROCEDURE

- **1.** In Write mode, do one of the following:
 - Start note input.

TIP

During note input, you can select additional notes before/after the last input note without deactivating the caret by pressing **Shift-Right Arrow** / **Shift-Left Arrow** .

- Select the notes to which you want to add vibrato bar scoops.
- **2.** Optional: If you want to input notes with vibrato bar scoops onto multiple staves at once, extend the caret to those staves.
- 3. Optional: During note input, input at least one note.
- **4.** Open the ornaments popover in any of the following ways:
 - Press Shift-O.
 - In the Notations toolbox, click **Popovers** , then **Ornaments** ...
- **5.** Enter **vibscoop** into the popover.
- **6.** Press **Return** to close the popover.

RESULT

Vibrato bar scoops are input on the selected notes. During note input, this is usually the last note you input.

By default, vibrato bar scoops only appear on notation staves, not tablature. They are positioned to the left of notes.

AFTER COMPLETING THIS TASK

You can input vibrato bar indications to clarify the vibrato bar scoops should be played using the vibrato bar.

RELATED LINKS

Ornaments popover on page 333

Extending the caret to multiple staves on page 218

Vibrato bar techniques on page 1118

Inputting vibrato bar indications/lines with the popover on page 354

Deleting guitar techniques on page 1124

Inputting vibrato bar scoops with the panel

You can input vibrato bar scoops using the Ornaments panel, both during note input and by adding them to existing notes.

PROCEDURE

- **1.** In Write mode, do one of the following:
 - Start note input.

TIP

During note input, you can select additional notes before/after the last input note without deactivating the caret by pressing **Shift-Right Arrow**/**Shift-Left Arrow**.

- Select the notes to which you want to add vibrato bar scoops.
- **2.** Optional: If you want to input notes with vibrato bar scoops onto multiple staves at once, extend the caret to those staves.
- 3. Optional: During note input, input at least one note.
- **4.** In the Notations toolbox, click **Panels 8**, then **Ornaments 1** to show the Ornaments panel.
- 5. In the **Guitar** section, click **Vibrato Bar Scoop** ✓.

RESULT

Vibrato bar scoops are input on the selected notes. During note input, this is usually the last note you input.

By default, vibrato bar scoops only appear on notation staves, not tablature. They are positioned to the left of notes.

AFTER COMPLETING THIS TASK

You can input vibrato bar indications to clarify the vibrato bar scoops should be played using the vibrato bar.

RELATED LINKS

Notations toolbox on page 197

Ornaments panel on page 337

Extending the caret to multiple staves on page 218

Vibrato bar techniques on page 1118
Inputting vibrato bar indications/lines with the panel on page 355
Deleting guitar techniques on page 1124

Inputting vibrato bar dips with the popover

You can input vibrato bar dips using the ornaments popover, both during note input and by adding them to existing music.

PROCEDURE

- **1.** In Write mode, do one of the following:
 - Start note input.
 - Select an item on each staff at the rhythmic position where you want to input a vibrato bar dip.
- **2.** Optional: During note input, if you want to input notes and notations onto multiple staves, extend the caret to those staves.
- 3. Open the ornaments popover in any of the following ways:
 - Press Shift-O.
 - In the Notations toolbox, click **Popovers** , then **Ornaments** ...
- 4. Enter vibdip into the popover.
- **5.** Press **Return** to close the popover.
- **6.** Optional: During note input, input a note or press **Space** to advance the caret and input the vibrato bar dip.

RESULT

During note input, vibrato bar dips are input at the caret position on all staves across which the caret extends.

Vibrato bar dips added to existing music are input on each selected staff, at the rhythmic position of the earliest selected either note or item, according to your item input position setting.

By default, vibrato bar dips have half step intervals, are placed above the staff, and only appear on notation staves, not tablature.

RELATED LINKS

Ornaments popover on page 333

Changing the item input position setting on page 209

Extending the caret to multiple staves on page 218

Vibrato bar techniques on page 1118

Changing vibrato bar dip intervals on page 1123

Changing the staff-relative placement of items on page 423

Inputting vibrato bar dips with the panel

You can input vibrato bar dips using the Ornaments panel, both during note input and by adding them to existing music.

PROCEDURE

- 1. In Write mode, do one of the following:
 - Start note input.

- Select an item on each staff at the rhythmic position where you want to input a vibrato bar dip.
- 2. In the Notations toolbox, click **Panels** , then **Ornaments** , to show the Ornaments panel.
- 3. In the Guitar section, click Vibrato Bar Dip ∨.

RESULT

During note input, vibrato bar dips are input at the caret position.

Vibrato bar dips added to existing music are input on each selected staff, at the rhythmic position of the earliest selected either note or item, according to your item input position setting.

By default, vibrato bar dips have half step intervals, are placed above the staff, and only appear on notation staves, not tablature.

RELATED LINKS

Notations toolbox on page 197

Ornaments panel on page 337

Changing the item input position setting on page 209

Inputting vibrato bar indications/lines with the popover

You can input vibrato bar indications/lines using the ornaments popover, both during note input and by adding them to existing music. When vibrato bar indications are input across a range of items, they are input with duration and show a duration line, which is dashed by default.

PROCEDURE

- 1. In Write mode, do one of the following:
 - Start note input.
 - Select an item on each staff at the rhythmic position where you want to input a vibrato bar indication. If you want to input a vibrato bar line, select items that span the required duration.
- **2.** Optional: During note input, if you want to input notes and notations onto multiple staves, extend the caret to those staves.
- **3.** Open the ornaments popover in any of the following ways:
 - Press Shift-O.
 - In the Notations toolbox, click Popovers = , then Ornaments
- **4.** Enter **wbar** into the popover to input the vibrato bar indication.
- **5.** Press **Return** to close the popover.
- **6.** Optional: During note input, input a note or press **Space** to advance the caret and input the vibrato bar indication.

RESULT

During note input, vibrato bar indications are input at the caret position on all staves across which the caret extends.

Vibrato bar indications added to existing music are input at the rhythmic position of, or span the duration of, either only notes or any items on each selected staff, according to your item input position setting. Vibrato bar indications with duration show a duration line, which is dashed by default.

By default, vibrato bar indications/lines are placed below the staff and only appear on notation staves, not tablature.

RELATED LINKS

Ornaments popover on page 333

Changing the item input position setting on page 209

Extending the caret to multiple staves on page 218

Vibrato bar techniques on page 1118

Playing technique duration on page 1167

Lengthening/Shortening items on page 419

Inputting vibrato bar indications/lines with the panel

You can input vibrato bar indications/lines using the Ornaments panel, both during note input and by adding them to existing music. When vibrato bar indications are input across a range of items, they are input with duration and show a duration line, which is dashed by default.

PROCEDURE

- **1.** In Write mode, do one of the following:
 - Start note input.
 - Select an item on each staff at the rhythmic position where you want to input a vibrato bar indication. If you want to input a vibrato bar line, select items that span the required duration.
- 2. In the Notations toolbox, click **Panels** , then **Ornaments** , to show the Ornaments panel.
- 3. In the Guitar section, click Vibrato Bar Line

RESULT

During note input, vibrato bar indications are input at the caret position.

Vibrato bar indications added to existing music are input at the rhythmic position of, or span the duration of, either only notes or any items on each selected staff, according to your item input position setting. Vibrato bar indications with duration show a duration line, which is dashed by default.

By default, vibrato bar indications/lines are placed below the staff and only appear on notation staves, not tablature.

RELATED LINKS

Ornaments panel on page 337

Changing the item input position setting on page 209

Inputting hammer-ons/pull-offs

You can input hammer-ons/pull-offs on any notes belonging to fretted instruments using the ornaments popover, both during note input and by adding them to existing notes. If you select multiple notes, Dorico Elements automatically inputs the appropriate slurs. You can also add tapping with hammer-ons/pull-offs to existing notes.

PROCEDURE

- 1. In Write mode, do one of the following:
 - Start note input.

TIP

During note input, you can select additional notes before/after the last input note without deactivating the caret by pressing **Shift-Right Arrow**/**Shift-Left Arrow**.

Select the notes to which you want to add hammer-ons/pull-offs.

NOTE

- If you want to input hammer-ons, you must select at least two notes assigned to the same string with ascending pitch directions, such as C-D.
- If you want to input pull-offs or tapping with pull-offs, you must select at least two notes assigned to the same string with descending pitch directions, such as D-C.
- If you want to input *ligados*, you must select at least three notes assigned to the same string with alternating pitch directions, such as C-D-C for a hammer-on then pull-off or D-C-D for a pull-off then hammer-on.
- **2.** Optional: During note input, if you want to input notes and notations onto multiple staves, extend the caret to those staves.
- **3.** Optional: During note input, input at least one note.
- **4.** Open the ornaments popover in any of the following ways:
 - Press Shift-O.
 - In the Notations toolbox, click **Popovers** , then **Ornaments** #.
- **5.** Enter the appropriate entry for the hammer-on/pull-off you want into the popover. For example, enter **ho** for a hammer-on or **hopo** for a hammer-on then pull-off.
- **6.** Press **Return** to close the popover.

RESULT

The hammer-on/pull-off you specify is input on the selected notes. During note input, this is usually the last note you input.

If you selected multiple adjacent notes assigned to the same string, Dorico Elements automatically inputs slurs spanning the selected notes and centers hammer-on/pull-off indications on the slurs. For slurs with multiple hammer-on/pull-off indications, each indication is centered over the range of notes in the corresponding direction.

By default, hammer-ons/pull-offs appear on both notation staves and tablature and are placed above the staff.

TIP

You can also add hammer-ons/pull-offs to existing notes by selecting them, activating **Technique** in the **Guitar Techniques** group of the Properties panel, and selecting the appropriate indication from the menu. To show hammer-on/pull-off indications centered on slurs, select all notes except the first note under each slur.

RELATED LINKS

Ornaments popover on page 333

Extending the caret to multiple staves on page 218

Assigning notes to strings on page 1040

Changing the allocated string for notes on tablature on page 1310

Hammer-ons and pull-offs on page 1120

Changing the staff-relative placement of guitar techniques on page 1123

Deleting guitar techniques on page 1124

Inputting tapping

You can input right-hand and left-hand tapping indications on any notes belonging to fretted instruments using the ornaments popover, both during note input and by adding them to existing notes. You can also add tapping with hammer-ons/pull-offs to existing notes.

PROCEDURE

- 1. In Write mode, do one of the following:
 - Start note input.

TIP

During note input, you can select additional notes before/after the last input note without deactivating the caret by pressing **Shift-Right Arrow** / **Shift-Left Arrow** .

Select the notes to which you want to add tapping indications.

NOTE

If you want to input tapping with pull-offs, you must select at least two notes assigned to the same string with descending pitch directions, such as D-C.

- **2.** Optional: During note input, if you want to input notes and notations onto multiple staves, extend the caret to those staves.
- 3. Optional: During note input, input at least one note.
- **4.** Open the ornaments popover in any of the following ways:
 - Press Shift-O.
 - In the Notations toolbox, click Popovers , then Ornaments ...
- **5.** Enter the appropriate entry for the tapping indication you want into the popover. For example, enter **tap** for right-hand tapping or **lhtappull** for left-hand tapping with pulloff.
- **6.** Press **Return** to close the popover.

RESULT

The tapping indication you specify is input on the selected notes. During note input, this is usually the last note you input.

By default, tapping indications appear on both notation staves and tablature and are placed above the staff.

TIP

You can also add tapping indications to existing notes by selecting them, activating **Technique** in the **Guitar Techniques** group of the Properties panel, and selecting the appropriate indication from the menu.

RELATED LINKS

Ornaments popover on page 333

Extending the caret to multiple staves on page 218

Assigning notes to strings on page 1040

Changing the allocated string for notes on tablature on page 1310

Tapping on page 1119

Changing the staff-relative placement of guitar techniques on page 1123

Deleting guitar techniques on page 1124

Input methods for playing techniques, pedal lines, string indicators, and harp pedal diagrams

You can input playing techniques with the keyboard by using the playing techniques popover, and with the mouse by using the Playing Techniques panel.

You can input string indicators outside the staff in the same ways, using either the playing techniques popover or Playing Techniques panel.

Playing techniques popover

The following tables contain the entries for the playing techniques popover that you can use to input playing techniques, harp pedal diagrams, pedal lines, and retakes.

When you start entering a playing technique into the playing techniques popover, a menu appears that shows valid playing techniques containing the letters/words you enter. You can then select one of these playing techniques to input.

You can open the playing techniques popover in Write mode in any of the following ways when either an item is selected or the caret is active:

- Press Shift-P.
- In the Notations toolbox, click **Popovers** , then **Playing Techniques** ...
- Select an existing playing technique and press Return.
- Choose Write > Create Playing Technique.

The icon on the left-hand side of the popover matches the corresponding button in the Notations toolbox on the right of the window.







Playing Techniques button in the Notations toolbox

Playing techniques popover with an example entry for inputting a playing technique Playing techniques popover with an example entry for inputting a pedal line

Playing techniques

Playing technique	Popover entry
Naturale (nat.)	nat
Vibrato	vibrato
Senza vibrato	senza vibrato
Harmonic (o)	0
Con sord.	con sord

Playing technique Popover entry

Strong air pressure strong air pressure

Double-tongue double-tongue

Down bow downbow

Up bow upbow

Sul ponticello sul pont

Sul tasto sul tasto

Poco sul tasto pst

Pizzicato pizz

Spiccato spicc

Arco arco

Tongue click (Stockhausen) tongue click

Finger click (Stockhausen) finger click

Vibraphone motor on **motor on**

Vibraphone motor off motor off

Open open

Damp damp

Damp (large) damp large

Full barré **full barre**

Half barré half barre

Strum up strum up

Strum down strum down

Left hand Ih

Right hand rh

This list is not comprehensive as there are many valid playing techniques. It is intended to illustrate how you can structure your entry to input different types of common playing techniques.

If you do not know the correct entry for a playing technique, start entering part of the playing technique and see if it becomes available in the popover menu.

NOTE

- To give playing techniques duration, add -> at the end of your entry, such as **vibrato->**. During note input, the duration of the playing technique extends as you continue inputting notes or advance the caret. When adding playing techniques to existing music, they are added as a group.
- To input hidden playing techniques, enclose your popover entry in parentheses, such as (pizz).
- As playing techniques correspond to specific samples, they must be input as described or selected from the popover menu.

Pedal lines

Type of pedal line or retake	Popover entry
Sustain pedal line	ped
Retake in sustain pedal line	^, notch, or retake
Remove retake in sustain pedal line	nonotch
Stop sustain pedal line	*
Sostenuto pedal line	sost
Stop sostenuto pedal line	s*
<i>Una corda</i> pedal line	unacorda
Stop <i>una corda</i> pedal line	u*

Harp pedaling

Example harp pedaling	Popover entry
D, C, Bb, Eb, F, G, A	DCBbEbFGA, BbEb, or^ ^
D, C#, B, E, F#, G#, A	DC#BEF#G#A, C#F#G#, or -v- -vv-

TIP

The pipe character is optional.

String indicators outside the staff

Example string indicator	Popover entry
1	string1
3	string3

RELATED LINKS

Notations toolbox on page 197
Playing techniques on page 1160
Pedal lines on page 1141
Sustain pedal retakes and pedal level changes on page 1142
Harp pedaling on page 1133
String indicators on page 974
Adding retakes with the popover on page 367

Playing Techniques panel

The Playing Techniques panel contains the different playing techniques available in Dorico Elements, divided into instrument families. It is located in the right zone in Write mode. Pedal lines are included in the **Keyboard** section.

• You can hide/show the Playing Techniques panel by clicking **Panels ?**, then **Playing Techniques 1** in the Notations toolbox.

You can also hide/show the right zone by pressing **Ctrl/Cmd-9**.

The Playing Techniques panel contains the following sections:

Common

Contains commonly used playing techniques that also apply to multiple different instrument families, such as "mute" and "legato".

Wind

Contains playing techniques typically only used for wind instruments, such as "key clicks" and "whistle tones".

Brass

Contains playing techniques typically only used for brass instruments, such as "cup mute" and "stopped".

Unpitched Percussion

Contains playing techniques typically only used for unpitched percussion instruments, such as "rim" and "scrape".

Pitched Percussion

Contains playing techniques typically only used for pitched percussion instruments, such as "motor on" and "½ Ped." for vibraphones.

Keyboard

Contains playing techniques typically only used for keyboard instruments, such as "Ped." and different pedal depression levels.

Choral

Contains playing techniques typically only used for the voice, such as "mouth open" and "tongue click".

Strings

Contains playing techniques typically only used for string instruments, such as "collegno battuto" and "down bow".

Guitar

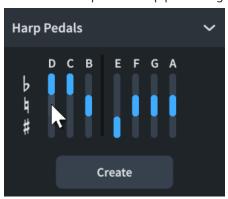
Contains playing techniques typically only used for guitars and fretted instruments, such as string indicators, "half barré", and "strum up".

Harp Pedals

Allows you to create harp pedal diagrams.

You can change the pitch settings for pedals by clicking the column section that corresponds to the required pitch alteration, as displayed by accidentals on the left.

You can then input the harp pedal diagram by clicking **Create**.



TIP

You can hover your mouse pointer over the options in each section to show the name of each playing technique.

RELATED LINKS

Notations toolbox on page 197 Playing techniques on page 1160 Pedal lines on page 1141 String indicators on page 974 Harp pedaling on page 1133

Inputting playing techniques with the popover

You can input playing techniques using the playing techniques popover, both during note input and by adding them to existing music.

NOTE

- You can only enter one playing technique into the popover during note input. You can enter two playing techniques when adding playing techniques to existing music if they are separated by ->.
- You can input playing techniques in the middle of tie chains by starting note input, then moving the caret to the required rhythmic position.

PROCEDURE

- **1.** In Write mode, do one of the following:
 - Start note input.
 - Select an item on each staff at the rhythmic position where you want to input a playing technique. If you want to input playing techniques with duration or a separate playing technique for each note, select items that span the required duration.
- **2.** Optional: During note input, if you want to input notes and notations onto multiple staves, extend the caret to those staves.
- 3. Open the playing techniques popover in any of the following ways:
 - Press Shift-P.
 - In the Notations toolbox, click **Popovers** , then **Playing Techniques** ...
- **4.** Enter the appropriate entry for the playing technique you want into the popover.

For example, enter pizz or non vibrato->.

When you start entering a playing technique into the playing techniques popover, a menu appears that shows valid playing techniques containing the letters/words you enter, which you can select.

- To give the playing technique duration, add -> at the end.
- To input a hidden playing technique, enclose its entry in parentheses, such as (pizz).



5. Press **Return** to close the popover.

Open-ended playing techniques, such as **non vibrato->**, automatically extend during note input as you continue inputting notes, or if you advance the caret by pressing **Space** or clicking **Advance Caret** in the Keyboard, Fretboard, or Drum Pads panel toolbar.

- **6.** Optional: During note input, stop open-ended playing techniques by opening the playing techniques popover again and entering one of the following entries:
 - To end the current playing technique with another playing technique, enter that playing technique. For example, enter **vibrato**. This joins the current playing technique to the following one with a continuation line.
 - To end the current playing technique with another open-ended playing technique, enter that playing technique followed by ->. For example, enter **vibrato**->. This joins the current playing technique to the following one with a continuation line.
 - To end the current playing technique without inputting another playing technique, enter? into the popover. This leaves the current playing technique with a duration line rather than a continuation line.

RESULT

The specified playing techniques are input. They are considered voice-specific by default, meaning they only apply to the voice indicated by the caret indicator during step input or the selected voice when adding playing techniques to existing notes. They are automatically placed above the staff for up-stem voices and below the staff for down-stem voices.

Adjoining playing techniques, or playing techniques that were input together or in sequence, are automatically grouped together, both during note input and when adding playing techniques to existing notes.

During note input, playing techniques are input at the caret position on all staves across which the caret extends. If you included an open-ended playing technique with duration, it extends automatically when you advance the caret or input notes.

Playing techniques added to existing music are input according to their playback technique and your selection:

- If you selected a single item on each staff, a playing technique without duration is input on each staff at the corresponding rhythmic position.
- If you selected a range of items on each staff and input a playing technique with an **Attribute** playback technique, a playing technique is input at the rhythmic position of either only notes or any items in the selection, according to your item input position setting.
- If you selected a range of items on each staff and input a playing technique with a **Direction** playback technique, a playing technique with duration is input that spans either only notes or any items in the selection, according to your item input position setting. For playing techniques whose continuation type is set to show lines, the appropriate continuation line is shown.

AFTER COMPLETING THIS TASK

- You can move playing techniques within playing technique groups, lengthen/shorten playing techniques, and hide/show playing technique duration lines.
- You can enable independent voice playback for individual instruments to hear different playing techniques in different voices simultaneously.

RELATED LINKS

Playing techniques popover on page 358
Extending the caret to multiple staves on page 218
Changing the item input position setting on page 209
Playing techniques on page 1160
Groups of playing techniques on page 1171
Hiding/Showing playing technique duration lines on page 1169
Hiding/Showing playing techniques on page 1163
Playback techniques on page 770
Lengthening/Shortening items on page 419
Moving notes/items rhythmically on page 448

Enabling independent voice playback on page 530

Inputting playing techniques with the panel

You can input playing techniques using the Playing Techniques panel, both during note input and by adding them to existing music.

NOTE

- You cannot input playing techniques with duration in sequence, which automatically groups them, when using the panel. If you want to input playing techniques with duration in sequence, you can use the popover.
- You can input playing techniques in the middle of tie chains by starting note input, then moving the caret to the required rhythmic position.
- These steps describe inputting with the default mouse input preference Create item at selection. If you want to input the same playing technique in multiple places, change your mouse input preference to Load pointer with item so that you do not have to reselect the playing technique for each note.

PROCEDURE

- **1.** In Write mode, do one of the following:
 - Start note input.
 - Select an item on each staff at the rhythmic position where you want to input a playing technique. If you want to input playing techniques with duration or a separate playing technique for each note, select items that span the required duration.
- 2. In the Notations toolbox, click **Panels** ②, then **Playing Techniques** vo to show the Playing Techniques panel.
- 3. In the Playing Techniques panel, click the playing technique you want.

RESULT

The specified playing technique is input. It is considered voice-specific by default, meaning it only applies to the voice indicated by the caret indicator during step input or the selected voice when adding playing techniques to existing notes. It is automatically placed above the staff for up-stem voices and below the staff for down-stem voices.

During note input, playing techniques are input at the caret position, even if your preference is set to **Load pointer with item**.

Playing techniques added to existing music are input according to their playback technique and your selection:

- If you selected a single item on each staff, a playing technique without duration is input on each staff at the corresponding rhythmic position.
- If you selected a range of items on each staff and input a playing technique with an **Attribute** playback technique, a playing technique is input at the rhythmic position of either only notes or any items in the selection, according to your item input position setting.
- If you selected a range of items on each staff and input a playing technique with a **Direction** playback technique, a playing technique with duration is input that spans either only notes or any items in the selection, according to your item input position setting. For playing techniques whose continuation type is set to show lines, the appropriate continuation line is shown.

AFTER COMPLETING THIS TASK

- If you want to show transition lines between playing techniques, you can group them together.
- You can enable independent voice playback for individual instruments to hear different playing techniques in different voices simultaneously.

RELATED LINKS

Notations toolbox on page 197

Changing your mouse input settings on page 207

Changing the item input position setting on page 209

Playing techniques on page 1160

Grouping playing techniques together on page 1172

Hiding/Showing playing technique duration lines on page 1169

Hiding/Showing playing techniques on page 1163

Playback techniques on page 770

Lengthening/Shortening items on page 419

Moving notes/items rhythmically on page 448

Enabling independent voice playback on page 530

Inputting pedal lines with the popover

You can input pedal lines using the playing techniques popover, both during note input and by adding them to existing music. Because pedal lines extend automatically as you input notes during note input, you can also input retakes when you reach the appropriate rhythmic position.

PROCEDURE

- 1. In Write mode, do one of the following:
 - Start note input.
 - On each staff where you want to input a pedal line, select items that span the required duration.
- 2. Open the playing techniques popover in any of the following ways:
 - Press Shift-P.
 - In the Notations toolbox, click **Popovers** , then **Playing Techniques** ...
- 3. Enter the appropriate entry for the pedal line you want into the popover.

For example, enter **ped** for a sustain pedal line.

When you start entering a pedal line into the playing techniques popover, a menu appears that shows valid pedal lines containing the letters/words you enter, which you can select.



4. Press **Return** to close the popover.

The pedal line is input.

- **5.** Optional: During note input, advance the caret and extend the pedal line in any of the following ways:
 - Press Space.
 - In the Keyboard, Fretboard, or Drum Pads panel toolbar, click **Advance Caret** ...

The pedal line also extends automatically as you continue inputting notes.

- **6.** Optional: During note input, input retakes by opening the playing techniques popover again at the appropriate rhythmic position and entering ^ or **retake** into the popover.
- **7.** Optional: During note input, stop the pedal line by opening the playing techniques popover again and enter the appropriate entry into the popover.

For example, enter * to stop a sustain pedal line.

8. Press **Return** to close the popover.

RESULT

During note input, pedal lines start at the caret position, and end at the caret position.

Pedal lines added to existing music span the duration of either only notes or any items on each selected staff, according to your item input position setting.

NOTE

Retakes only appear for sustain pedal lines with the **Line** continuation type.

AFTER COMPLETING THIS TASK

You can change the continuation type used for individual pedal lines; for example, to show a sign at the end.

RELATED LINKS

Playing techniques popover on page 358

Changing the item input position setting on page 209

Pedal lines on page 1141

Sustain pedal retakes and pedal level changes on page 1142

Changing the pedal line continuation type on page 1153

Adding retakes with the popover

You can add retakes to sustain pedal lines using the playing techniques popover, both during note input and by adding them to existing music.

NOTE

You cannot add retakes to *sostenuto* or *una corda* pedal lines. Retakes only appear for sustain pedal lines with the **Line** continuation type.

PREREQUISITE

You have input a sustain pedal line.

PROCEDURE

- **1.** In Write mode, do one of the following:
 - Start note input.
 - Select an item on each staff and at each rhythmic position where you want to input retakes.
- **2.** Optional: During note input, if you want to input notes and notations onto multiple staves, extend the caret to those staves.
- 3. Open the playing techniques popover in any of the following ways:
 - Press Shift-P.
 - In the Notations toolbox, click Popovers , then Playing Techniques .
- 4. Enter ^ or retake into the popover.
- 5. Press **Return** to close the popover.

RESULT

During note input, retakes are input at the caret position on all staves across which the caret extends.

Outside of note input, retakes are input at each selected rhythmic position on each selected staff.

TIP

You can also input retakes by selecting notes within the ranges of sustain pedal lines and choosing **Edit** > **Notations** > **Pedal Lines** > **Add Retake**. You can also choose this option from the context menu.

RELATED LINKS

Playing techniques popover on page 358

Moving the caret manually on page 218
Sustain pedal retakes and pedal level changes on page 1142
Changing the pedal line continuation type on page 1153
Removing retakes and pedal level changes on page 1147

Inputting pedal lines with the panel

You can input pedal lines using the Playing Techniques panel.

NOTE

- When using the panel, you cannot input pedal lines during note input.
- These steps describe inputting with the default mouse input preference Create item at selection.

PROCEDURE

- **1.** In Write mode, on each staff where you want to input a pedal line, select items that span the required duration.
- 2. In the Notations toolbox, click **Panels** ②, then **Playing Techniques** vo to show the Playing Techniques panel.
- 3. In the Playing Techniques panel, expand the **Keyboard** section.
- 4. Click the pedal line you want.

RESULT

Pedal lines added to existing music span the duration of either only notes or any items on each selected staff, according to your item input position setting.

TIP

Alternatively, when nothing is selected, you can click the pedal line you want in the **Keyboard** section of the Playing Techniques panel, then click and drag in the music area to input a pedal line and extend it to the duration you want.

AFTER COMPLETING THIS TASK

- You can change the continuation type used for individual pedal lines; for example, to show a sign at the end.
- You can add retakes within the ranges of sustain pedal lines.

NOTE

Retakes only appear for sustain pedal lines with the **Line** continuation type.

RELATED LINKS

Playing Techniques panel on page 361
Changing the item input position setting on page 209
Changing your mouse input settings on page 207
Pedal lines on page 1141
Sustain pedal retakes and pedal level changes on page 1142

Changing the pedal line continuation type on page 1153

Adding retakes with the panel

You can add retakes to existing sustain pedal lines using the Playing Techniques panel.

NOTE

You cannot add retakes to *sostenuto* or *una corda* pedal lines. Retakes only appear for sustain pedal lines with the **Line** continuation type.

PREREQUISITE

You have input a sustain pedal line.

PROCEDURE

- **1.** In Write mode, select an item on each staff and at each rhythmic position where you want to input retakes.
- 2. In the Notations toolbox, click **Panels** (a), then **Playing Techniques** (b) to show the Playing Techniques panel.
- 3. In the Playing Techniques panel, expand the **Keyboard** section.
- 4. Click Retake Pedal ...

RESULT

The retake is input at each selected rhythmic position on each selected staff.

TIP

- Alternatively, when nothing is selected in the music area, you can click Retake Pedal in the Keyboard section of the Playing Techniques panel, and then click at each rhythmic position where you want to input the retake.
- You can also input retakes by selecting notes within the ranges of sustain pedal lines and choosing Edit > Notations > Pedal Lines > Add Retake. You can also choose this option from the context menu.

RELATED LINKS

Playing Techniques panel on page 361 Sustain pedal retakes and pedal level changes on page 1142 Changing the pedal line continuation type on page 1153 Removing retakes and pedal level changes on page 1147

Inputting harp pedal diagrams with the popover

You can input harp pedal diagrams using the playing techniques popover, both during note input and by adding them to existing music.

If you do not input any harp pedaling, Dorico Elements assumes all harp pedals are in their natural setting, as they would be for C major. Any pitches that do not fit with the current harp pedaling, excluding the two lowest harp strings, appear red when colors for notes out of range are shown.

PROCEDURE

- **1.** In Write mode, do one of the following:
 - Start note input on a harp staff.

- Select an item on a harp staff at the rhythmic position where you want to input a harp pedal diagram.
- **2.** Open the playing techniques popover in any of the following ways:
 - Press Shift-P.
 - In the Notations toolbox, click Popovers , then Playing Techniques .
- **3.** Enter the appropriate entry for the harp pedals you want.

For example, enter:

- **C#F#G#** or **-v-|-vv-** for C#, F#, and G# pedals, such as in A major.
- **BbEb** or --^ | ^--- for Bb and Eb pedals, such as in Bb major.
- 4. Press **Return** to close the popover.

RESULT

The corresponding harp pedal diagram is input at the selected rhythmic position. Depending on your per-layout settings, it is either displayed as a diagram, using note names, or not shown and instead indicated by a signpost.

During note input, harp pedal diagrams are input at the caret position.

RELATED LINKS

Playing techniques popover on page 358
Harp pedaling on page 1133
Hiding/Showing harp pedaling in layouts on page 1135
Changing the appearance of harp pedal diagrams on page 1134
Signposts on page 438

Inputting harp pedal diagrams with the panel

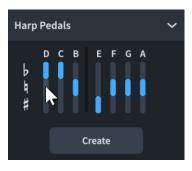
You can input harp pedal diagrams using the Playing Techniques panel.

NOTE

- You cannot input harp pedal diagrams with the panel during note input.
- These steps describe inputting with the default mouse input preference Create item at selection.

PROCEDURE

- **1.** In Write mode, select an item on a harp staff at the rhythmic position where you want to input a harp pedal diagram.
- 2. In the Notations toolbox, click **Panels** (a), then **Playing Techniques** (b) to show the Playing Techniques panel.
- **3.** In the Playing Techniques panel, expand the **Harp Pedals** section.
- **4.** For each pedal, click the column section that corresponds to the required pitch alteration, as displayed by accidentals on the left.



5. Click Create.

RESULT

The corresponding harp pedal diagram is input at the selected rhythmic position. Depending on your per-layout settings, it is either displayed as a diagram, using note names, or not shown and instead indicated by a signpost.

RELATED LINKS

Playing Techniques panel on page 361
Harp pedaling on page 1133
Hiding/Showing harp pedaling in layouts on page 1135
Changing the appearance of harp pedal diagrams on page 1134
Signposts on page 438

Calculating harp pedal diagrams based on existing music

You can automatically calculate suitable harp pedal diagrams based on the notes you have already input, either from a single point onwards or within a selected region.

If you do not input any harp pedaling, Dorico Elements assumes all harp pedals are in their natural setting, as they would be for C major. Any pitches that do not fit with the current harp pedaling, excluding the two lowest harp strings, appear red when colors for notes out of range are shown.

PROCEDURE

- **1.** In Write mode, select the region you want to use to calculate harp pedaling in one of the following ways:
 - Select an existing single note from which you want to calculate harp pedaling.
 - Select a range of notes for which you want to calculate harp pedaling.

NOTE

Dorico Elements ignores the lowest two harp strings, C and D, when calculating harp pedals.

2. Choose Write > Calculate Harp Pedals.

RESULT

A harp pedal diagram is input at the start of your selection. Depending on your per-layout settings, it is either displayed as a diagram, using note names, or not shown and instead indicated by a signpost.

RELATED LINKS

Generating chord symbols from notes on page 319

Inputting string indicators outside the staff with the popover

You can input string indicators outside the staff using the playing techniques popover, both during note input and by adding them to existing music.

PROCEDURE

- **1.** In Write mode, do one of the following:
 - Start note input.
 - Select an item on each staff at the rhythmic position where you want to input a string indicator outside the staff. If you want to input a string indicator with a duration line, select items that span the required duration.
- **2.** Optional: During note input, if you want to input notes and notations onto multiple staves, extend the caret to those staves.
- **3.** Open the playing techniques popover in any of the following ways:
 - Press Shift-P.
 - In the Notations toolbox, click **Popovers** , then **Playing Techniques** ...
- **4.** Enter the appropriate entry for the string indicator you want into the popover. For example, enter **string1** for just a string 1 indicator or **string3->** for a string 3 indicator with duration.
- **5.** Press **Return** to close the popover.
 - Open-ended string indicators, such as **string3->**, automatically extend during note input as you continue inputting notes, or if you advance the caret by pressing **Space** or clicking **Advance Caret** in the Keyboard, Fretboard, or Drum Pads panel toolbar.
- **6.** Optional: During note input, stop open-ended string indicators by opening the playing techniques popover again and entering ? into the popover.
 - This leaves the current string indicator with a duration line. You can also enter another string indicator into the popover, but this joins the current string indicator to the following one with a continuation line rather than a duration line, which is a less common notation.

RESULT

The specified string indicators are input. They are considered voice-specific by default, meaning they only apply to the voice indicated by the caret indicator during step input or the selected voice when adding string indicators to existing notes. They are automatically placed above the staff for up-stem voices and below the staff for down-stem voices.

During note input, string indicators are input at the caret position on all staves across which the caret extends. If you included an open-ended string indicator with duration, it extends automatically when you advance the caret or input notes.

String indicators added to existing music are input at the rhythmic position of, or span the duration of, either only notes or any items on each selected staff, according to your item input position setting. String indicators with duration show a duration line, which is dashed with a hook cap end by default.

AFTER COMPLETING THIS TASK

- If you input string indicators without duration but want to show dashed duration lines, you can lengthen them.
- You can change the staff-relative placement of string indicators.

RELATED LINKS

Playing techniques popover on page 358

String indicators on page 974

Changing the item input position setting on page 209

Extending the caret to multiple staves on page 218

Lengthening/Shortening items on page 419

Changing the staff-relative placement of items on page 423

Keyboard panel on page 202

Fretboard panel on page 204

Drum Pads panel on page 205

Inputting string indicators outside the staff with the panel

You can input string indicators outside the staff using the Playing Techniques panel, both during note input and by adding them to existing music.

NOTE

- You cannot input string indicators with duration during note input when using the panel. You can only do so when using the popover.
- These steps describe inputting with the default mouse input preference Create item at selection. If you want to input the same string indicator in multiple places, change your mouse input preference to Load pointer with item so that you do not have to reselect the string indicator for each note.

PROCEDURE

- **1.** In Write mode, do one of the following:
 - Start note input.
 - Select an item on each staff at the rhythmic position where you want to input a string indicator outside the staff. If you want to input a string indicator with a duration line, select items that span the required duration.
- 2. In the Notations toolbox, click **Panels** , then **Playing Techniques** to show the Playing Techniques panel.
- 3. In the Playing Techniques panel, expand the **Guitar** section.
- 4. Click the string indicator you want.

RESULT

The specified string indicator is input. It is considered voice-specific by default, meaning it only applies to the voice indicated by the caret indicator during step input or the selected voice when adding string indicators to existing notes. It is automatically placed above the staff for up-stem voices and below the staff for down-stem voices.

During note input, string indicators are input at the caret position, even if your preference is set to **Load pointer with item**.

String indicators added to existing music are input at the rhythmic position of, or span the duration of, either only notes or any items on each selected staff, according to your item input position setting. String indicators with duration show a duration line, which is dashed with a hook cap end by default.

AFTER COMPLETING THIS TASK

- If you input string indicators without duration but want to show dashed duration lines, you can lengthen them.
- You can change the staff-relative placement of string indicators.

RELATED LINKS

Playing Techniques panel on page 361

Changing your mouse input settings on page 207

Inputting string indicators inside the staff

You can show a string indicator inside the staff for each fretted instrument note. You can do this for the current layout and frame chain only, or for all layouts and frame chains. Dorico Elements automatically detects a string that each pitch could be played on, but you can also specify the string manually.

NOTE

These steps only apply to notes belonging to fretted instruments.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** 3 is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** Select the notes belonging to fretted instruments beside which you want to show string indicators. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Show** in the **String Indicators** group.

RESULT

String indicators are shown in the staff beside each selected note. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

Unless you have specified a string for each note, the string number shown in the string indicators is calculated automatically. String indicators inside the staff for open strings appear as a bold number zero without a circle enclosure.

By default, string indicators appear on the left of noteheads without left-hand fingerings and on the right of noteheads with left-hand fingerings.

AFTER COMPLETING THIS TASK

- You can specify the string on which notes are played, which affects the number shown in their corresponding string indicators.
- You can change the notehead-relative position of string indicators.

RELATED LINKS

String indicators on page 974

Fingerings for fretted instruments on page 962

Fretted instrument tuning on page 150

Assigning notes to strings on page 1040

Changing the notehead-relative position of string indicators on page 976

Engrave toolbox on page 490

Changing the property scope on page 648

Copying property settings to other layouts/frame chains on page 629

Input methods for lines

You can input both horizontal and vertical lines by using the Lines panel. There is no popover for lines.

TIP

If you want lines to represent specific notations that affect playback if applicable, you can instead input these notations directly. For example, dynamics, arpeggios, glissandi, and trills all have dedicated features in Dorico Elements.

Lines panel

The Lines panel contains the different types of lines available in Dorico Elements. It is located in the right zone in Write mode.

• You can hide/show the Lines panel by clicking **Panels** (3), then **Lines** / in the Notations

You can also hide/show the right zone by pressing Ctrl/Cmd-9.

The Lines panel contains the following sections:

Horizontal

Contains the different horizontal lines available. The options at the top of the section allow you to determine the attachment type for the start and end of horizontal lines you subsequently input.

Horizontal lines can be attached to noteheads, barlines, or rhythmic positions, and the start and end can have different attachment types.



Vertical

Contains the different vertical lines available.

RELATED LINKS

Notations toolbox on page 197

Lines on page 1174

Line components on page 1176

Inputting horizontal lines

You can input horizontal lines between existing notes or spanning a specified duration using the Lines panel. Horizontal lines can be attached to noteheads, barlines, or rhythmic positions, and can have different attachment types at their start and end.

You can also input barline-/rhythmic position-attached lines that apply to all staves.

NOTE

- You cannot change the attachment type of horizontal lines after they have been input.
- If you want to input notehead-attached horizontal lines to represent glissandi, you can instead input glissando lines directly.
- These steps describe inputting with the default mouse input preference Create item at selection.

PROCEDURE

- **1.** In Write mode, select one of the following:
 - If you want to input a notehead-attached line, select the notes you want to join with a line.
 - If you want to input a barline-/rhythmic position-attached line, select items that span the required duration of the line.
 - If you want to input a horizontal line that is attached to noteheads at one end but barlines/rhythmic positions at the other end, select the required note and any item at the required rhythmic position of the other end.

TIP

You can input horizontal lines on multiple selected staves simultaneously. However, notehead-attached lines can only join notes belonging to the same player, although they can be in different voices and on different staves.

- 2. In the Notations toolbox, click **Panels** ②, then **Lines** 🗾 to show the Lines panel.
- 3. In the Horizontal section, choose one of the following options for both Start and End:
 - Attach to notehead
 - Attach to barline (where available)
 - Attach to rhythmic position
- **4.** Input a line with the specified attachments in one of the following ways:
 - To input a notehead-attached line or barline-/rhythmic position-attached line on the selected staves only, click it in the **Horizontal** section.
 - To input a barline-/rhythmic position-attached line that applies to all staves, Alt/Optclick it in the Horizontal section.

RESULT

A horizontal line with the specified attachments is input. They are positioned according to their attachment types and their rhythmic positions.

Barline-/Rhythmic position-attached lines span the duration of either only notes or any items on each selected staff, according to your item input position setting.

Horizontal lines that apply to all staves are categorized as system objects. Therefore, they follow your per-layout settings for the visibility and positioning of system objects.

AFTER COMPLETING THIS TASK

- You can change the placement and staff position of barline-/rhythmic position-attached lines.
- You can add text to lines.

RELATED LINKS

Notations toolbox on page 197

Lines on page 1174

Positions of lines on page 1177

System objects on page 1303

Adding text to lines on page 1188

Changing the placement of horizontal lines on page 1181

Inputting glissando lines with the popover on page 341

Changing the item input position setting on page 209

Inputting vertical lines

You can input vertical lines on existing notes using the Lines panel, including across notes in multiple voices and on different staves that belong to the same instrument, such as piano or harp.

NOTE

- If you want to input vertical lines to represent arpeggios, you can instead input arpeggio signs directly.
- These steps describe inputting with the default mouse input preference Create item at selection. You cannot create cross-staff and cross-voice vertical lines if your preference is set to Load pointer with item.

PROCEDURE

1. In Write mode, select at least one note in each voice to which you want to add a vertical line.

NOTE

- For instruments with multiple staves, such as piano and harp, you can select existing
 notes on multiple staves to create cross-staff vertical lines. However, you cannot create
 cross-staff vertical lines between different instruments, even if they are held by the same
 player.
- Vertical lines are added to all notes in the selected voices at the selected rhythmic positions.
- 2. In the Notations toolbox, click **Panels** ♠, then **Lines** ✓ to show the Lines panel.
- **3.** In the **Vertical** section, click the line you want.

RESULT

The vertical line specified is input to the left of the selected notes. Its length is adjusted automatically so that it spans the range of all notes in the selected voices/staves at that rhythmic position.

AFTER COMPLETING THIS TASK

- You can change the order of lines when multiple exist at the same rhythmic position and show vertical lines on the right of notes.
- You can lengthen/shorten vertical lines.
- You can add text to lines.

RELATED LINKS

Notations toolbox on page 197

Lines on page 1174

Length of lines on page 1183

Lengthening/Shortening vertical lines on page 1184

Adding text to lines on page 1188

Showing vertical lines on the right/left of notes on page 1178

Changing the horizontal order of vertical lines on page 1178

Inputting arpeggio signs with the popover on page 339

Changing your mouse input settings on page 207

Inputting text items

You can input text at specific rhythmic positions in the score using text items. You can input staff-attached text for single staves or input system-attached text that applies to all staves and appears in all applicable layouts.

PROCEDURE

- **1.** In Write mode, do one of the following:
 - Start note input.
 - Select an item on the staff and at the rhythmic position where you want to input text.
- 2. Open the text editor in any of the following ways:
 - To input staff-attached text, press **Shift-X** or click **Popovers**, then **Text T** in the Notations toolbox.
 - To input staff-attached text with a specific paragraph style, choose Write > Create
 Text > [Paragraph style].
 - To input system-attached text, press Shift-Alt/Opt-X.
 - To input system-attached text with a specific paragraph style, choose Write > Create
 System Text > [Paragraph style].
- 3. Enter the text you want.
 - To insert a line break, press **Return**.
 - To insert a music symbol, right-click in the text item and choose **Insert Music Text** from the context menu to open the **Insert Music Text** dialog. Select the music symbol you want to insert, then click **OK**.
 - To insert a Unicode character, enter its four-character hexadecimal code, then press **Alt/Opt-X**.
- **4.** Optional: Format the text using the text editor options.
- 5. Press **Esc** or **Ctrl/Cmd-Return** to close the text editor.

RESULT

During note input, the text you entered into the text editor is input at the caret position. When adding text to existing music, it is input at the position of the earliest selected item.

If you did not change or specify the paragraph style, the text item uses the **Default Text** paragraph style.

Text items are automatically placed above the staves to which they apply and follow the default settings for the vertical position of text.

NOTE

- In Dorico Elements, system-attached text is categorized as a system object. Therefore, system-attached text follows your per-layout settings for the visibility and positioning of system objects.
- If you override the paragraph style of text in an individual text item or text frame, such as by making text bold, any changes you later make to corresponding parameters of the paragraph style are not applied to the overridden text. However, font size overrides are combined with the font size in the paragraph style.
- You can assign key commands for inputting text with specific paragraph styles, for both
 Create Text and Create System Text, on the Key Commands page in Preferences.

RELATED LINKS

Notations toolbox on page 197

Types of text on page 1329

System objects on page 1303

Changing the staff-relative placement of items on page 423

Enabling/Disabling text collision avoidance on page 1334

Paragraph Styles dialog on page 739

Key Commands page in the Preferences dialog on page 58

Text editor options in Write mode

The text editor allows you to add and format text. In Write mode, it opens when you add or edit text items.



The text editor provides the following options:

1 Character Style

Allows you to change the appearance of selected text within paragraphs. This overrides the paragraph style applied to the corresponding paragraph.

2 Paragraph Style

Allows you to change the paragraph style applied to the whole text item. Depending on the paragraph style, this can change the appearance, formatting, and alignment of the text.

3 Font

Allows you to change the font family of selected text.

4 Font Style

Allows you to change the font style of selected text.

NOTE

- Depending on the font selected, some font styles might not be available.
- You can also change the font style using the following standard key commands:
 - Ctrl/Cmd-B for bold
 - Ctrl/Cmd-I for italic

5 Font Size

Allows you to change the size of selected text.

TIP

You can also change the font size using the following key commands:

- Ctrl/Cmd-Shift-. to increase the font size
- Ctrl/Cmd-Shift-, to decrease the font size

6 Font Stretch

Allows you to make selected text wider or narrower.

7 Baseline Shift

Allows you to shift the baseline of selected text gradually up or down.

8 Letter Spacing

Allows you to increase/decrease the space between the characters of selected text.

9 Word Spacing

Allows you to increase/decrease the space between the words of selected text.

10 Leading

Allows you to increase/decrease the line spacing of the whole text item.

11 Line Types

Allows you to show any of the following types of lines, in any combination, on selected text:

- Underline
- Overline
- Strikethrough

TIP

You can also make selected text underlined by pressing Ctrl/Cmd-U.

12 Script Types

Allows you to position selected text in one of the following positions relative to the text on the baseline:

- Superscript
- Subscript

13 Alignment

Allows you to choose one of the following alignments for the text item relative to its rhythmic position:

- Align Left
- Align Center
- Align Right

14 Foreground Color

Allows you to change the color of selected text.

15 Background Color

Allows you to change the background color of selected text.

NOTE

If you override the paragraph style of text in an individual text item or text frame, such as by making text bold, any changes you later make to corresponding parameters of the paragraph style are not applied to the overridden text. However, font size overrides are combined with the font size in the paragraph style.

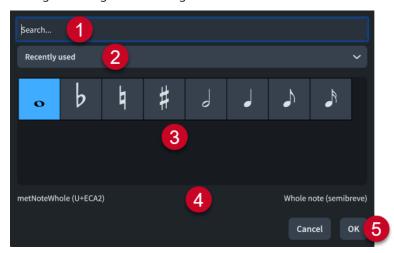
RELATED LINKS

Types of text on page 1329
Changing the default font family on page 743
Paragraph Styles dialog on page 739
Character Styles dialog on page 742
Missing Fonts dialog on page 72

Insert Music Text dialog

The **Insert Music Text** dialog allows you to add music symbols, such as accidentals and note symbols, to text items.

• You can open the **Insert Music Text** dialog when inputting or editing text in a text item by right-clicking and choosing **Insert Music Text** from the context menu.



The **Insert Music Text** dialog comprises the following:

1 Search field

Allows you to search for music symbols by their SMuFL name. When you start entering text, a menu appears that shows valid music symbols containing the letters/words you enter, which you can select.

2 Range menu

Allows you to select which SMuFL glyph range is available in the music symbol selector. By default, **Recently used** is selected, which contains common accidentals and note symbols in addition to music symbols you have used in recent projects.

3 Music symbol selector

Contains the available music symbols in the selected range or that match your entry.

4 Name

Displays the SMuFL name and description, where available, of the selected music symbol.

5 OK

Inserts the selected music symbol at the cursor position with the **Music Text** character style applied to them automatically.

You can also insert music symbols by selecting them and pressing **Return**, or double-clicking them.

Editing text in text items

You can edit the text shown in text items; for example, to replace individual words or to change their formatting.

PROCEDURE

- 1. Open the text editor for an existing text item in any of the following ways:
 - Select the text item and press Return.
 - Double-click the text item.

- **2.** Edit the text in the text item.
 - For example, you can format the text using the text editor options.
- 3. Press Esc or Ctrl/Cmd-Return to close the text editor.

Inputting lyrics

You can input lyrics by entering text into the lyrics popover, and you can advance the lyrics popover to the next note on the staff without closing and reopening it for every note.

PROCEDURE

- 1. In Write mode, select the note on the staff from which you want to start inputting lyrics.
- 2. Open the lyrics popover in any of the following ways:
 - Press Shift-L.
 - In the Notations toolbox, click Popovers =, then Lyrics
- 3. Optional: Change the type of lyric in one of the following ways:
 - To change the lyric line number, press **Down Arrow**.
 - To input lyrics above the staff, press **Shift-Up Arrow**.
 - To input chorus lines, press **Up Arrow**.
 - To input lyric line translations, press Alt/Opt Down Arrow.
 - . Enter the word or syllable you want to add to the selected note into the popover.
 - To include multiple words in a single lyric, press Shift-Alt/Opt-Space for a non-breaking space.
 - To include a hyphen within a single word or syllable, press **Alt/Opt-** (hyphen).
 - To include an elision in a lyric, press [(underscore).
- **5.** Advance the popover to the next note in one of the following ways:
 - If you entered a complete word, or the final syllable in a multi-syllabic word, press **Space**.
 - If you entered one syllable of a multi-syllabic word that is not the final syllable, press (hyphen).
 - If you do not want the syllable to be followed by an extension line or hyphen, press **Right Arrow** .

TIP

For lyrics sung over multiple notes, you can press these key commands multiple times until the lyrics popover reaches the note where you want to input the next lyric.

- **6.** Continue entering words and syllables into the popover for the rest of the notes to which you want to add lyrics.
- **7.** Press **Return** or **Esc** to close the popover.

The popover closes automatically when you reach the last note on the staff.

RESULT

The text you entered into the popover is input as lyrics of the type indicated by the icon on the left-hand side of the popover.

When you advance the popover to the next note by pressing -, a hyphen appears after the last entered lyric. This is used for multi-syllabic words across multiple notes.

When you advance the popover by pressing **Space**, either a gap or a lyric extender line appears after the last entered lyric, depending on the available horizontal space and whether the note appears as a tie chain. This is used for single-syllable words or for the final syllable in multi-syllabic words.

TIP

- You can later change whether a gap or a hyphen appears between lyrics by changing their syllable type.
- You can also input lyrics by copying and pasting them; for example, from an external text editor.

RELATED LINKS

Notations toolbox on page 197

Lyrics on page 1010

Types of lyrics on page 1010

Types of syllables in lyrics on page 1012

Copying and pasting lyrics on page 1013

Lyric line numbers on page 1028

Lyric hyphens and lyric extender lines on page 1026

Elision slurs on page 1031

Lyric text editing on page 1023

Lyrics popover

You can input lyrics, including chorus lines and lyric line translations, using the lyrics popover. You can use key commands to change the type of lyric being input at any time.

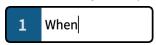
You can open the lyrics popover in Write mode in any of the following ways when either an item is selected or the caret is active:

- Press Shift-L.
- In the Notations toolbox, click **Popovers** , then Lyrics ...
- Select an existing lyric and press **Return**.
- Choose Write > Create Lyrics.

Lyric lines

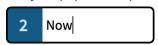
The popover automatically opens ready to input lyrics into Line 1, except if you are changing an existing lyric.

The number shown on the left-hand side of the lyrics popover indicates the lyric line into which the lyric is input.



The lyrics popover with an example entry for Line 1

You can change the lyric line number by pressing **Up Arrow** and **Down Arrow** when the lyrics popover is open.



The lyrics popover with an example entry for Line 2

Lyric lines above the staff

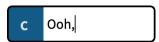
You can input lyrics into lines above the staff by pressing **Shift-Up Arrow** when the lyrics popover is open.

You can then press **Up Arrow** and **Down Arrow** to change the lyric line number above the staff.

Chorus lines

You can input chorus lines by pressing **Up Arrow** when the lyrics popover is open. You can do this when inputting lyrics below the staff and above the staff.

A **c**, for "chorus lines", is shown on the left-hand side of the popover.

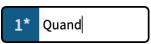


The lyrics popover with an example entry for a chorus line

Lyric line translations

You can input lyric line translations by pressing **Alt/Opt - Down Arrow** when the lyrics popover is open.

An asterisk (*) is shown beside the lyric line number for which you are inputting a lyric line translation on the left-hand side of the popover.



The lyrics popover with an example entry for a lyric line translation

Navigation during lyric input

You can move the lyrics popover to input new lyrics and edit existing lyrics without having to close and reopen the lyrics popover.

Popover navigation	Key command
Finish the current word and advance the popover to the next note or chord.	Space
Finish the current syllable and advance the popover to the next note or chord.	- (hyphen)
Advance the popover to the next note without showing an extension line or hyphen.	Right Arrow
Move the cursor to the next/previous letter. If the next/previous letter is in another lyric, the popover advances to that lyric.	Right Arrow / Left Arrow
Move the popover forwards/backwards from syllable to syllable within lines of lyrics.	Alt/Opt-Right Arrow / Alt/Opt-Left Arrow
Add non-breaking spaces without advancing the popover.	Shift-Alt/Opt-Space

Popover navigation	Key command
Add a hyphen within a single word or syllable without advancing the popover.	Alt/Opt (hyphen)
Add an elision slur within a word or syllable.	_ (underscore)

Inputting figured bass

You can input figured bass using the figured bass popover, both for all instruments or only for individual instruments. You can also open the figured bass popover during note input; however, inputting a figure stops note input.

PROCEDURE

- **1.** In Write mode, select an item on the staff and at the rhythmic position where you want to start inputting figured bass.
- **2.** Open the figured bass popover in any of the following ways:
 - Press Shift-G.
 - In the Notations toolbox, click **Popovers** , then **Figured Bass** .

NOTE

If you selected an item on a staff that has local figures at earlier rhythmic positions, the figured bass popover is automatically set to input local figures when it opens.

- **3.** Optional: Change the type of figure you want to enter in one of the following ways:
 - To input local figures, press Alt/Opt-L.
 - To input global figures, press Alt/Opt-G.

The popover icon updates to show the current type.



Figured bass popover when inputting a global figure

Figured bass popover when inputting a local figure

4. Enter the figure you want into the figured bass popover.

For example, enter **4->3d=4r=2** for a 4-3 suspension that lasts a whole note, with the resolution to the third after a half note. For bracketed figures, include parentheses around the required figures or accidentals, such as **(#)64(3)**.

If you want Dorico Elements to follow your entry exactly, include **O**, **o**, or **!** at the start of your entry. For example, to force Dorico Elements to show 5,3 figures.

5. Optional: Press **Space** to advance the popover to the next beat according to the prevailing time signature.

TIP

You can also navigate the popover forwards and backwards by different amounts.

- **6.** Optional: To input an individual local figure when the popover is set to global, and vice versa, press **Alt/Opt-Return** to input the figure.
- 7. Press **Return** to close the popover.

RESULT

The figured bass specified is input. If you selected an item belonging to an instrument that was not already set to show figured bass in the current layout, its player is automatically updated to show them. If Dorico Elements cannot identify the bass note at the position of a figure, such as if you input a figure on a rest, it appears as a signpost.

Dorico Elements calculates and saves the pitches implied by the figures you enter in relation to the lowest note at that rhythmic position. This semantic understanding of the harmony implied by figures allows Dorico Elements to update the displayed figures on different staves and if you transpose or change the pitch of notes.

Global figures apply to all instruments in the project and appear on all staves whose players are set to show figured bass. Local figures only apply to the selected instrument, and by default refer to its lowest staff. Local figures always appear, even if global figures exist at the same rhythmic positions.

NOTE

- Unless you included an entry for Follow input literally at the start of your popover entry, the appearance of the resulting figure is determined by the default settings in Dorico Elements
- The appearance of *tasto solo* indications depends on the formatting of the **Figured Bass Tasto Solo** paragraph style.
- You can move figures graphically in Engrave mode, including changing the graphical length of hold lines.

EXAMPLE

Entering **4->3d=4r=2** into the figured bass popover produces a 4-3 suspension that lasts a whole note, with the resolution to the third after a half note.



AFTER COMPLETING THIS TASK

- You can hide/show figured bass above specific players in each layout independently.
- You can simplify compound figures; that is, figures 9 and above.
- You can show figures on individual rests.

RELATED LINKS

Figured bass on page 938

Figured bass hold lines on page 942

Hiding/Showing figured bass in layouts on page 939

Moving figured bass resolutions on page 947

Paragraph Styles dialog on page 739

Simplifying figured bass compound intervals on page 949

Showing figured bass on rests on page 940

Appearance of figured bass on page 948

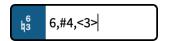
Figured bass popover

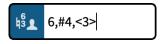
The following tables contain examples of what you can enter into the figured bass popover to input the different possible figured bass figures, including alterations and suspensions.

You can open the figured bass popover in Write mode in any of the following ways when either a note is selected or the caret is active:

- Press Shift-G.
- In the Notations toolbox, click **Popovers** , then **Figured Bass** .
- Choose Write > Create Figured Bass.

When inputting global figured bass, the icon on the left-hand side of the popover matches the corresponding button in the Notations toolbox. When inputting local figured bass, the icon on the left-hand side of the popover appears smaller and includes the icon for a single player.







Figured bass popover with an example entry for a global figure

Figured bass popover with an example entry for a local figure

Figured Bass button in the Notations toolbox

Figures and suspensions

Type of figure	Example popover entry
Figures (1-19)	1 , 2 , 3 , and so on, up to 19
Bracketed figures or accidentals	(#643), #64(3), (#)643, and so on
Figures determined by chord symbols	Em7, Amaj7, or G/B, and so on
Dorico Elements automatically converts chord symbols, as you would enter into the chord symbols popover, into correct figured bass.	
tasto solo	ts or tasto
Hold duration	<pre>d=2 (number of quarter notes) or d=1/2n (fraction of bass note duration)</pre>
Multiple figures	6#42 or 6,#4,2
TIP	
You can separate figures with commas to remove ambiguity.	
Hide figures	<3> or {3}
Suspensions	4->3, 4_3, or 4~3

Type of figure	Example popover entry
Suspension duration; that is, the duration between suspension and resolution figures	r=2 (number of quarter notes) or r=1/2n (fraction of bass note duration)
Hold and suspension durations both specified	4->3d=4r=2 or 4->3d=1nr=1/2n
For example, a 4-3 suspension that lasts a whole note, with the resolution to the third after a half note.	
Follow Engraving Options for this figure only	R, r, V, v, or?
NOTE	
Must be at the start of the popover entry.	
Follow input literally for this figure only NOTE	O, o, or !
Must be at the start of the popover entry.	

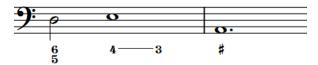
This list is not comprehensive. It is intended to illustrate how you can structure your entry to input different figures.

NOTE

- Unless you include an entry for **Follow input literally** at the start of your popover entry, the appearance of resulting figures is determined by Dorico Elements's default settings.
- The appearance of *tasto solo* indications depends on the formatting of the **Figured Bass Tasto Solo** paragraph style.

EXAMPLE

Entering **4->3d=4r=2** into the figured bass popover produces a 4-3 suspension that lasts a whole note, with the resolution to the third after a half note.



Accidentals and alterations

Type of accidental/alteration	Popover entry
Sharp	# or s
TIP	
For raised thirds, you can enter just without the number.	
Flat	b or f
Natural	N or n
Double sharp	x, ##, or ds
Triple sharp	x #, #x , ### , or ts
Double flat	bb or db
Triple flat	bbb or tb
Raise figure by a half-step (semitone)	+
Lower figure by a half-step (semitone)	-
Diminished figure	d
Unaltered figure	u

RELATED LINKS

Notations toolbox on page 197 Figured bass on page 938 Figured bass hold lines on page 942 Chord symbols popover on page 312 Paragraph Styles dialog on page 739

Navigation during figured bass input

You can move the figured bass popover manually by different amounts to input figured bass figures at other positions without closing and reopening the popover each time.

Popover navigation	Key command
Advance the popover to the next beat, according to the prevailing time signature.	Space
Move the popover back to the previous beat, according to the prevailing time signature.	Shift-Space

Popover navigation	Key command
Advance the popover to the start of the next bar.	Tab
Move the popover back to the start of the previous bar.	Shift-Tab
Move the cursor and popover to one of the following positions, whichever is closest:	Right Arrow / Left Arrow
Next/Previous note or rest	
Next/Previous rhythmic grid position	
 Next/Previous character in existing figure's entry 	
Move the popover to the next/previous figure.	Ctrl/Cmd-Right Arrow / Ctrl/Cmd-Left Arrow

RELATED LINKS

Key Commands page in the Preferences dialog on page 58

Inputting rehearsal marks

You can input rehearsal marks with the mouse and the keyboard. You can input rehearsal marks during note input and later by adding them to existing music.

PROCEDURE

- **1.** In Write mode, do one of the following:
 - Start note input.
 - Select an item at the rhythmic position where you want to input a rehearsal mark. For example, a barline or a note.

NOTE

You can only input one rehearsal mark at a time, even if multiple items are selected.

- 2. Input a rehearsal mark in any of the following ways:
 - Press Shift-A.
 - In the Notations toolbox, click **Popovers** , then **Rehearsal Marks** .

RESULT

A rehearsal mark is input at the selected barline, or at the rhythmic position of other selected items.

The order of rehearsal marks is updated automatically, meaning you can input them in any order, including before and between existing rehearsal marks.

AFTER COMPLETING THIS TASK

If you want to change the letter/number displayed in the rehearsal mark, you can change its index and/or sequence type.

RELATED LINKS

Notations toolbox on page 197

Rehearsal marks on page 1196

Changing the index of rehearsal marks on page 1197

Changing the rehearsal mark sequence type on page 1198

Adding prefixes/suffixes to rehearsal marks on page 1199

Going to rehearsal marks on page 430

Changing your mouse input settings on page 207

Inputting markers/timecodes

You can input markers at specific positions in time. In Dorico Elements, timecodes are automatically shown alongside markers.

PROCEDURE

- 1. In Write mode, move the playhead to the time position where you want to input a marker.
- 2. Press Shift-Alt/Opt-M to open the Add Marker dialog.
- 3. Enter the marker text you want into the **Text** field.
- **4.** Optional: Change the timecode in the **Timecode** field.
- **5.** Click **OK** to input the marker and close the dialog.

RESULT

A marker is input at the timecode position set in the **Add Marker** dialog, which by default is the position of the playhead.

It shows the text you entered, or the default text "Marker" if you did not change the marker text, and a timecode reflecting its position.

TIP

You can also input markers by clicking **Add Marker** • in the **Markers** section of the Video panel, or by using the Markers track in Play mode.

RELATED LINKS

Markers on page 1201

Timecodes on page 1206

Moving the playhead on page 523

Editing marker text on page 1203

Changing the timecodes of markers on page 1204

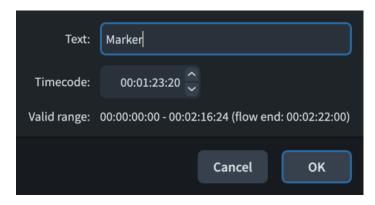
Video panel on page 392

Markers track on page 519

Add Marker dialog

The **Add Marker** dialog allows you to input markers with custom text at specific timecodes.

• The **Add Marker** dialog opens automatically when you input markers in Write mode, either by pressing **Shift-Alt/Opt-M** or by clicking **Add Marker →** in the **Markers** section of the Video panel.



The Add Marker dialog contains the following options:

Text

Allows you to enter custom text that is shown in the marker.

Timecode

Allows you to specify the timecode at which you want to input the marker. For example, if you already know the timecodes for each marker, you can enter them directly rather than positioning the playhead at the position of each marker.

Valid range

Displays the timecode range of the flow.

Video panel

The Video panel in Write mode allows you to access the **Video Properties** dialog, and to input and edit markers and timecodes. You can also define markers as important and calculate suitable tempos for them. It is located in the right zone in Write mode.

• You can hide/show the Video panel by clicking **Panels** ②, then **Video** in the Notations toolbox.

You can also hide/show the right zone by pressing **Ctrl/Cmd-9**.

In the **Video** section of the Video panel, you can click **Properties** to open the **Video Properties** dialog.

The **Markers** section of the Video panel contains a table of markers, divided into the following columns:

Timecode

Shows the timecode of the marker. You can edit the timecode by double-clicking in the field.

Text

Shows the text of the marker. You can edit the text by double-clicking in the field.

Imp.

Stands for "important". Allows you to define markers as important by activating their checkbox in this column.

When markers are defined as important, their entry uses a bold font in the table and they are considered when finding a suitable tempo in the **Find Tempo** dialog.

The action bar at the bottom of the table contains the following options:

- Add Marker #: Adds a marker at the playhead position.
- **Delete Marker** : Deletes the selected marker.

NOTE

You can only delete one marker at a time.

RELATED LINKS

Notations toolbox on page 197 Video Properties dialog on page 185

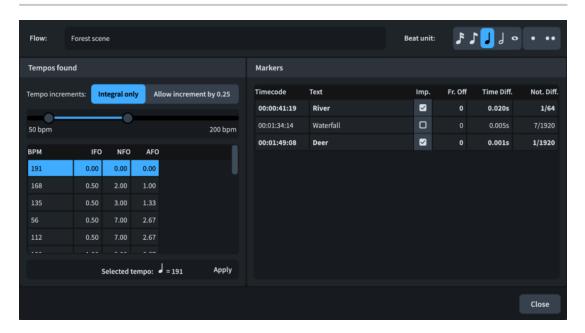
Find Tempo dialog

The **Find Tempo** dialog allows you to calculate tempos that best accommodate your important markers; for example, by identifying which tempos cause markers to coincide as closely as possible with strong beats.

 You can open the Find Tempo dialog in Write mode by clicking Find Tempo in the Markers section of the Video panel.

NOTE

- The **Find Tempo** dialog only considers markers in a single flow. You can change which flow by selecting an item in the corresponding flow and then opening the dialog.
- The **Find Tempo** dialog is only available if you have input at least one marker in the flow and defined at least one marker as important.



The **Find Tempo** dialog contains the following options and sections:

Flow

Shows the name of the flow whose tempo you are determining. This field is read-only.

Beat unit

Allows you to change the beat unit considered for the tempo. For example, if the time signature for the flow is 6/8, you might want to change the beat unit to a dotted quarter note.

Tempo increments

Allows you to filter the suggested tempos according to their precision.

- **Integral only**: Only whole number tempos, that is, tempos without decimal places, are suggested.
- **Allow increment by 0.25**: Allows tempos with decimal places of .25, .5, and .75 to be suggested.

Tempo range

Allows you to set the minimum/maximum tempos you want to consider.

Tempos found

Contains a list of possible tempos that you can select to see how they affect the position of your markers relative to beats. The list is updated automatically when you change options such as **Tempo range** and **Beat unit**.

The list contains columns for the following information:

- **BPM**: Stands for "beats per minute". Lists different possible tempos according to their metronome mark value.
- **IFO**: Stands for "important frames off". Indicates the average number of frames by which important markers miss significant beats, either before or after.
- NFO: Stands for "non-important frames off". Indicates the average number of frames by which non-important markers miss significant beats, either before or after.
- **AFO**: Stands for "all frames off". Indicates the average number of frames by which all markers in the flow miss significant beats, either before or after.

Found tempos are listed in descending order of average frames off for important markers.

Markers

Shows the impact that the tempo currently selected in the **Tempos found** list would have on each marker in the flow in more detail.

- **Timecode**: Shows the exact timecode of each marker.
- **Text**: Shows the marker text of each marker to help you identify them.
- **Imp.**: Indicates whether a marker has been defined as important.
- **Fr. Off**: Stands for "frames off". Shows the average number of frames by which each marker misses being aligned to beats.
- **Time Diff.**: Stands for "time difference". Shows the time difference between the position of the marker and the position of the nearest beat, expressed in fractions of a second.
- **Not. Diff.**: Stands for "notated difference". Shows the notated difference between the position of the marker and the position of the nearest beat, expressed in fractions of a whole note.

Selected tempo

Displays the currently selected tempo for the flow.

Apply

Applies the selected tempo to the flow by inputting it as a tempo mark at the beginning of the flow. Any other tempo marks in the flow are automatically deleted.

RELATED LINKS

Defining markers as important on page 1205 Metronome marks on page 1319

Input methods for repeats and tremolos

You can input repeats and tremolos, including repeat endings, repeat markers, and rhythm slashes, with the keyboard by using the repeats popover, and with the mouse by using the Repeat Structures panel.

Tremolos are included in the Repeat Structures panel because they indicate that notes are repeated, either individually as single-note tremolos or in sequences as multi-note tremolos.

TIP

To indicate repeats using repeat barlines, you can input repeat barlines using the available input methods for barlines.

RELATED LINKS

Input methods for bars, beats, and barlines on page 294 Repeats in playback on page 534

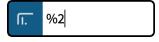
Repeats popover

The following tables contain the entries for the repeats popover that you can use to input the different tremolos, repeat markers, repeat endings, and bar repeat, slash, and numbered bar regions available.

You can open the repeats popover in Write mode in any of the following ways when either an item is selected or the caret is active:

- Press Shift-R.
- In the Notations toolbox, click **Popovers** , then **Repeats** ...
- Select an existing repeat marker, slash region, or bar repeat and press Return.
- Choose Write > Create Repeat.

The icon on the left-hand side of the popover matches the corresponding button in the Notations toolbox on the right of the window.





Repeats popover with an example entry

Repeat Structures button in the Notations toolbox

Repeat endings

Part of repeat ending	Popover entry
Whole repeat ending	end or ending
Additional repeat ending segment	add

Repeat markers

Type of repeat marker	Popover entry
D.C.	dc, D.C., da capo, and so on
D.C. al Fine	dcalf, DC al Fine, D.C. al Fine, and so on
D.C. al Coda	dcalc, DC al Coda, D.C. al Coda, and so on
D.S.	ds, D.S., dal segno, and so on
D.S. al Fine	dsalf, DS al Fine, D.S. al Fine, and so on
D.S. al Coda	dsalc, DS al Coda, D.S. al Coda, and so on
to Coda	toc, tc, to coda, To Coda, and so on
Segno	s, seg, segno, and so on
Fine	f, fin, fine, and so on
Coda	c, co, coda, and so on

The list of entries for repeat markers is not comprehensive, as the flexibility of the popover means you can enter any reasonable version or abbreviation of the type of repeat marker you want, and the popover recognizes it in most cases.

Single-note tremolos

Type of tremolo	Popover entry
One stroke	/, or 1
Two strokes	//, \ or 2
Three strokes	///, \\ or 3
Four strokes	////, \\\ or 4
Z on stem (buzz roll)	z or zonstem
Tremolo with release; for example, two-strokes with release	rel; for example, //rel or 2rel
Tremolo with attack; for example, two-strokes with attack	att; for example, //att or 2att
Remove all tremolos	0 or clear

Multi-note tremolos

Type of tremolo	Popover entry
One stroke	/2, \2, or 12
Two strokes	//2, \\2, or 22
Three strokes	///2, \\\2, or 32
Four strokes	////2, \\\\2, or 4 2
Remove all tremolos	0 or clear

Slash regions

Slash region	Popover entry
New slash region	slash

Numbered bar regions

Numbered bar region	Popover entry
New numbered bar region	nb, num, numbars, or number bars

Bar repeats

Type of bar repeat	Popover entry
Repeat last bar	% or %1
Repeat last 2 bars	%2
Repeat last 4 bars	%4
Repeat last bar, group in 2	%1,2
Repeat last bar, group in 4	%1,4
Repeat last 2 bars, group in 4	%2,4

RELATED LINKS

Notations toolbox on page 197 Repeat endings on page 1210 Repeat markers on page 1216 Tremolos on page 1377
Rhythm slashes on page 1236
Bar repeats on page 1224
Numbered bar regions on page 1231
Bars and barlines popover on page 294

Repeat Structures panel

The Repeat Structures panel contains the different types of repeat notations available in Dorico Elements, including repeat endings, tremolos, and bar repeats. It is located in the right zone in Write mode.

Tremolos are included in the Repeat Structures panel because they indicate that notes are repeated, either individually as single-note tremolos or in sequences as multi-note tremolos.

• You can hide/show the Repeat Structures panel by clicking **Panels** , then **Repeat Structures** in the Notations toolbox.

You can also hide/show the right zone by pressing Ctrl/Cmd-9.

The Repeat Structures panel contains the following sections:

Repeat Endings

Contains options that allow you to input new repeat endings and add additional endings to existing repeat endings.

Repeat Jumps

Contains different types of repeat markers that instruct players to jump to a specific point in the piece, such as "D.S. al Coda".

Repeat Sections

Contains different sections used in conjunction with repeat jumps, such as "Coda".

Tremolos

Contains different types of single-note and multi-note tremolos.

Rhythm Slashes

Allows you to input a region that displays rhythm slashes that are automatically formatted to be compatible with the prevailing time signature.

Bar Repeats

Allows you to input a region that indicates that the preceding bar is repeated without re-notating the bar.

TIP

You can input bar repeat regions with different bar groupings when using the repeats popover.

Numbered Bars

Allows you to input a region that displays bar counts without additional notations.

RELATED LINKS

Notations toolbox on page 197 Repeats popover on page 395

Inputting repeat endings with the popover

You can input repeat endings using the repeats popover, both during note input and by adding them to existing music.

PROCEDURE

- **1.** In Write mode, do one of the following:
 - Start note input.

TIP

During note input, you can select additional notes before/after the last input note without deactivating the caret by pressing **Shift-Right Arrow** / **Shift-Left Arrow** .

- Select at least one item in each bar that you want to include in the first ending.
- **2.** Open the repeats popover in any of the following ways:
 - Press Shift-R.
 - In the Notations toolbox, click Popovers , then Repeats ...
- 3. Enter end or ending into the popover.
- 4. Press Return to close the popover.

RESULT

The repeat ending is input, with the first ending segment covering the bars in which you selected items, and a second ending segment created automatically in the following bar.

An end repeat barline is created at the end of the first ending if none exists already.

RELATED LINKS

Repeats popover on page 395

Repeat endings on page 1210

Changing the total number of playthroughs in repeat endings on page 1210

Types of barlines on page 799

Adding additional repeat endings with the popover

You can have more than two possible endings in each repeat ending structure by adding additional segments using the repeats popover. You can add repeat ending segments both during note input and by adding them to existing music.

PROCEDURE

- **1.** In Write mode, do one of the following:
 - Start note input.

TIP

During note input, you can select additional notes before/after the last input note without deactivating the caret by pressing **Shift-Right Arrow**/**Shift-Left Arrow**.

Select the bars that you want to include in the additional ending.

NOTE

Your selection must start from the first bar in the final repeat ending segment.

- 2. Open the repeats popover in any of the following ways:
 - Press Shift-R.
 - In the Notations toolbox, click **Popovers** , then **Repeats** ...
- **3.** Enter **add** into the popover.
- 4. Press Return to close the popover.
- 5. Optional: Repeat these steps as many times as required for the number of additional endings you want.

RESULT

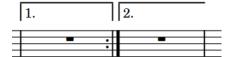
A new repeat ending segment is added. The existing previous repeat ending segment now ends with a closed line, with an end repeat barline created if necessary.

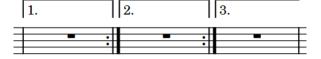
TIP

You can also add additional repeat ending segments by selecting the repeat ending and changing the value for No. endings in the Repeat Endings group of the Properties panel.

However, No. endings only adds additional repeat ending segments that contain one bar, and does not automatically input or reposition repeat barlines. You must input repeat barlines as appropriate manually.

EXAMPLE





Default repeat ending structure with two endings

Repeat ending structure with additional third ending

Inputting repeat endings with the panel

You can input repeat endings using the Repeat Structures panel, both during note input and by adding them to existing music.

PROCEDURE

- **1.** In Write mode, do one of the following:
 - Start note input.

TIP

During note input, you can select additional notes before/after the last input note without deactivating the caret by pressing Shift-Right Arrow/Shift-Left Arrow.

- Select at least one item in each bar that you want to include in the first ending.
- 2. In the Notations toolbox, click Panels (3), then Repeat Structures (1) to show the Repeat Structures panel.
- 3. In the Repeat Endings section, click Create Repeat Ending

RESULT

The repeat ending is input, with the first ending segment covering the bars in which you selected items, and a second ending segment created automatically in the following bar.

An end repeat barline is created at the end of the first ending if none exists already.

RELATED LINKS

Repeat Structures panel on page 398

Repeat endings on page 1210

Changing the total number of playthroughs in repeat endings on page 1210

Types of barlines on page 799

Adding additional repeat endings with the panel

You can have more than two possible endings in each repeat ending structure by adding additional segments using the Repeat Structures panel. You can add repeat ending segments both during note input and by adding them to existing music.

PROCEDURE

- **1.** In Write mode, do one of the following:
 - Start note input.

TIP

During note input, you can select additional notes before/after the last input note without deactivating the caret by pressing **Shift-Right Arrow** / **Shift-Left Arrow** .

Select the bars that you want to include in the additional ending.

NOTE

Your selection must start from the first bar in the final repeat ending segment.

- 2. In the Notations toolbox, click **Panels** (3), then **Repeat Structures** (a) to show the Repeat Structures panel.
- 3. In the Repeat Endings section, click Add Section To Repeat Ending

NOTE

If increasing the number of endings makes the repeat ending collide with any part of another repeat ending, the other repeat ending is deleted. However, its repeat barlines are not deleted.

4. Optional: Repeat these steps as many times as required for the number of additional endings you want.

RESULT

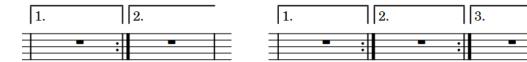
A new repeat ending segment is added. The existing previous repeat ending segment now ends with a closed line, with an end repeat barline created if necessary.

TIP

You can also add additional repeat ending segments by selecting the repeat ending and changing the value for **No. endings** in the **Repeat Endings** group of the Properties panel.

However, **No. endings** only adds additional repeat ending segments that contain one bar, and does not automatically input or reposition repeat barlines. You must input repeat barlines as appropriate manually.

EXAMPLE



Default repeat ending structure with two endings

Repeat ending structure with additional third ending

Inputting repeat markers with the popover

You can input repeat markers, including repeat jumps and repeat sections, using the repeats popover, both during note input and by adding them to existing music.

PROCEDURE

- 1. In Write mode, do one of the following:
 - Start note input.

TIP

During note input, you can select additional notes before/after the last input note without deactivating the caret by pressing **Shift-Right Arrow**/**Shift-Left Arrow**.

- Select an item at the rhythmic position where you want to input a repeat marker. For repeat jumps, we recommend that you select the barline with which you want the end of the jump instruction to align. For repeat sections, we recommend that you select the barline with which you want the start of the section marker to align.
- 2. Open the repeats popover in any of the following ways:
 - Press Shift-R.
 - In the Notations toolbox, click **Popovers** , then **Repeats** ...
- **3.** Enter the appropriate entry for the type of repeat marker you want into the popover. For example, enter **coda** to input a coda section or enter \$ to input a segno.
- **4.** Press **Return** to close the popover.

RESULT

During note input, repeat markers are input at the caret position. Coda sections are automatically formatted so that there is a gap between the coda and the preceding material.

When adding repeat markers to existing music, they are input at the rhythmic position of the earliest selected item.

Repeat markers that indicate the end of a section, such as *Fine* and *D.C. al Coda*, are right-aligned with the selected rhythmic position.

RELATED LINKS

Repeats popover on page 395

Repeat markers on page 1216
Repeats in playback on page 534
Changing the gap before codas on page 1221
Hiding/Showing repeat markers on page 1220

Inputting repeat markers with the panel

You can input repeat markers using the Repeat Structures panel, both during note input and by adding them to existing music.

PROCEDURE

- **1.** In Write mode, do one of the following:
 - Start note input.

TIP

During note input, you can select additional notes before/after the last input note without deactivating the caret by pressing **Shift-Right Arrow**/**Shift-Left Arrow**.

- Select an item at the rhythmic position where you want to input a repeat marker. For repeat jumps, we recommend that you select the barline with which you want the end of the jump instruction to align. For repeat sections, we recommend that you select the barline with which you want the start of the section marker to align.
- 2. In the Notations toolbox, click **Panels** , then **Repeat Structures** to show the Repeat Structures panel.
- 3. Click the repeat marker you want to input in any of the following sections:
 - Repeat Jumps
 - Repeat Sections

RESULT

During note input, repeat markers are input at the caret position. Coda sections are automatically formatted so that there is a gap between the coda and the preceding material.

When adding repeat markers to existing music, they are input at the rhythmic position of the earliest selected item.

Repeat markers that indicate the end of a section, such as *Fine* and *D.C. al Coda*, are right-aligned with the selected rhythmic position.

Inputting tremolos with the popover

You can input both single-note and multi-note tremolos using the repeats popover, both during note input and by adding them to existing notes.

PROCEDURE

- 1. In Write mode, do one of the following:
 - Start note input.

TIP

During note input, you can select additional notes before/after the last input note without deactivating the caret by pressing **Shift-Right Arrow** / **Shift-Left Arrow** .

• Select the notes to which you want to add tremolos.

NOTE

If you want to input multi-note tremolos, you must select at least two notes that are in the same voice, have the same duration, and are notated using a single notehead. The notes can also be tuplets and cross-staff notes.

- 2. Open the repeats popover in any of the following ways:
 - Press Shift-R.
 - In the Notations toolbox, click **Popovers** , then **Repeats** ...
- **3.** Enter the appropriate entry for the type of tremolo you want into the popover. For example, enter:
 - // for single-note tremolos with two strokes.
 - ///2 for multi-note tremolos with three strokes.
 - //rel for two-stroke single-note tremolos with release.
- 4. Press Return to close the popover.

RESULT

Single-note tremolos are input on the selected notes with the number of tremolo strokes specified. They appear on all notes in tie chains.

Tremolos with release show single-note tremolo strokes on all notes in tie chains apart from the last note. Tremolos with attack show single-note tremolo strokes on all notes in tie chains apart from the first note.

Multi-note tremolos with the number of tremolo strokes specified are input between selected individual notes and the notes immediately after them, or between selected pairs of notes. The notated duration of notes in multi-note tremolos is automatically updated. For example, two quarter notes joined by a multi-note tremolo both appear as half notes.

When tuplets are selected, multi-note tremolos are input across the selected tuplets, with the tremolo strokes positioned in the center of all notes in the tuplet. The tuplet bracket is hidden, and a signpost is shown at the start of each tuplet indicating its ratio.

EXAMPLE





Tremolo with release added to tie chain

Multi-note tremolos with three tremolo strokes across tuplets

AFTER COMPLETING THIS TASK

You can enable independent voice playback for individual instruments to hear different sounds in different voices simultaneously; for example, if you have tremolos in one voice and slurs in another voice.

RELATED LINKS

Repeats popover on page 395 Tremolos on page 1377 Tremolos in playback on page 1383
Tremolos in tie chains on page 1379
Enabling independent voice playback on page 530
Forcing the duration of notes/rests on page 257
Creating cross-staff beams/tremolos on page 832
Deleting tremolos on page 1381
Tuplets on page 1386

Inputting tremolos with the panel

You can input both single-note and multi-note tremolos using the Repeat Structures panel, both during note input and by adding them to existing notes.

Tremolos are included in the Repeat Structures panel because they indicate that notes are repeated, either individually as single-note tremolos or in sequences as multi-note tremolos.

PROCEDURE

- **1.** In Write mode, do one of the following:
 - Start note input.

TIP

During note input, you can select additional notes before/after the last input note without deactivating the caret by pressing **Shift-Right Arrow** / **Shift-Left Arrow** .

Select the notes to which you want to add tremolos.

NOTE

If you want to input multi-note tremolos, you must select at least two notes that are in the same voice, have the same duration, and are notated using a single notehead. The notes can also be tuplets and cross-staff notes.

- 2. In the Notations toolbox, click **Panels** , then **Repeat Structures** to show the Repeat Structures panel.
- **3.** In the **Tremolos** section, click the tremolo you want to input.

For example, click:

- Two Strokes Single-note Tremolo # for single-note tremolos with two strokes.
- Three Strokes Multi-note Tremolo 🕫 for multi-note tremolos with three strokes.
- Tremolo With Release 🕖 for three-stroke single-note tremolos with release.

RESULT

Single-note tremolos are input on the selected notes with the number of tremolo strokes specified. They appear on all notes in tie chains.

Tremolos with release show single-note tremolo strokes on all notes in tie chains apart from the last note. Tremolos with attack show single-note tremolo strokes on all notes in tie chains apart from the first note.

Multi-note tremolos with the number of tremolo strokes specified are input between selected individual notes and the notes immediately after them, or between selected pairs of notes. The notated duration of notes in multi-note tremolos is automatically updated. For example, two quarter notes joined by a multi-note tremolo both appear as half notes.

When tuplets are selected, multi-note tremolos are input across the selected tuplets, with the tremolo strokes positioned in the center of all notes in the tuplet. The tuplet bracket is hidden, and a signpost is shown at the start of each tuplet indicating its ratio.

EXAMPLE





Multi-note tremolos with three tremolo strokes across tuplets

Tremolo with release added to tie chain

AFTER COMPLETING THIS TASK

You can enable independent voice playback for individual instruments to hear different sounds in different voices simultaneously; for example, if you have tremolos in one voice and slurs in another voice.

RELATED LINKS

Repeat Structures panel on page 398
Enabling independent voice playback on page 530
Forcing the duration of notes/rests on page 257
Creating cross-staff beams/tremolos on page 832
Tuplets on page 1386

Inputting slash regions

You can input slash regions using the repeats popover.

PROCEDURE

- 1. In Write mode, do one of the following:
 - Start note input.
 - On each staff where you want to input a slash region, select items that span the required duration.
- 2. Open the repeats popover in any of the following ways:
 - Press Shift-R.
 - In the Notations toolbox, click Popovers , then Repeats ...
- 3. Enter slash into the popover.
- **4.** Press **Return** to close the popover.

RESULT

During note input, slash regions are input spanning the duration of the selected note or item, which is usually the last input note.

When adding slash regions to existing music, they span the selected duration on each selected staff.

Slash regions are automatically formatted as appropriate for the meter. If you later change the time signature, slash regions retain their duration but the appearance of slashes within them automatically updates.

TIP

You can also input slash regions by clicking **Create Slash Region** in the **Rhythm Slashes** section of the Repeat Structures panel, or by choosing **Write** > **Create Slash Region**. You can assign a key command for this option on the **Key Commands** page in **Preferences**.

RELATED LINKS

Repeats popover on page 395
Repeat Structures panel on page 398
Slash regions on page 1239
Slash voices on page 1236
Inputting chord symbol regions on page 318
Hiding/Showing chord symbols on page 859
Key Commands page in the Preferences dialog on page 58

Inputting bar repeats

You can input bar repeat regions when at least one bar before the region contains notes.

PROCEDURE

1. In Write mode, on each staff where you want to input a bar repeat region, select items that span the required duration.

NOTE

You cannot input bar repeat regions in the first bar of a flow.

- **2.** Open the repeats popover in any of the following ways:
 - Press Shift-R.
 - In the Notations toolbox, click **Popovers** , then **Repeats** .
- **3.** Enter the appropriate entry for the type of bar repeat region you want into the popover. For example, enter **%2,4** to repeat the previous two bars, grouped in four.
- **4.** Press **Return** to close the popover.

RESULT

A bar repeat region spanning the selected duration is input on each selected staff, in which the corresponding type of bar repeat symbol is shown at the intervals specified.

NOTE

- You can also input bar repeat regions during note input; however, this inputs bar repeat regions from the bar containing the currently selected note. As bar repeats are mostly shown in empty bars, this is likely to produce unintended results.
- You can also input one-bar repeat regions by clicking Create Bar Repeat Region in the Bar Repeats section of the Repeat Structures panel, or by choosing Write > Create Bar Repeat Region. You can assign a key command for this option on the Key Commands page in Preferences.

AFTER COMPLETING THIS TASK

You can change how bar repeats are grouped.

RELATED LINKS

Bar repeats on page 1224

Bar repeat grouping on page 1229

Inputting numbered bar regions

You can input numbered bar regions using the repeats popover.

PROCEDURE

- **1.** In Write mode, on each staff where you want to number bars, select items that span the required duration.
- **2.** Open the repeats popover in any of the following ways:
 - Press Shift-R.
 - In the Notations toolbox, click Popovers , then Repeats .
- 3. Enter **num** into the popover.
- **4.** Press **Return** to close the popover.

RESULT

A numbered bar region spanning the selected duration is input on each selected staff.

By default, bar counts are shown on every bar in the region. If the numbered bar region lasts four or more bars, Dorico Elements adds the total range in parentheses to the count on the first bar, such as showing "1 (-8)" on the first bar in a numbered bar region lasting eight bars.

NOTE

- You can also input numbered bar regions during note input; however, this only inputs a numbered bar region in the bar containing the currently selected note.
- You can also input numbered bar regions by clicking Create Numbered Bar Region in the Numbered Bars section of the Repeat Structures panel, or by choosing Write > Create Numbered Bar Region. You can assign a key command for this option on the Key Commands page in Preferences.
- Numbered bar regions are hidden in full score layouts and shown in part layouts by default, but you can choose to hide/show numbered bar regions in any layout.

RELATED LINKS

Repeats popover on page 395

Repeat Structures panel on page 398

Numbered bar regions on page 1231

Numbered bar region counts on page 1232

Hiding/Showing numbered bar regions on page 1232

Inputting MIDI trigger regions

You can input MIDI trigger regions using the MIDI trigger regions popover.

PREREQUISITE

You have the chosen the appropriate middle C numbering convention setting.

PROCEDURE

- 1. In Write mode, do one of the following:
 - Start note input.
 - On each staff where you want to input a MIDI trigger region, select items that span the required duration.
- 2. Press **Shift-0** to open the MIDI trigger regions popover.
- 3. Enter the notes you want to trigger into the popover.

For example, enter **C4,E4,G4**, **60,64,67**, or play a C major chord on a MIDI keyboard. To specify the velocity, include the required number in parentheses, such as **(112)**, at the end of your entry.

TIP

You can audition notes/chords while the popover is open.

4. Press **Return** to close the popover.

RESULT

During note input, MIDI trigger regions are input spanning the duration of the selected note or item, which is usually the last input note.

When adding MIDI trigger regions to existing music, they span the selected duration on each selected staff. If you selected a duration within an existing MIDI trigger region, the new MIDI trigger region replaces the existing region only for the selected duration.

RELATED LINKS

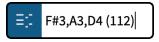
MIDI trigger regions on page 559 Changing the middle C numbering convention on page 50 Inputting slash regions on page 406 Inputting notes on page 219

MIDI trigger regions popover

The following table contains examples of what you can enter into the MIDI trigger regions popover to input notes for playback that are not shown in the music.

You can open the MIDI trigger regions popover in Write mode in any of the following ways when either an item is selected or the caret is active:

- Press Shift-0.
- Select an existing MIDI trigger region and press Return.
- Choose Write > Create MIDI Trigger Region.



MIDI trigger regions popover with an example entry

Notes and velocity	Popover entry
Notes by pitch and octave	C0 , Db1 , E2 , F#3 , and so on
NOTE	
Follows your middle C numbering convention setting.	
Notes by MIDI note number	12 , 25 , 40 , 54 , and so on
Played notes	Play notes on a MIDI keyboard
	TIP
	This also sets the velocity.
Specify velocity	(0) to (127) after the final note

Selecting notes/items

In Dorico Elements, there are multiple different ways you can select notes and items in your project, from selecting items individually to making large selections covering multiple staves. You can also change whether notes play back during note input/selection.

RELATED LINKS

Large selections on page 410

Filters on page 417

Playing/Muting notes during note input/selection on page 211

Playing all/individual notes in chords during note input/selection on page 211

Selecting items in the Key Editor on page 659

Large selections

You can make large selections, including selecting the contents of whole staves or the whole flow.

Select everything in a specific area

You can use the **Marquee Tool** to specify an area in which you want to select everything.

Select everything in the whole flow

- Press Ctrl/Cmd-A.
- Choose Edit > Select All.

Select everything on a single staff

- Select the first note on the staff, hold down **Shift**, then select the last note on the staff.
- Select the first note on the staff and choose Edit > Select To End Of System or Edit > Select To End Of Flow.

 Select the last note on the staff and choose Edit > Select To Start Of System or Edit > Select To Start Of Flow.

Select everything on multiple adjacent staves

- Select one whole staff at the top/bottom of the range of staves you want to select and press Shift-Up Arrow or Shift-Down Arrow until all the staves you want are selected.
- Select one whole staff at the top/bottom of the range of staves you want to select and Shift -click the staff at the other end of the range of staves you want to select.

Select more of the currently selected types of items

You can use **Edit** > **Select More** (**Ctrl/Cmd-Shift-A**) to expand your current selection horizontally and incrementally to other items of the same types and in the selected voices and staves in Write mode. For items that span multiple bars and systems, they are selected in the earliest bar/system in which they exist.

- 1. The first expansion is to the boundaries of the current bar, both to the left and right. If there is nothing to select within the bar, such as if you selected a whole note in a 4/4 bar, Dorico Elements automatically advances to the second expansion.
- **2.** The second expansion in page view is to the boundaries of the current system, both to the left and right. In galley view, the second expansion is to the rest of the flow, as there is only a single system in galley view.
- **3.** In page view, the third expansion is to the entire flow.

Select everything in the system within a range of beats/bars

You can use the system track to select a region of beats/bars and then select everything on all staves in the system within that region.

System track selections include system objects, such as chord symbols, key signatures, and time signatures.

TIP

If you want to select only a certain type of item, such as lyrics or dynamics, you can then use the corresponding filters.

RELATED LINKS
Filters on page 417
System track on page 414
Selecting items in the Key Editor on page 659
Undoing/Redoing actions on page 426
Histogram tool on page 693

Selecting/Deselecting notes and items individually

You can select/deselect existing notes and other notation items individually in the music area; for example, if you want to add articulations to a selection of notes or delete a short passage of music. You can do this in Write mode and Engrave mode.

TIP

If you want to select a large number of notes/items, we recommend that you use one of the larger selection methods.

PROCEDURE

- 1. Select individual notes/items in the music area in any of the following ways:
 - Click a single note/item.

TIP

If the item you want to select is behind another item, Shift - Alt/Opt -click it.

- **Ctrl/Cmd** -click individual notes/items.
- **Shift** -click adjacent notes/items.
- To select all notes in a beam group, click the beam.
- To select all notes in a chord, click the stem.
- To select everything in a bar, click on the staff in that bar, but not on any notes, stems, or items.
- Make a marquee selection around multiple notes/items.
- Navigate to other items from an existing selection.
- If nothing is selected in the music area, press any arrow key on your computer keyboard to select the first note, rest, or other item on the top staff in the current layout.
- **2.** Deselect all currently selected items in any of the following ways:
 - Press Ctrl/Cmd-D.
 - Choose Edit > Select None.
 - Click outside of the staves within the music area.

RELATED LINKS

Large selections on page 410
Filters on page 417
Selecting items in the Key Editor on page 659
Playing/Muting notes during note input/selection on page 211
Navigating to other items in the music area on page 428
Undoing/Redoing actions on page 426

Extending selections

You can extend your current selection to adjacent notes and items, including to the start/end of systems and flows.

PROCEDURE

- 1. In Write mode, make a selection in the music area.
- **2.** Extend the selection in any of the following ways:
 - To select adjacent notes/items to the right, press **Shift-Right Arrow**.
 - To select adjacent notes/items to the right, press Shift-Left Arrow.
 - To select to the end of the bar, press **Ctrl/Cmd-Shift-Right Arrow**.
 - To select to the start of the bar, press Ctrl/Cmd-Shift-Left Arrow.
 - To select to the end of the system, choose Edit > Select To End Of System.
 - To select to the start of the system, choose **Edit** > **Select To Start Of System**.
 - To select to the end of the flow, choose Edit > Select To End Of Flow.

• To select to the start of the flow, choose Edit > Select To Start Of Flow.

Selecting more items of the same type

You can incrementally extend your current selection to more items of the same type and notes in the same voices, which is particularly helpful if you want to select multiple different items at once, such as dynamics and lyrics.

PREREQUISITE

If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.

PROCEDURE

1. Select the notes and items you want to select more of. You can do this in Write mode and Engrave mode.

TIP

You can select notes and items on multiple staves and in specific voices; for example, if you only want to select notes in up-stem voices on four staves.

- 2. Press Ctrl/Cmd-Shift-A to expand your selection.
- 3. Optional: Continue pressing **Ctrl/Cmd-Shift-A** to extend your selection further.

RESULT

More of the same types of items and notes in the same voices as your original selection are selected, with the range of selected items expanding each time you press the key command: firstly to the boundaries of the bar, secondly to the boundaries of the system, and finally to the rest of the flow. If there are no other items available in the bar, Dorico Elements automatically advances to the second expansion. In galley view, the second expansion is to the entire flow directly as there is only a single system in galley view.

For items that span multiple bars and systems, they are selected in the earliest bar/system in which they exist.

NOTE

Dorico Elements selects the following items differently if you select only a single one of them:

- Lyrics: The selection expands only to other lyrics with the same line number, placement, and line type as the originally selected lyric.
- Dynamics: The first expansion is to all other dynamics in the same group and on the same staves as the original selection, with further expansions selecting other dynamics in other groups.
- Text items: The selection expands only to other text items using the same paragraph style as the originally selected text item.
- Playing techniques: The selection expands only to playing techniques of the same category, such as **Strings** or **Choral**. Additionally, if you select either an up bow or down bow playing technique, the selection expands only to other up bow and down bow playing techniques. It does not select any other playing techniques.

RELATED LINKS

Engrave toolbox on page 490

Types of lyrics on page 1010

Lyric line numbers on page 1028 Groups of dynamics on page 930 Changing the paragraph style of text items on page 1333

Selecting multiple items using marquee selections

You can use a marquee selection to select multiple notes and notations at the same time within a specific area. You can do this in Write mode and Engrave mode.

PROCEDURE

- 1. In the status bar, click Marquee Tool
- 2. In the music area, click and drag across the area where you want to select everything.

 A gray rectangle indicates which notes and notations will be selected. We recommend that you click in one corner of the area you want to select and drag diagonally across to the other corner.

RESULT

When you release the mouse, all notes and notations in the area within the gray rectangle are selected.

NOTE

Only items completely within the area are selected. However, if any part of a note/tie chain is within the area, the whole note/tie chain is selected.

RELATED LINKS

Status bar on page 37

Selection tools on page 39

Extending selections on page 412

Selecting items in the Key Editor on page 659

Changing values using the Transform tool on page 698

System track

The system track is a translucent line above the top of each system in Write mode. It allows you to add and delete bars and beats, and to select everything on all staves in the system. System track selections include system objects, such as chord symbols, key signatures, and time signatures.







0 1 1 1 2 1 3 1

The system track above a staff, showing beat units reflecting the current rhythmic grid resolution (available when you hold **Alt/Opt**)

The color of the system track changes depending on how you are interacting with it.

When you hover the mouse over it, it becomes more opaque.

• When you select a region in the system track, it appears highlighted.





The system track when the mouse pointer hovers over it

The system track with a region selected

When you have selected a region in the system track, the following options are available:



1 Set Edit Stop Position

Allows you to set and delete Insert mode stop positions.

2 Delete

Allows you to delete the selected region.

NOTE

When you hover over **Delete**, the highlight color of the selected region changes.

3 System Track Select

Allows you to select all items, including system objects, on all staves in the system across the selected region.

4 Add

Allows you to add bars or beats of the same duration as the selection in the system track. The extra time is inserted immediately after the end of the selection.

NOTE

Selections on the system track are cleared whenever you make any other kind of selection, or when you switch layouts. However, selections on the system track are retained when switching between page and galley view.

RELATED LINKS

Inputting bars/beats with the system track on page 299
Deleting bars/beats with the system track on page 794
System objects on page 1303
Rhythmic grid on page 212
Insert mode on page 439

Hiding/Showing the system track

The system track is shown by default in new projects, but you can hide/show it in Write mode at any time.

PROCEDURE

- Hide/Show the system track in any of the following ways:
 - Press Alt/Opt-T.
 - Choose View > System Track.

RESULT

The system track is hidden/shown.

TIP

You can hide the system track in all future projects by default in Preferences > General > View.

RELATED LINKS

Preferences dialog on page 57

Selecting bars with the system track

The system track allows you to select all items, including system objects, on all staves in the system across the selected bars.

PREREQUISITE

The system track is shown.

PROCEDURE

- **1.** In Write mode, click a bar in the system track.
- 2. Optional: Select additional bars in any of the following ways:
 - **Shift** -click bars to the right/left along the system track.
 - Click and drag to the right/left along the system track.
- **3.** Click **System Track Select** in the system track. It can also appear above the system track if your selection is narrow.

System Track Select o appears filled in when you hover your mouse pointer over it.

RESULT

Everything on all staves in the selected bars is selected and highlighted, including system objects, notations, and signposts.

NOTE

If you then delete your selection, any signposts included are also deleted. This can affect the page layout; for example, by removing ossia staves whose signposts were included in the selection.

Selecting beats with the system track

The system track allows you to select all items, including system objects, on all staves in the system across the selected beats.

PREREQUISITE

The system track is shown.

PROCEDURE

In Write mode, press and hold **Alt/Opt**.
 Grid lines that match the current rhythmic grid resolution appear in the system track.

2. Without releasing **Alt/Opt**, click and drag to the right/left along the system track.

NOTE

You cannot **Shift** -click when selecting beats.

3. Click **System Track Select** in the system track. It can also appear above the system track if your selection is narrow.

System Track Select o appears filled in when you hover your mouse pointer over it.

RESULT

Everything on all staves in the selected beats is selected and highlighted, including system objects, notations, and signposts.

NOTE

If you then delete your selection, any signposts included are also deleted. This can affect the page layout; for example, by removing ossia staves whose signposts were included in the selection.

RELATED LINKS

System objects on page 1303
Rhythmic grid on page 212
Copying and pasting notes/items on page 445
Deleting the contents of bars on page 795
Deleting bars/beats with the system track on page 794

Filters

Filters in Dorico Elements allow you to select only a specific type of item from a larger selection. Dorico Elements includes a filter for every notation item.

• You can find the available filters by choosing **Edit** > **Filter** > **[Item]** > **[Item type]**. You can also choose filters from the context menu.

All significant notation items have their own filter; for example, arpeggio signs, chord symbols, key signatures, and playing techniques. You can also filter for note spacing changes.

The following items have multiple filters because they have multiple types:

Notes

Allows you to filter notes, grace notes, and chords. You can also filter notes according to their position in chords.

Voices

Allows you to filter voices according to their stem direction. You can also filter slash voices.

Dynamics

Allows you to filter all dynamics, or just gradual or immediate dynamics.

Tempos

Allows you to filter all tempo marks, or just absolute, relative, or gradual tempo changes.

Lyrics

Allows you to filter all lyrics, or just lyrics with a specific line number, type, or staff-relative placement.

NOTE

There is no filter for barlines. You also cannot filter notations that are considered part of the notes to which they apply, including fingerings, beams, articulations, and tremolos.

RELATED LINKS

Large selections on page 410
Filters for lyrics on page 1015
Selecting more items of the same type on page 413
Changing the voice of existing notes on page 453
Changing the line number and type of lyric lines on page 1029

Changing filters to select/deselect

You can change whether the available filter options select or deselect the specified items. By default, filters select items, meaning that the resulting selection only includes the item being filtered.

When filters are set to deselect, the resulting selection includes everything except the item being filtered.

PROCEDURE

- Change the filter behavior in one of the following ways:
 - To change filters to select, choose Edit > Filter > Select Only.
 - To change filters to deselect, choose Edit > Filter > Deselect Only.

TIP

You can also choose these options from the context menu.

Editing items

In Dorico Elements, there are editing methods that are common to most notations, including lengthening/shortening items and changing their staff-relative placement.

RELATED LINKS

Selecting notes/items on page 410 Arranging tools on page 443 Moving notes/items rhythmically on page 448 Undoing/Redoing actions on page 426

Lengthening/Shortening items

You can lengthen/shorten items with duration rhythmically after they have been input; for example, if you want an octave line to cover more/fewer notes.

Lengthening figured bass or playing techniques, including string indicators outside the staff and vibrato bar indications, that were input without a specified duration gives them duration and shows duration or hold lines if required.

PREREQUISITE

You have chosen the appropriate rhythmic grid resolution.

PROCEDURE

1. In Write mode, select the items you want to lengthen/shorten.

NOTE

- When multiple items are selected, you can only lengthen/shorten them by the current rhythmic grid resolution.
- You can only lengthen/shorten one of the following items at a time: slurs, gradual dynamics, groups of gradual dynamics, and bar repeat regions.
- When using the mouse, you can only lengthen/shorten a single item at a time. Figured bass and playing techniques, including string indicators and vibrato bar lines, must have duration already.
- When lengthening/shortening multiple figured bass or playing techniques using the keyboard, they must all have duration already.
- You can only lengthen/shorten non-grouped playing techniques or the last playing technique in a group.
- You can only lengthen/shorten cross-staff slurs to notes on the same staff as the corresponding endpoint, and you can only lengthen/shorten cross-voice slurs to notes in the same voice as the corresponding endpoint.
- **2.** Lengthen/Shorten the selected items in any of the following ways:
 - To lengthen them by the current rhythmic grid resolution or to the next notehead, whichever is closer, press Shift-Alt/Opt-Right Arrow.
 - To shorten them by the current rhythmic grid resolution or to the previous notehead, whichever is closer, press **Shift-Alt/Opt-Left Arrow**.

NOTE

Bar repeat regions are lengthened/shortened by the duration of their grouping.

- To lengthen a single item to the next notehead, press Ctrl/Cmd-Shift-Alt/Opt-Right Arrow.
- To shorten a single item to the previous notehead, press Ctrl/Cmd-Shift-Alt/Opt-Left Arrow.
- Click and drag the circular handle at the start/end to the right/left.

NOTE

Playing technique groups only have a single handle at their start and end, not individual handles for each playing technique within the group.

RESULT

The selected items are lengthened/shortened by moving their end rhythmically to the right/left. Most items are lengthened/shortened either by the current rhythmic grid resolution or to the next/previous notehead, whichever is closer, or directly to the next/previous notehead.

Bar repeat regions are lengthened/shortened by the duration of their grouping. Numbered bar regions are lengthened/shortened by bars. Slurs are lengthened/shortened to notes.

If figured bass or playing techniques previously had no duration, they now have duration and show duration or hold lines if required.

If any part of slash regions now overlap rhythmic positions with other slash regions, the staff positions of slashes are automatically adjusted to accommodate multiple slash regions at the same positions.

Dynamic groups are lengthened/shortened proportionally by lengthening/shortening the gradual dynamics and moving any other type of dynamic in the group. This retains the relative durations of the gradual dynamics in the group.

NOTE

- The minimum length of a bar repeat region is one bar. If you shorten regions with longer groupings, such as every four bars, the length of the region is halved until a one-bar repeat region remains.
- Only a single bar repeat region or chord symbol region can exist at each rhythmic position
 on each staff. If a bar repeat region or chord symbol region collides with another item of
 the same type when it is lengthened/shortened, the existing item is deleted or shortened
 accordingly. For bar repeat regions, this can mean the grouping of other bar repeat regions
 is changed.

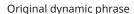
You can undo this action and restore the previous lengths of the other regions. However, if you lengthened/shortened a bar repeat region or chord symbol region using the mouse and it overwrote another region of the same type completely, the other region is permanently deleted.

You can move items graphically in Engrave mode, including changing their graphical length.

EXAMPLE

In the example, lengthening the phrase moves the p at the end two quarter notes to the right, but moves the f in the middle only one quarter note to the right. This keeps the lengths of the gradual dynamics equal.







Lengthened dynamic phrase

RELATED LINKS

Changing the rhythmic grid resolution on page 213

Changing the duration of notes on page 255

Lengthening/Shortening segments in repeat endings on page 1212

Moving notes/items rhythmically on page 448

Playing technique duration on page 1167

Slashes in multiple-voice contexts on page 1246

Cross-staff and cross-voice slurs on page 1272

Groups of dynamics on page 930

Changing existing items

You can change all items that have an associated popover, rather than deleting them and inputting new ones. For example, if you want to change an 8va octave line into a 15va octave line or change a short fermata into a long fermata.

PROCEDURE

- **1.** Select the item or the signpost of the item you want to change.
- **2.** Open the popover for that item in any of the following ways:
 - Press Return.
 - Double-click the item.
- **3.** Change the existing entry in the popover.

 For chord symbols, you can also play the new chord on your MIDI keyboard.
- **4.** Press **Return** to close the popover.

RESULT

The selected item is changed according to the new entry in the popover. This changes different parameters for different items, such as the duration of a hold or pause or the volume of a dynamic.

NOTE

- Any properties previously set on the item are reset.
- If you change a fermata to a breath mark, only the fermata on the top staff is changed to a breath mark. If you change a caesura to a breath mark, a breath mark is input on the top staff at the end of the bar to which the caesura is attached. However, the existing caesura also remains on all staves.
- If you open the playing techniques popover in this way, Dorico Elements inputs your new entry as a separate playing technique and does not delete the previous one.
- If you change an immediate dynamic to a combined dynamic, such as f to fp, or vice versa,
 Dorico Elements inputs your new entry as a separate dynamic and does not delete the previous one.

RELATED LINKS

Popovers on page 22
Properties panel on page 646
Changing the text of existing lyrics on page 1024
Changing dynamic levels on page 908
Assigning key commands on page 62

Changing the size of notes/items

You can change the size of individual notes and items using the default scale sizes for cues, grace notes, a custom scale size, or a custom scale size in addition to a default scale size. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

TIP

- To make all notes, items, and staves proportionally larger/smaller, you can change the staff size.
- If you want to make notes smaller to represent grace notes, you can input them as grace notes instead.
- You can change the default size of many text-based notations, such as rehearsal marks and chord symbols, project-wide by editing the corresponding font style or paragraph style.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** Select the notes/items whose size you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate any of the following properties in the **Common** group:
 - To use a default scale size, activate Scale.
 - To use a custom scale size, activate Custom scale.
 - To use a custom scale size based on a default scale size, activate both Scale and Custom scale.
- 3. Optional: If you activated **Scale**, select one of the following options from the menu:
 - Normal
 - Grace
 - Cue
 - Cue grace
- **4.** Optional: If you activated **Custom scale**, change the value in the value field.

RESULT

The size of the selected notes/items is changed. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

- If you activated **Scale**, the selected notes/items are changed to the selected default scale size
- If you activated **Custom Scale**, the selected notes/items are changed to the custom percentage scale size you set.
- If you activated both Scale and Custom Scale, the selected notes/items are changed to the
 custom percentage scale size of the selected default scale size. For example, if you selected
 Grace for Scale then set Custom Scale to 50, the size of the selected notes/items is half the
 size of grace notes.

RELATED LINKS

Changing the property scope on page 648
Engrave toolbox on page 490
Changing the default staff size on page 587
Grace notes on page 983
Cues on page 902
Notehead set designs on page 1034
Text formatting on page 736
Large time signatures on page 1365

Changing the staff-relative placement of items

You can flip any item that can be placed both above/below the staff to change their staff-relative placement; for example, if you want to change the stem direction of notes quickly. For many items, you can do this for the current layout and frame chain only or for all layouts and frame chains.

NOTE

These steps do not apply to text in text frames or pedal lines.

PREREQUISITE

- If you are in Engrave mode, Graphic Editing ? is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

1. Select the items you want to flip. You can do this in Write mode and Engrave mode.

NOTE

- You cannot flip items during note input. You cannot flip text items when the text editor is open.
- If you want to select parts of items, such as articulations, a single notehead within a tie chain, or a single fermata, you must be in Engrave mode.
- To select multiple items of the same type, you can use large selections and/or filters.

2. Press **F**.

RESULT

The staff-relative placement of the selected items is changed by setting **Placement**, **Position**, or **Direction** properties appropriately in the corresponding groups of the Properties panel. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain for items whose staff-relative placement properties are local.

Deactivating these properties resets items to their default placement.

NOTE

If you flipped multiple multi-segment slurs or tuplet brackets with different hook directions at the same time, all selected items are set to either above or below the staff, unless they all originally had compatible directions set.

AFTER COMPLETING THIS TASK

If you need to move items to different graphical positions, you can move them graphically in Engrave mode.

RELATED LINKS

Filters on page 417

Large selections on page 410

Local vs. global properties on page 647

Changing the property scope on page 648

Engrave toolbox on page 490

Tucking index properties on page 504

Moving items graphically on page 501

Resetting the appearance of items

You can reset all changes that you have made to the appearance of individual items, which returns them to the default settings.

Properties relating to the appearance of items include those that change their style, type, and some additions, such as *poco a poco* text for dynamics.

PREREQUISITE

If you are in Engrave mode, **Graphic Editing** 3 is selected in the Engrave toolbox.

PROCEDURE

1. Select the items whose appearance you want to reset. You can do this in Write mode and Engrave mode.

TIP

To select multiple items of the same type, you can use large selections and/or filters.

2. Choose Edit > Reset Appearance.

RESULT

All properties that affect the appearance of the selected items are reset to their default settings.

NOTE

Local properties that were originally set with the property scope set to **Globally** are reset in all layouts and frame chains that do not have subsequent local overrides.

RELATED LINKS

Engrave toolbox on page 490 Local vs. global properties on page 647 Filters on page 417

Large selections on page 410

Resetting the position of items

You can reset the position of individual items that you have moved graphically, which returns them to their default position.

Properties relating to the position of items include horizontal and vertical offsets, beat-relative position, and staff-relative placement.

PREREQUISITE

If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.

PROCEDURE

1. Select the items whose position you want to reset. You can do this in Write mode and Engrave mode.

TIP

To select multiple items of the same type, you can use large selections and/or filters.

2. Choose Edit > Reset Position.

RFSIIIT

All properties that affect the position of the selected items are reset to their default settings.

NOTE

Local properties that were originally set with the property scope set to **Globally** are reset in all layouts and frame chains that do not have subsequent local overrides.

Hiding non-printing elements

You can temporarily hide all visible elements that do not print, such as signposts and selection highlights. This allows you to view the current layout as it will appear when printed/exported without switching to Print mode.

PROCEDURE

Press and hold \ (Windows) or \ (macOS).

RESULT

All non-printing elements in the current layout are hidden until you release the key command. Printing elements appear as they will when printed/exported.

TIP

You can also hide/show individual non-printing elements permanently.

RELATED LINKS

Annotations on page 581

Printing layouts on page 566

Exporting layouts as graphics files on page 570

Hiding/Showing signposts on page 438

Hiding/Showing the system track on page 416

View options for notes and rests on page 1044

Hiding/Showing guide bar numbers on page 811 Hiding/Showing region highlights on page 1226 Hiding/Showing slash region highlights on page 1243

Hiding/Showing attachment lines

You can hide/show attachment lines in Write mode and Engrave mode. Attachment lines link a single selected item to its rhythmic position, including items that you have moved graphically.

PROCEDURE

• Choose View > Attachment Lines.

RESULT

Attachment lines are hidden/shown.

FXAMPLE





Attachment lines shown

Attachment lines hidden

RELATED LINKS

Rhythmic position on page 23 Moving notes/items rhythmically on page 448 Lengthening/Shortening items on page 419 Moving items graphically on page 501 Hiding/Showing crosshairs on page 503

Undoing/Redoing actions

You can undo/redo sequences of edits and selections in reverse order.

PROCEDURE

- 1. Undo actions in any of the following ways:
 - Press **Ctrl/Cmd-Z** as many as times as required.
 - In the toolbar, click **Undo** 🔄
 - Choose **Edit** > **History** to open the **History** dialog, select the action that you want to undo up to, then click **OK**.
- **2.** Redo actions in any of the following ways:
 - Press Ctrl/Cmd-Shift-Z or Ctrl/Cmd-Y as many as times as required.
 - In the toolbar, click Redo ...
 - Choose **Edit** > **History** to open the **History** dialog, select the action that you want to redo up to, then click **OK**.

RESULT

All edits and selections you made up to the selected action are undone/redone.

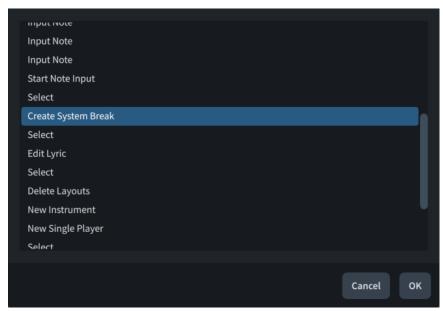
RELATED LINKS

Toolbar on page 29

History dialog

The **History** dialog displays all your edits and selections in the current session, and allows you to undo/redo all actions up to the selected one.

• You can open the History dialog in any mode by choosing **Edit** > **History**.



RELATED LINKS
Selecting notes/items on page 410
Editing items on page 418

Navigation

There are different ways you can navigate around the layout currently open in the music area, such as moving the selection to different items or bringing specific bar numbers or pages into view. Many navigation methods function in multiple modes.

If you have an item selected, you can navigate to other notes/items, which moves the selection to those notes/items.

RELATED LINKS

Workspace setup on page 42 Going to locations with the jump bar on page 65 Moving the caret manually on page 218

Navigating to other items in the music area

You can navigate to other notes and items in the music area after you have selected a note/item; for example, if you want to move the selection to other notes along the staff without using the mouse.

NOTE

In Engrave mode, navigating to other items always moves the selection to the closest item graphically, rather than the next/previous item of the same type.

PROCEDURE

- 1. Select an item in the music area.
 - If you want to navigate through notes, select a note.
 - If you want to navigate through a particular type of item, such as rehearsal marks, select an item of that type.

NOTE

You can only navigate forwards/backwards through items on the same staff. You cannot navigate to other items of the same type on other staves.

- 2. Navigate to other notes or items in any of the following ways:
 - To navigate to the next item or note in the same voice, press Right Arrow.
 - To navigate to the previous item or note in the same voice, press Left Arrow.
 - To navigate to the closest note above the current selection, press Up Arrow.
 This navigates to any existing notes on the same staff first, then to the lowest note/rest on the staff above. If a whole chord was selected, this leaves the bottom note in the chord selected.
 - To navigate to the closest note below the current selection, press **Down Arrow**.

 This navigates to any existing notes on the same staff first, then to the highest note/rest on the staff below. If a whole chord was selected, this leaves the top note in the chord selected.
 - To navigate forwards to the note/rest at the start of the next bar, press Ctrl/Cmd-Right Arrow.
 - To navigate backwards to the note/rest at the start of the previous bar, press Ctrl/Cmd-Left Arrow.
 - To navigate to the top staff in the system, press **Ctrl/Cmd-Up Arrow**.
 - To navigate to the bottom staff in the system, press Ctrl/Cmd-Down Arrow.
- **3.** Optional: Switch the selection to another type of item at the same rhythmic position in one of the following ways:
 - To cycle forwards through items, press Tab.
 - To cycle backwards through items, press Shift-Tab.

NOTE

You cannot switch the selection to system objects, such as system-attached text or rehearsal marks. However, you can select system objects directly and navigate through them.

4. Optional: After switching the selection to another type of item, navigate to other items of that type.

RELATED LINKS

System objects on page 1303

Going to flows

You can go to the next/previous flow in the current layout, which automatically brings the start of that flow into view in the music area. This is particularly useful when navigating around layouts that contain many flows.

These steps function in Setup, Write, and Engrave modes.

PROCEDURE

- Go to a different flow in one of the following ways:
 - To go to the previous flow in the layout, choose Edit > Go To > Go To Previous Flow.
 - To go to the next flow in the layout, choose **Edit** > **Go To** > **Go To Next Flow**.

RESULT

The music area updates to show the start of the corresponding flow. Dorico Elements automatically positions the top staff towards the top left of the music area.

TIP

You can assign key commands to both **Go To Previous Flow** and **Go To Next Flow** on the **Key Commands** page in **Preferences**.

Going to pages

You can go to any specified page in the current layout using its page number; for example, to jump quickly to the exact page that requires changes when editing music.

These steps function in Setup, Write, and Engrave modes.

PROCEDURE

- 1. Choose **Edit** > **Go To** > **Go To Page** to open the **Go To Page** dialog.
- 2. Enter the page number to which you want to go into the Page field.
- 3. Click OK.

RESULT

The music area updates to show the start of the corresponding page. Dorico Elements automatically centers the top of the page in the music area.

TIP

You can assign a key command for **Go To Page** on the **Key Commands** page in **Preferences**.

RELATED LINKS

Moving the view in the music area on page 430

Page arrangements for page view on page 40
Key Commands page in the Preferences dialog on page 58

Going to bars

You can go to any specific bar in any flow in the current layout; for example, to jump quickly to the exact bar that requires changes when editing music.

These steps function in Setup, Write, Engrave, and Play modes.

PROCEDURE

- 1. Press Ctrl/Cmd-G to open the Go To Bar dialog.
- 2. Select the flow containing the bar to which you want to go from the **Flow** menu.
- 3. Enter the bar number to which you want to go into the **Bar** field.
- 4. Click OK.

RESULT

The music area updates to show the corresponding bar. Dorico Elements automatically positions the top staff towards the top left of the music area.

In Play mode, the playhead moves to the start of the corresponding bar. Dorico Elements automatically positions the playhead at the start of the ruler.

Going to rehearsal marks

You can go to any specific rehearsal mark in any flow in the current layout; for example, to jump quickly to passages that require changes when editing music.

These steps function in Setup, Write, and Engrave modes.

PROCEDURE

- 1. Choose Edit > Go To > Go To Rehearsal Mark to open the Go To Rehearsal Mark dialog.
- **2.** Select the flow containing the rehearsal mark to which you want to go from the **Flow** menu.
- 3. Enter the rehearsal mark to which you want to go into the **Rehearsal mark** field.
- 4. Click OK.

RESULT

The music area updates to show the corresponding rehearsal mark.

TIP

You can assign a key command for **Go To Rehearsal Mark** on the **Key Commands** page in **Preferences**.

Moving the view in the music area

You can move the view in the music area to show different parts of layouts. For example, you can scroll through a layout to view each page in sequence.

PROCEDURE

- Move the view in any of the following ways:
 - To move the view upwards/downwards, scroll upwards/downwards on a mouse wheel or swipe upwards/downwards on a touchpad.
 - To move the view to the right/left, **Shift**-scroll upwards/downwards on a mouse wheel or swipe to the right/left on a touchpad.
 - To navigate to the next page, press End (horizontal page arrangements) or Page
 Down (vertical page arrangements).
 - To navigate to the previous page, press **Home (horizontal page arrangements) or Page Up (vertical page arrangements)**.
 - To navigate to the first page, press Ctrl/Cmd-Home.
 - To navigate to the last page, press Ctrl/Cmd-End.
 - In the status bar, click **Hand Tool** , then click and drag in any empty space within the page boundaries in the music area.

The mouse pointer changes into a hand symbol during the move.

RESULT

The view in the music area is moved.

TIP

- You change the maximum overscroll amount, that is, how far beyond the edges of pages you can move the view, on the **General** page in **Preferences**.
- You can assign a key command for Center Selection on the Key Commands page in Preferences. This command automatically brings the selection into view.

RELATED LINKS

Status bar on page 37
Selection tools on page 39
Going to pages on page 429
Enabling/Disabling playhead following on page 524

Zooming in/out of the music area

You can change the zoom level in the music area; for example, if you want a larger overview when inputting notes, but want to see notes and notations more closely when making detailed graphical amendments.

PREREQUISITE

If you want to keep a specific item in the center of the music area when you zoom in/out, you have selected that item.

PROCEDURE

- **1.** Zoom in in any of the following ways:
 - Press Ctrl/Cmd-= or Z.
 - Spread two fingers outwards on a touchpad.
 - Ctrl/Cmd -scroll upwards on a mouse wheel.
 - Use the zoom options \bigcirc 100% \bigcirc + in the status bar.

- **2.** Zoom out in any of the following ways:
 - Press Ctrl/Cmd-- or X.
 - Pinch two fingers together on a touchpad.
 - Ctrl/Cmd -scroll downwards on a mouse wheel.
 - Use the zoom options \bigcirc 100% \bigcirc + in the status bar.

RESULT

The zoom level in the music area is changed. If you had anything selected, Dorico Elements uses your selection as the focal point of the zoom. If you had nothing selected, Dorico Elements focuses on the area previously in the center of the view.

TIP

- You can change the default zoom level that is used when opening layouts in all future projects in **Preferences** > **General** > **View**.
- You can assign a key command for **Center Selection** on the **Key Commands** page in **Preferences**. This command automatically brings the selection into view.

RELATED LINKS

Status bar on page 37
Zoom options on page 41
Zooming in/out of tracks on page 522
Workspace setup on page 42

Assigning key commands for custom zoom levels

You can assign key commands for multiple custom zoom levels; for example, if you regularly use zoom levels not available from the preset menu in the status bar.

PROCEDURE

- 1. Press Ctrl/Cmd-, to open Preferences.
- 2. In the category list, click **Key Commands**.
- **3.** In the functions list, expand **View**, then select **Zoom**.
- **4.** In the **Key Commands** section, enter the zoom level for which you want to assign a key command into the **Parameter 'ZoomPercent'** value field.
- 5. Click the **Press shortcut** input field.
- **6.** On your computer keyboard, press the key command that you want to assign.
- 7. Click Add Key Command.

If the key command you pressed is already used by another function, a warning is displayed.

8. Click **Apply**.

The functions list is refreshed, and **Zoom** is no longer selected. To assign key commands for other custom zoom levels, you must navigate to **Zoom** again in the functions list.

9. Click Close.

RESULT

The key command you pressed is added to the list of assigned key commands for the selected zoom level.

In the functions list, **Zoom** now has a disclosure arrow and your new zoom level is listed beneath. Each zoom level for which you have assigned a key command appears separately.

RELATED LINKS

Key Commands page in the Preferences dialog on page 58

Instrument filters

Instrument filters allow you to show only the staves of selected instruments in galley view in Write mode. This can be useful in large projects when you want to focus on a specific set of instruments, such as only the woodwinds or strings.

When instrument filters are active, dashed lines are shown at the vertical positions of hidden staves, and you can only select and edit music on visible staves.

Instrument filters are layout-specific.



Instrument filter containing flute and violin instruments active in galley view

TIP

You can assign key commands for up to ten instrument filter presets on the **Key Commands** page in **Preferences**. The instruments filtered by these commands vary in each layout and project.

RELATED LINKS

Switching to galley/page view on page 49
Selecting notes/items on page 410
Editing items on page 418
Arranging tools on page 443
Hiding/Showing empty staves on page 590
Scrubbing on page 527

Instrument filter overlay

The instrument filter overlay allows you to apply instrument filters to layouts and add new instrument filters. It only appears in galley view in Write mode.

You can hide/show the instrument filter overlay in Write mode by choosing View >
 Instrument Filter Overlay.



The instrument filter overlay contains the following options:

Filter

Activates/Deactivates the selected instrument filter. Only available when the layout contains at least one instrument filter.



Instrument filter menu

Vln 1.2, Vla ✓

Allows you to select the instrument filter you want to apply to the current layout. Only available when **Filter** is activated.

Add Instrument Filter



Adds an instrument filter containing the instruments on which you have selected items. Only available when at least one item is selected in the music area.

Manage Instrument Filters

•••

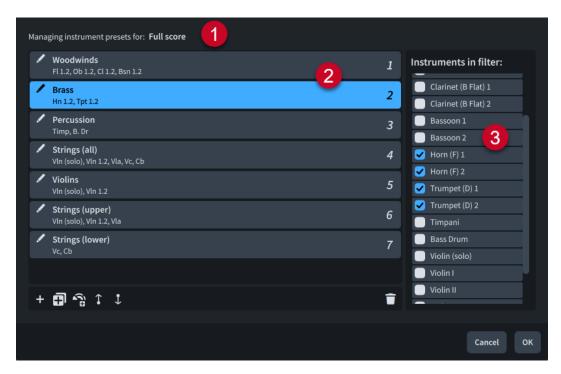
Opens the **Manage Instrument Filters** dialog, which allows you to add, edit, and delete instrument filters for the current layout.

Manage Instrument Filters dialog

The **Manage Instrument Filters** dialog allows you to add, edit, and delete instrument filters for the current layout.

You can open the Manage Instrument Filters dialog in Write mode in any of the following ways:

- In the instrument filter overlay, click Manage Instrument Filters
- Choose Write > Instrument Visibility > Edit Instrument Filter Presets.



The **Manage Instrument Filters** dialog comprises the following:

1 Managing instrument presets for

Displays the name of the layout whose instrument filters are listed in the dialog.

2 Instrument filters list

Contains the instrument filters set for the layout. Each instrument filter displays its name and the instruments it contains. If multiple instrument filters contain the same instruments, Dorico Elements displays a warning.

The first ten instrument filters show a number corresponding to their order in the list. This denotes the instrument filters for which you can assign key commands on the **Key Commands** page in **Preferences**.

Rename Instrument Filter Z allows you to rename each instrument filter.

The action bar at the bottom of the list contains the following options:

- Add Filter Preset #: Adds a new empty instrument filter.
- **Duplicate Filter Preset** : Creates a copy of an existing instrument filter that you can edit separately from the original.
- Add Presets From Instrument Families : Generates an instrument filter for each instrument family in the layout automatically, such as woodwind and brass.
- **Move Up** : Moves the selected instrument filter up the list, which can change its key command.
- **Move Down 1**: Moves the selected instrument filter down the list, which can change its key command.

3 Instruments in filter list

Contains the instruments in the layout. Allows you to change the instruments included in the selected instrument filter by activating/deactivating instrument checkboxes.

Activating/Deactivating instrument filters

You can activate/deactivate instrument filters at any time in each layout independently. For example, if you want to show only woodwind staves whilst working on the woodwind section.

PREREQUISITE

- You are in galley view.
- The instrument filter overlay is shown.
- You have added the instrument filters you want to use.

PROCEDURE

- 1. In Write mode, open the layout in which you want to activate/deactivate instrument filters.
- 2. In the instrument filter overlay, click **Filter ?**.





Filter when activated

Filter when deactivated

3. Optional: If you activated instrument filters, select the instrument filter you want to use from the menu.

RESULT

Instrument filters are activated/deactivated. When instrument filters are active, dashed lines are shown at the vertical positions of hidden staves and you can only select and edit music on visible staves.

TIP

- You can also activate/deactivate and select instrument filters from the Write > Instrument
 Visibility menu.
- You can assign a key command for **Use Instrument Filter** on the **Key Commands** page in **Preferences**.
- You can assign key commands for up to ten instrument filter presets on the **Key Commands**page in **Preferences**. The instruments filtered by these commands vary in each layout and
 project.

RELATED LINKS

Switching to galley/page view on page 49
Switching between layouts on page 42
Selecting notes/items on page 410
Editing items on page 418
Arranging tools on page 443
Hiding/Showing empty staves on page 590
Scrubbing on page 527
Key Commands page in the Preferences dialog on page 58

Adding instrument filters

You can add any number of instrument filters to each layout independently.

PREREQUISITE

- You are in galley view.
- The instrument filter overlay is shown.

PROCEDURE

- 1. In Write mode, open the layout to which you want to add instrument filters.
- **2.** Select at least one item belonging to each instrument you want to include in the instrument filter.
- 3. In the instrument filter overlay, click Add Instrument Filter +.

RESULT

A new instrument filter containing the selected instruments is added to the layout open in the music area. Dorico Elements automatically activates instrument filters in the layout and selects the new instrument filter.

TIP

- You can also add, edit, and delete instrument filters in the **Manage Instrument Filters** dialog.
- You can assign key commands for up to ten instrument filter presets on the **Key Commands**page in **Preferences**. The instruments filtered by these commands vary in each layout and
 project.

Renaming instrument filters

You can change the names of instrument filters, and reset renamed instrument filters to their default names; for example, to summarize instrument filter contents into a shorter name.

PROCEDURE

- 1. In Write mode, open the layout whose instrument filters you want to rename.
- Choose Write > Instrument Visibility > Edit Instrument Filter Presets to open the Manage Instrument Filters dialog.
- 3. Click **Rename Instrument Filter** / for the instrument filter you want to rename.
- 4. Rename the instrument filter in any of the following ways:
 - Enter a new instrument filter name, or edit the existing name.
 - To reset the instrument filter name, delete the existing name.
- 5. Press Return.

Deleting instrument filters

You can delete instrument filters you no longer need from each layout independently.

PROCEDURE

1. In Write mode, open the layout from which you want to delete instrument filters.

- 2. Choose Write > Instrument Visibility > Edit Instrument Filter Presets to open the Manage Instrument Filters dialog.
- **3.** Select the instrument filter you want to delete.
- 4. In the action bar, click **Delete Filter Preset 1**.

RESULT

The selected instrument filter is deleted from the layout open in the music area.

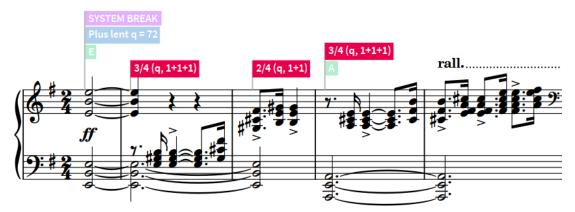
Signposts

In Dorico Elements, signposts indicate the positions of important items or changes that cannot be seen in the score, such as key signatures with no accidentals, hidden items, and rhythmic feel changes.

Signposts have different colors depending on the item they mark because many items can show signposts, such as hidden bar numbers and time signatures. They are selectable, meaning you can use signposts to change properties of hidden/invisible items; for example, by selecting system break signposts in order to change the staff size from that position. Selected signposts appear solid, while unselected signposts appear translucent.

Signposts include a text summary of the hidden/invisible item to help you identify it. For example, time signature signposts include the time signature, expressed as a fraction, and its beat subdivision.

When multiple signposts exist at the same rhythmic position or in close proximity to each other, they stack vertically so that they do not overlap and remain legible.



Multiple signposts for different items above the staff, with time signature signposts selected

NOTE

By default, signposts are not printed or included when you export graphics files.

RELATED LINKS

Annotations on page 581

Hiding/Showing signposts

You can hide/show all signposts or only hide/show signposts for specific items at any time in Setup, Write, and Engrave modes.

PROCEDURE

- Hide/Show signposts in any of the following ways:
 - To hide/show all signposts, choose View > Signposts > Hide Signposts.
 - To hide/show signposts for specific items, choose View > Signposts > [Type of item].

Insert mode

Insert mode changes how notes are input and how edits you make outside of note input affect the music. When Insert mode is activated, notes are pushed to subsequent rhythmic positions instead of being overwritten if you input new notes or lengthen existing notes. Similarly, deleting notes or reducing their duration with Insert mode activated pulls surrounding notes closer together without leaving rests between them.

For example, if you input four quarter notes with Insert mode activated, all subsequent notes are pushed four quarter note beats back to accommodate the new notes.

Edits outside of note input that are affected by Insert mode include copying/pasting notes, deleting notes, changing the duration of notes including by adding/removing rhythm dots, or inputting time signatures.

The voices and staves affected by Insert mode depend on the Insert mode scope. The current Insert mode scope is indicated in the Notes toolbox and by the caret during note input.

You can set a single rhythmic position in each flow as an Insert mode stop position, which prevents any material beyond the stop point being affected by inserted notes. For example, if you want to insert notes at the start of a flow but want to preserve material from a specific position later in the flow. Stop positions appear as a vertical translucent line that spans all staves.

• You can activate/deactivate Insert mode in Write mode by pressing **I** or clicking **Insert II** in the Notes toolbox.

NOTE

You cannot have both Insert mode and Chord mode activated simultaneously.

When Insert mode is not activated, Dorico Elements does not add extra beats before an existing time signature if you change a previous time signature. When Insert mode is activated, Dorico Elements inserts beats before existing time signatures to fill the final bar.





3/4 time signature input without Insert mode activated

3/4 time signature input with Insert mode activated

RELATED LINKS

Inputting notes in Insert mode on page 232
Rhythmic position on page 23
Chord mode on page 249
Caret on page 214
System track on page 414
Arranging tools on page 443
Changing the duration of notes on page 255

Deleting notes/items on page 443
Turning tuplets into normal notes on page 1388

Insert mode scopes

Insert mode has different scopes, from affecting only selected voices to affecting all players and changing the duration of the current bar. All scopes apply until the Insert mode stop position or the end of the flow, whichever comes first.

You can change the Insert mode scope in Write mode in any of the following ways:

- Press Alt/Opt-I to cycle through the different Insert mode scopes.
- In the Notes toolbox, click and hold **Insert 1**, then click the scope you want.
- Choose Write > Insert Scope > [Scope].

In Dorico Elements, there are the following Insert mode scopes:

Voice



Insert mode only affects the selected voices. During note input, this is the voice indicated by the caret indicator. Outside of note input, this includes all selected voices, such as when you copy and paste material across multiple staves.

Player



Insert mode affects all voices and instruments belonging to the selected players. During note input, dotted lines are shown on staves affected by the Insert mode scope across which the caret does not already extend.

Global



Insert mode affects all players in the flow. During note input, dotted lines are shown on staves affected by the Insert mode scope across which the caret does not already extend.

Global Adjustment of Current Bar



Insert mode affects all players in the flow, changes the duration of the current bar, and updates its time signature to reflect its new duration. For example, inputting notes extends the duration of bars while deleting notes shortens the duration of bars.

During note input, dotted lines are shown on staves affected by the Insert mode scope across which the caret does not already extend.

TIP

You can use the **Global Adjustment of Current Bar** Insert mode scope to create and delete pick-up bars by deleting notes/rests in the first bar in the flow. You can also use it to shorten the last bar in flows that start with a pick-up bar.

RELATED LINKS

Caret on page 214

Arranging tools on page 443

Players on page 121 Voices on page 1416 Time signatures on page 1359 Pick-up bars on page 1364

Changing the Insert mode scope

You can change the Insert mode scope; for example, if you want to switch from inserting notes into the selected voice only to inserting rhythmic time for all players.

The current Insert mode scope is indicated in the Notes toolbox and by the caret during note input.

PROCEDURE

- In Write mode, change the Insert mode scope in any of the following ways:
 - Press Alt/Opt-I to cycle through the different Insert mode scopes.
 - In the Notes toolbox, click and hold **Insert 1**, then click the scope you want.
 - Choose Write > Insert Scope > [Scope].

RELATED LINKS

Notes toolbox on page 192
Inputting notes in Insert mode on page 232

Setting Insert mode stop positions

You can set a single rhythmic position in each flow as an Insert mode stop position, which prevents any material beyond the stop point being affected by inserted notes. For example, if you want to insert notes at the start of a flow but want to preserve material from a specific position later in the flow.

PROCEDURE

- **1.** In Write mode, select the rhythmic position that you want to be the Insert mode stop position in any of the following ways:
 - Select an item in the music area.
 - In the system track, select the bar whose start barline you want to set as the stop position.
- 2. Set the Insert mode stop position in any of the following ways:
 - Press Shift-Alt/Opt-I.
 - In the system track, click **Set Edit Stop Position (a)**.
 - Choose Write > Insert Scope > Set Edit Stop Position.

RESULT

The Insert mode stop position for the flow is set at the selected rhythmic position. It appears as a vertical translucent line that spans all staves.

Because each flow can only have a single stop position, any existing stop position elsewhere in the flow is deleted.

When Insert mode is activated, existing notes that would otherwise be pushed beyond the stop position are deleted.

TIP

You can also move stop positions to barlines by clicking the top handle and dragging to the right/left.





Insert mode stop position across two piano staves

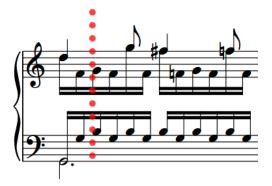
RELATED LINKS
System track on page 414
Arranging tools on page 443
Inputting notes in Insert mode on page 232

Deleting Insert mode stop positions

You can delete Insert mode stop positions after they have been set.

PROCEDURE

- In Write mode, delete Insert mode stop positions in any of the following ways:
 - Select an item at the rhythmic position of the Insert mode stop position and press **Shift-Alt/Opt-I**.
 - In the system track, click **Set Edit Stop Position** \bigcirc above existing stop positions.
 - Click the stop position top handle and drag it in any direction until the mouse pointer is outside the music, then release the mouse.



TIP

When the mouse pointer is in the correct position, the stop position appears as a dotted line.

Arranging tools

Arranging tools in Dorico Elements allow you to allocate notes to different staves and voices quickly and efficiently.

These tools include copying notes and items to multiple staves at the same time, and multiple times within a selected range, moving notes between staves, and changing the voices of notes.

RELATED LINKS

Filters on page 417

Note durations on page 254

Transposing tools on page 454

Selecting notes/items on page 410

Copying and pasting articulations on page 788

Adding notes above/below existing notes on page 253

Repitching notes without changing their rhythm on page 459

Rhythmic grid on page 212

Insert mode on page 439

Chord mode on page 249

Musical transformations on page 463

Deleting notes/items

You can delete any notes/items you have input into your project independently of each other, such as deleting repeat endings without deleting the notes in them. However, you must be in Write mode. You cannot delete notes and items in Setup, Engrave, or Print modes.

You can also delete notes in the Key Editor, but not other notation items.

PROCEDURE

1. In Write mode, select the notes, items, and/or the signposts of items you want to delete.

NOTE

- You must select barlines directly, not their signposts.
- If you delete some but not all dynamics from a dynamics group that is linked to other staves, the selected dynamics are also deleted from all linked staves.
- Deleting only tuplets does not delete the notes within them, and vice versa.
- To select multiple items of the same type, you can use large selections and/or filters.

2. Press Backspace or Delete.

RESULT

All selected notes/items are deleted from your project. Dorico Elements moves your selection to the most logical and nearby item to the deleted items. For example, if you deleted a note, Dorico Elements's first choice is the nearest note in the same voice.

If Insert mode was activated, notes following deleted notes move up to fill the gap. If Insert mode was deactivated, deleted notes are replaced by implicit rests as appropriate.

TIP

You can also delete markers by selecting them in the **Markers** section of the Video panel and clicking **Delete** in the action bar.

If a slur began or ended on a deleted note, the slur is automatically repositioned to the next/previous notehead. If only one note is left under a slur, the slur is automatically deleted.

Holds and pauses are not automatically deleted if they are not selected when you delete notes. They are positioned above the note/rest closest to their rhythmic position, or over whole bar rests if you delete all notes in a bar.

Any repeat barlines input as part of repeat endings are not deleted automatically when you delete repeat endings.

When you delete barlines, the two bars on either side combine into one bar, containing the same number of beats but without changing the time signature. This might cause note, rest, and beam groupings to change. Signposts are shown at the start of passages with deleted single barlines.

When you delete time signatures, subsequent bars are re-barred according to the previous time signature in the score, up until the next time signature or the end of the flow, whichever comes first. Flows without time signatures are notated in an open meter, but notes and items retain their duration and positions.

When you delete clefs and key signatures, the pitches of notes are not changed but they are automatically notated according to the previous clef and key signature on the staff, such as with additional accidentals, up to the next existing one or the end of the flow, whichever comes first. Flows without any key signatures are treated as if there were an open/atonal key signature rather than A minor or C major.

When you delete octave lines, any notes to which the deleted octave lines previously applied are shown at either concert pitch or transposed pitch, depending on your current setting for the layout.

If you delete some but not all dynamics in a dynamics group that is linked to other staves, the selected dynamics are also deleted from all linked staves. However, if you select and delete the whole group of dynamics from a single staff, those dynamics are not deleted from other linked staves. Deleting immediate dynamics immediately before/after hairpins can automatically adjust the length of hairpins, depending on the context.

When you delete rehearsal marks, any subsequent rehearsal marks are adjusted until the next change in the sequence or the end of the flow, whichever comes first. For example, if you delete the first rehearsal mark, the second rehearsal mark shows either the letter A, the number 1, or the bar number, depending on your choice of sequence type.

Deleting tempo marks also removes them from the Tempo editor and the Tempo track in Play mode. The tempo in playback follows the previous tempo mark, or the default tempo of 120 bpm if there is no previous tempo mark.

AFTER COMPLETING THIS TASK

If you deleted notes/items because you want to change where they occur, you can input new notes/items at the new positions.

RELATED LINKS

Signposts on page 438
Editing items on page 418
Selecting notes/items on page 410
Large selections on page 410
Filters on page 417
Deleting rests on page 1254
Deleting notes in the Key Editor on page 671
Insert mode on page 439
Inputting notes on page 219
Notations input on page 266

Copying and pasting notes/items

You can copy and paste items, including notes and notations, to other rhythmic positions and staves in different ways.

PREREQUISITE

If you want to use the mouse, you have enabled mouse editing.

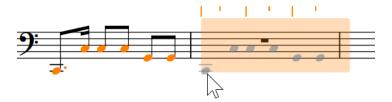
PROCEDURE

1. In Write mode, select the notes/items you want to copy.

TIP

To select multiple items of the same type, you can use large selections and/or filters.

- **2.** Copy the selected notes/items to other rhythmic positions in any of the following ways:
 - Press Ctrl/Cmd-C, select the position to which you want to paste them, then press Ctrl/Cmd-V.
 - Alt/Opt -click each position to which you want to paste them.
 - Alt/Opt-drag notes to the position and staff to which you want to paste them.
 When you drag notes, shadow noteheads indicate their destination positions, and the affected region appears highlighted with the rhythmic grid shown above it.



- To repeat the material directly after itself, press **R**.
- To copy notes/items to the staff above, select them and choose Edit > Paste Special > Duplicate to Staff Above.
- To copy notes/items to the staff below, select them and choose Edit > Paste Special > Duplicate to Staff Below.

RESULT

The selected notes/items are copied without deleting them from their original positions. By default, any MIDI CC points in the copied range are also pasted.

If you copied dynamics or slurs to other staves at the same rhythmic position, they are automatically linked by default.

When you copy or move chord symbol regions to other staves, the corresponding players are set to show chord symbols.

TIP

You can assign key commands for **Duplicate to Staff Above** and **Duplicate to Staff Below** on the **Key Commands** page in **Preferences**.

RELATED LINKS

Disabling automatic copying of MIDI data when pasting on page 448
Disabling automatic linking of dynamics and slurs when pasting on page 447
Enabling/Disabling mouse editing on page 208

Copying and pasting articulations on page 788

Copying and pasting lyrics on page 1013

Copying and pasting points in the Key Editor on page 660

Rhythmic grid on page 212

Large selections on page 410

Filters on page 417

Resetting notes crossed to other staves on page 835

Hiding/Showing chord symbols on page 859

Key Commands page in the Preferences dialog on page 58

Copying and pasting notes/items to multiple staves

You can copy and paste notes and other items to multiple staves at once; for example, to copy a single phrase to all the woodwind staves when they are playing in unison.

PROCEDURE

1. In Write mode, select the notes/items you want to copy to multiple staves.

TIP

To select multiple items of the same type, you can use large selections and/or filters.

- 2. Press Ctrl/Cmd-C to copy the selected notes/items.
- 3. Select an item on each staff to which you want to paste the selected items.

NOTE

The earliest selected item on the top selected staff determines the rhythmic position for pasted items on all staves.

4. Press **Ctrl/Cmd-V** to paste the selected notes/items.

RESULT

The selected notes/items are copied to all of the selected staves. By default, any MIDI CC points in the copied range are also pasted.

If you copied dynamics or slurs to other staves at the same rhythmic position, they are automatically linked by default.

When you copy or move chord symbol regions to other staves, the corresponding players are set to show chord symbols.

TIP

If you selected a range of notes/items on each staff, the selected notes/items are also pasted multiple times to fill the selected range.

RELATED LINKS

Filters on page 417

Large selections on page 410

Disabling automatic copying of MIDI data when pasting on page 448

Disabling automatic linking of dynamics and slurs when pasting on page 447

Hiding/Showing chord symbols on page 859

Resetting notes crossed to other staves on page 835

Copying and pasting notes/items to fill a selected range

You can copy and paste items, including notes and notations, multiple times within a selected range at once; for example, if you want to fill multiple bars with the same phrase.

NOTE

You can only copy and paste items that have a duration to fill a selection. For example, you can copy and paste gradual dynamics to fill a selection but not immediate dynamics.

PROCEDURE

1. In Write mode, select the notes/items you want to copy throughout a range.

TIF

To select multiple items of the same type, you can use large selections and/or filters.

- **2.** Press **Ctrl/Cmd-C** to copy the selected notes/items.
- 3. Select the range throughout which you want to paste the selected notes/items.
- 4. Press Ctrl/Cmd-V to paste the selected notes/items.

RESULT

The selected notes/items are copied as many times as will fit within the selected range without extending beyond it. By default, any MIDI CC points in the copied range are also pasted.

If you copied dynamics or slurs to other staves at the same rhythmic position, they are automatically linked by default.

When you copy or move chord symbol regions to other staves, the corresponding players are set to show chord symbols.

TIP

If you selected a range on multiple staves, the selected items are also pasted to multiple staves.

RELATED LINKS

Filters on page 417
Large selections on page 410
Splitting notes by duration on page 256

Disabling automatic linking of dynamics and slurs when pasting

By default, dynamics and slurs are automatically linked when you copy them to other staves at the same rhythmic position. You can disable this behavior so dynamics and slurs are not linked by default.

PROCEDURE

- 1. Press Ctrl/Cmd-, to open Preferences.
- 2. In the category list, click Note Input and Editing.
- 3. In the **Editing** section, deactivate **Link dynamics and slurs to existing items when pasting**.
- 4. Click Apply, then Close.

RELATED LINKS

Preferences dialog on page 57 Linked dynamics on page 931 Linked slurs on page 1275

Disabling automatic copying of MIDI data when pasting

By default, all MIDI CC, MIDI pitch bend, and dynamic points are copied when you copy the notes to which they apply. You can disable this behavior for all future projects on your computer.

PROCEDURE

- 1. Press Ctrl/Cmd-, to open Preferences.
- 2. In the category list, click Note Input and Editing.
- 3. In the Note Input section, deactivate Include MIDI CC, pitch bend and dynamics from Key Editor when copying music.
- 4. Click Apply, then Close.

RELATED LINKS

Preferences dialog on page 57
Copying and pasting notes/items on page 445
Copying and pasting notes in the Key Editor on page 670

Moving notes/items rhythmically

You can move notes and items to new rhythmic positions to the right/left along staves after they have been input. For example, if you want a *cresc*. dynamic to start a beat later. You can also move individual dynamics and playing techniques within a group.

NOTE

- These steps do not apply to the following items: barlines, notehead brackets, glissando lines, notehead-attached horizontal lines, fingerings and fingering slides, jazz articulations, guitar bends, vibrato bar dives/returns, pedal retakes, and tremolo strokes. If you want to change the rhythmic positions of these items, you must delete them from their original positions and input new ones at the new positions.
 - We recommend deleting and inputting new arpeggio signs and vertical lines rather than moving them. If you move arpeggio signs and vertical lines to the rhythmic position of a rest, they are deleted.
- Because markers have a fixed position in time, moving markers relative to the notated music automatically changes the tempo on either side of the marker. If you want to move a marker to a new time position, you must change the timecode of the marker; for example, if you want to move it from 25 seconds to 28 seconds.

PREREQUISITE

- You have chosen the appropriate rhythmic grid resolution.
- If you want to use the mouse, you have enabled mouse editing.

PROCEDURE

1. In Write mode, select the notes, items, or signposts that you want to move.

NOTE

- If you want tuplet notes to remain tuplets, you must also select their tuplet numbers/ ratios, brackets, or tuplet signposts, otherwise notes become normal notes of their rhythmic value when you move them beyond the boundaries of tuplets.
- You can only move a single slur, marker, repeat ending, or bar repeat region at a time.
- When using the mouse, you can only move a single item at a time.
- You cannot move the following items using the mouse: tuplets, lyrics, slash regions, time signatures, arpeggio signs, and vertical lines.
- You can only select clefs that you have input. You cannot select initial clefs at the start of flows or clefs shown automatically at the start of each system.
- To move a single dynamic within a group, you must click and drag it with the mouse. If you use the key commands, the whole group is moved.
- Moving multiple playing techniques or dynamics in the same group at the same time ungroups them.
- **2.** Optional: If you selected notes and do not want them to overwrite existing notes they pass over as part of their move, activate one of the following:
 - If you want the selected notes to overlap with existing notes, activate Chord mode by pressing **Q** or clicking **Chords** in the Notes toolbox.
 - If you want the selected notes to move through existing notes, activate Insert mode in Write mode by pressing **I** or clicking **Insert I** in the Notes toolbox.

NOTE

Moving notes rhythmically with Insert mode activated can affect the durations of existing notes the selected notes move through.

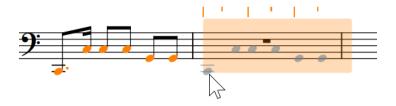
- **3.** Move the notes, items, and/or signposts in any of the following ways:
 - To move them to the right, press Alt/Opt-Right Arrow.
 - To move them to the left, press Alt/Opt-Left Arrow.

NOTE

Most items move according to the current rhythmic grid resolution. A single selection of the following items moves to adjacent noteheads, bars, or barlines: ornaments, slurs, horizontal lines, octave lines, pedal lines, rehearsal marks, repeat endings, and bar repeat regions.

- To move items to the right according to the current rhythmic grid resolution, press Ctrl/ Cmd-Alt/Opt-Right Arrow.
- To move items to the left according to the current rhythmic grid resolution, press Ctrl/ Cmd-Alt/Opt-Left Arrow.
- Click and drag them to the right/left.

When you drag notes, shadow noteheads indicate their destination positions, and the affected region appears highlighted with the rhythmic grid shown above it.



NOTE

The following items move to adjacent noteheads, bars, or barlines: ornaments, slurs, horizontal lines, octave lines, pedal lines, rehearsal marks, repeat endings, and bar repeat regions.

RESULT

The selected notes, items, and/or signposts are moved to new rhythmic positions. Attachment lines link items to the rhythmic positions to which they apply.

Most items move according to the current rhythmic grid resolution. However, a single selection of some items automatically moves to adjacent noteheads, bars, or barlines. When multiple items are selected, they move as a block according to the current rhythmic grid resolution.

NOTE

Only a single instance of many items, such as tempo marks and clefs, can exist at each rhythmic position on each staff. If an item passes over another item of the same type as part of its move, the existing item is deleted or shortened accordingly.

You can undo this action, but any items deleted in the process are only restored if you moved items using the keyboard.

Items that can have multiple instances at the same rhythmic position on the same staff include dynamics, octave lines, playing techniques, horizontal lines, slash regions, and text items. However, if you move multiple items together, any existing items of the same type between the selected items or that they pass over as part of the move are deleted or shortened accordingly unless Insert mode is activated.

Notes are automatically positioned according to their rhythmic duration and position relative to other notes

If a tuplet number/ratio or tuplet bracket is included in the selection, the whole tuplet is moved along the staff. If it crosses a barline, the tuplet is automatically adjusted to compensate. However, tuplets are not automatically adjusted at the mid-point of bars, where it is convention to split tuplets to show the beat division. You must enter two tuplets manually to show the beat division at the mid-point of bars.

Items such as clefs, key signatures, and time signatures take effect from their new positions until the next item of the same type or the end of the flow, whichever comes first. Barlines on either side of a moved time signature are automatically updated up to the previous/next existing time signature, or the start/end of the flow.

If you moved divisi change signposts, any music on divisi staves outside of divisi passages is automatically hidden, and any unison ranges before/after divisi passages are automatically updated.

If you moved harp pedal diagrams and colors are shown for notes out of range, any notes that no longer fit with the prevailing harp pedal diagram appear red.

The position of holds and pauses you have moved might not appear to change. For example, if one staff has a bar rest and you move a fermata rhythmically within the bar, the fermata still appears above the bar rest.

The rhythmic duration of slurs is usually maintained. However, depending on the rhythms they cross as they move, slurs may cover longer/shorter durations than before the move.

Moving repeat endings does not automatically input, delete, or move repeat barlines.

When you move markers, their fixed position in time is not changed. Therefore, the tempo immediately preceding the marker automatically updates so that the marker occurs at the correct time. For example, moving a marker to the right increases the preceding tempo. Any gradual tempo changes between the preceding tempo change or the start of the flow and the marker are removed. The tempo change affects the positions of all other markers in the flow relative to the notated music.

RELATED LINKS

Changing the rhythmic grid resolution on page 213

Enabling/Disabling mouse editing on page 208

Hiding/Showing attachment lines on page 426

Notes toolbox on page 192

Chord mode on page 249

Insert mode on page 439

Changing the staff-relative placement of items on page 423

Creating cross-staff beams/tremolos on page 832

Moving figured bass resolutions on page 947

Moving the center of messa di voce hairpins on page 926

Moving items graphically on page 501

Hiding/Showing colors for notes out of range on page 1044

Changing the timecodes of markers on page 1204

Moving notes/items to other staves

You can move notes and items to other staves of any type; for example, if you want to move individual notes from one keyboard staff to another after importing a keyboard part from a MIDI file.

NOTE

- These steps do not apply to pedal lines or system objects.
- If you want notes to appear on a different staff but remain attached to their original staff, such as to create a cross-staff beam, you can cross notes to other staves instead.

PREREQUISITE

If you want to use the mouse, you have enabled mouse editing.

PROCEDURE

1. In Write mode, select the notes and/or items you want to move to another staff.

TIP

To select multiple items of the same type, you can use large selections and/or filters.

- 2. Move the selected notes/items another staff in one of the following ways:
 - To move them to the staff above, press Alt/Opt-N.
 - To move them to the staff below, press Alt/Opt-M.

• Click and drag notes to other staves.

When you drag notes, shadow noteheads indicate their destination positions, and the affected region appears highlighted with the rhythmic grid shown above it.



- Choose Edit > Paste Special > Move to Staff Above.
- Choose Edit > Paste Special > Move to Staff Below.

TIP

You can also choose these options from the context menu.

RESULT

The selected notes and/or items are moved to another staff by cutting them from their original staff and pasting them to the new staff. By default, notes are pasted into the first voice active on that staff.

Notes within tuplets remain tuplets even if you did not select the tuplet bracket, tuplet number/ratio, or tuplet signpost.

When you copy or move chord symbol regions to other staves, the corresponding players are set to show chord symbols.

RELATED LINKS

Filters on page 417

Large selections on page 410

Enabling/Disabling mouse editing on page 208

Creating cross-staff beams/tremolos on page 832

Changing the positions of system objects on page 1304

Hiding/Showing chord symbols on page 859

Moving notes to other instruments in percussion kits

You can move notes to different instruments in the same percussion kit after they have been input.

NOTE

These steps do not apply in layouts using the single-line instruments kit presentation type. In such layouts, you can cross or move notes to other staves.

PROCEDURE

- 1. In Write mode, select the notes you want to move to a different instrument in the percussion kit
- **2.** Move the notes to another instrument in any of the following ways:
 - To move them to the instrument above, press **Alt/Opt-Up Arrow**.

To move them to the instrument below, press Alt/Opt-Down Arrow.

AFTER COMPLETING THIS TASK

You can change the position of each instrument in the kit.

RELATED LINKS

Moving instruments in percussion kits on page 146 Changing playing technique-specific noteheads on page 1402 Percussion kit presentation types on page 1406 Creating cross-staff beams/tremolos on page 832

Changing the voice of existing notes

You can change the voice of notes after they have been input, including notes in slash voices. For example, you can change notes in an up-stem voice to a down-stem voice or a slash voice.

PROCEDURE

1. In Write mode, select the notes whose voice you want to change.

TIP

You can use large selections and filters to select many notes in the same voice quickly.

- **2.** Change the voice in any of the following ways:
 - To change the selected notes to a new normal voice, press **Shift-V** or click **Create Voice** in the Notes toolbox.
 - To change the selected notes to a new slash voice, press **Shift-Alt/Opt-V**. You can also click and hold **Create Voice** in the Notes toolbox, then click **Create Slash Voice**.
 - To change the selected notes to an existing voice, press **V** or click **Next Voice** in the Notes toolbox to cycle through active voices on the staff.

RESULT

The voice of the selected notes is changed, which might cause Dorico Elements to change the stem directions of the selected notes and other notes on the staff. Rests appear as required around notes in different voices.

By default, notes in slash voices are not played back. However, if you include slash voices in playback, notes in slash voices play back with their input pitch.

TIP

You can also change the voice of selected notes by choosing **Edit** > **Notations** > **Voices** > **Change Voice** > **[Voice]**. You can also choose these options from the context menu. If there is only one voice on the staff, you can create a new voice for your selected notes.

AFTER COMPLETING THIS TASK

- You can later delete or hide rests and change the stem direction of notes manually.
- You can also change whole voices into slash voices.

RELATED LINKS

Notes toolbox on page 192 Large selections on page 410 Filters on page 417

Hiding/Showing voice colors on page 1417

Inputting notes into multiple voices on page 227

Inputting notes into slash voices on page 229

Deleting rests on page 1254

Changing the stem direction of notes on page 1057

Changing the slash voice type on page 1237

Swapping the contents of voices

You can swap the contents of two voices that contain musical material.

PROCEDURE

- 1. In Write mode, select the notes in two voices that you want to swap.
- 2. Choose **Edit** > **Notations** > **Voices** > **Swap Voice Contents**. You can also choose this option from the context menu.

RESULT

The contents of the voices are swapped. For example, the notes previously in an up-stem voice are now in a down-stem voice, and the notes previously in a down-stem voice are now in an up-stem voice.

NOTE

Depending on the pitches involved in the swap and their stem directions, the notes might overlap. Dorico Elements automatically positions notes with the noteheads partially overlapping, in order to minimize the horizontal space they occupy and maintain the clarity of the rhythm. However, if you want to change this arrangement, you can change the order of voices or change the voice column index.

EXAMPLE





An E is in the up-stem voice, an F in the down-stem voice.

After swapping their voice contents, the E is in the down-stem voice, and the F is in the up-stem voice.

RELATED LINKS

Swapping the order of voices on page 1420 Voice column index on page 1419

Transposing tools

In Dorico Elements, you can change the pitches of existing notes in a variety of ways.

RELATED LINKS

Arranging tools on page 443

Transposing instruments on page 130

Concert vs. transposed pitch on page 174
Making layouts transposed/concert pitch on page 173
Transposing notes in the piano roll editor on page 668
Transposing chord symbols on page 864

Changing the pitch of individual notes

You can raise/lower the pitch and register of individual notes, including grace notes, after they have been input by octave divisions, staff position, and octaves.

PREREQUISITE

If you want to use the mouse, you have enabled mouse editing.

PROCEDURE

- 1. In Write mode, select the notes whose pitches you want to change.
- **2.** Raise/Lower the pitches of the selected notes in any of the following ways:
 - To move notes up one staff position, such as from C to D, press Alt/Opt-Up Arrow.
 - To move notes down one staff position, such as from D to C, press Alt/Opt-Down Arrow.
 - To transpose notes up a single octave division, such as a half-step (semitone) in 12-EDO or a quarter tone in 24-EDO, press **Shift-Alt/Opt-Up Arrow**.
 - To transpose notes down a single octave division, such as a half-step (semitone) in 12-EDO or a quarter tone in 24-EDO, press **Shift-Alt/Opt-Down Arrow**.
 - To transpose notes up an octave, press Ctrl/Cmd-Alt/Opt-Up Arrow.
 - To transpose notes down an octave, press Ctrl/Cmd-Alt/Opt-Down Arrow.
 - To transpose notes up/down by staff position, click and drag notes upwards/downwards.
 - To transpose notes up/down by octave division, start dragging notes upwards/ downwards, then press and hold **Shift**.
 - To transpose notes up/down by octaves, start dragging notes upwards/downwards, then press and hold **Ctrl/Cmd**.

When you drag notes, shadow noteheads indicate their destination pitches, and the affected region appears highlighted with the rhythmic grid shown above it.



RESULT

The pitch or register of the selected notes is changed. Any figured bass shown on the affected staves is updated automatically.

If the pitch is now impossible to play on a fretted instrument, such as if a note would have to be played below the nut on the lowest string, it appears on tablature as a question mark.

NOTE

You can press **Alt/Opt-Up Arrow** and **Alt/Opt-Down Arrow** to change the staff positions of notes in percussion kits using grid and five-line staff presentation types. However, this also changes the instrument playing the note.

RELATED LINKS

Enabling/Disabling mouse editing on page 208 Equal Division of the Octave (EDO) on page 1009 Respelling notes on page 460

Inputting accidentals on page 239

Transposing notes in the piano roll editor on page 668

Figured bass on page 938

Arranging tools on page 443

Musical transformations on page 463

Transposing selections

You can transpose whole flows or specific selections, including selected key signatures, using the **Transpose** dialog.

TIP

Dorico Elements automatically shows the appropriate key signatures for transposing instruments in transposing layouts.

PROCEDURE

1. Optional: In Write mode, select the region you want to transpose.

NOTE

- To transpose key signatures, chord symbols, or figured bass, you must include them in your selection.
- If nothing is selected, the whole flow in which you last selected a note/item is transposed.
- 2. Choose Write > Transpose to open the Transpose dialog.
- 3. Adjust the parameters required for your transposition, such as interval and quality.

TIP

- We recommend using the Calculate interval section to determine your required settings; for example, if you want to transpose from Gb major to G major.
- Different intervals have different possible qualities. For example, you can specify a major third but not a major octave. Therefore, if you want to set your transposition parameters manually, we recommend selecting the interval before the quality.
- **4.** Optional: If you want to transpose any key signatures in the flow or included in your selection, activate **Transpose key signatures**.
- **5.** Click **OK** to save your changes and close the dialog.

RESULT

All notes in your selection, or all notes in the flow if nothing was selected, are transposed according to the interval or number of divisions of the octave specified in the **Transpose** dialog.

If your selection included key signatures and you activated **Transpose key signatures**, all key signatures in the selection are also transposed.

Any figured bass shown on the affected staves is also transposed accordingly.

Key signatures that apply to all staves are transposed on all staves in the layout, even if your selection did not include all staves. Key signatures that apply only to single staves are transposed if they are included in a selection, but this does not affect any other staff in the layout.

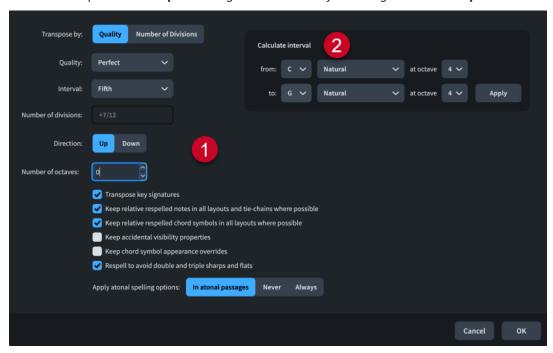
RELATED LINKS

Large selections on page 410
System track on page 414
Figured bass on page 938
Enharmonic equivalent key signatures on page 1006
Concert vs. transposed pitch on page 174

Transpose dialog

The **Transpose** dialog allows you to transpose whole flows or selections of notes, including key signatures. You can transpose according to an interval and quality or by a set number of octave divisions.

• You can open the **Transpose** dialog in Write mode by choosing **Write** > **Transpose**.



The **Transpose** dialog contains the following sections:

1 Transposition options

Contains options that allow you to specify the transposition you want. For example, you can choose to transpose by an interval quality, such as a major third, or by a set number of divisions of the octave. You can choose the direction of the transposition, whether it includes octaves, and the interval and quality or number of divisions by which you want to transpose your selection.

According to convention, different intervals have different possible qualities. For example, you can specify a major third but not a major octave. Therefore, we recommend selecting the interval before the quality.

Additional options also allow you to transpose any key signatures included in your selection, keep relative respelled notes and chord symbols where possible, and avoid double and triple accidentals.

NOTE

You can only use **Respell to avoid double and triple sharps and flats** when transposing music in tonality systems that are compatible with 12-EDO.

2 Calculate interval

Allows you to set transposition options according to a starting note and the resulting note you want. For example, if you want to transpose a selection relative to a C4 becoming a G# but you are not certain of the interval and quality required, you can enter those two notes in the **Calculate interval** section, click **Apply**, and Dorico Elements automatically sets the required transposition options for you.

NOTE

The **Transpose** dialog does not allow transpositions that would result in impossible notations, such as sharper than a triple sharp, or that require a microtonal accidental that does not exist in the tonality system in place at the position of your selection.

RELATED LINKS

Equal Division of the Octave (EDO) on page 1009 Tonality systems on page 1009 Enharmonic equivalent key signatures on page 1006

Transposing existing notes with the note tools popover

You can change the pitch of notes after they have been input using the note tools popover.

PROCEDURE

- 1. In Write mode, select the notes you want to transpose.
- 2. Open the note tools popover in any of the following ways:
 - Press Shift-I.
 - In the Notations toolbox, click **Popovers** , then **Note Tools** ...
- 3. Enter the transposition interval you want into the popover.

For example, enter **t3** to transpose the notes up a third, or **t-min6** to transpose the notes down a minor sixth.

4. Press **Return** to close the popover.

RESULT

The selected notes are transposed by the degree specified. Any figured bass shown on the affected staves is also transposed accordingly.

RELATED LINKS

Notations toolbox on page 197 Note tools popover on page 473 Figured bass on page 938 Musical transformations on page 463

Repitching notes without changing their rhythm

You can repitch notes after you have input them while keeping their durations the same. For example, if you want to duplicate the rhythm but have different pitches.

PROCEDURE

- 1. In Write mode, select the first note you want to repitch.
- **2.** Start note input in any of the following ways:
 - Press Shift-N.
 - In the Notes toolbox, click Start Note Input In.
 - Double-click the staff.
- **3.** Optional: If you want to repitch notes on multiple staves at once, extend the caret to those staves.
- **4.** Activate **Lock Duration** in any of the following ways:
 - Press L.
 - In the Notes toolbox, click **Lock Duration** •.
- **5.** Enter the pitches you want.
- **6.** Optional: Press **L** or click **Lock Duration △** again to deactivate **Lock Duration**.

NOTE

Lock Duration automatically deactivates when you reach the last existing note on the staff. By default, normal note input continues using the previous note value selected before you activated **Lock Duration**.

RESULT

Existing notes on the selected staff are repitched without their rhythms being changed. The caret automatically advances from note to note, even if there are large rests between notes on the staff.

TIP

You can set a maximum number of rests over which you want to advance when repitching notes in **Preferences** > **Note Input and Editing** > **Note Input** > **Lock Duration**.

RELATED LINKS

Extending the caret to multiple staves on page 218
Arranging tools on page 443
Mapping notes to pitches on page 469
Mapping notes to scales on page 471
Copying and pasting articulations on page 788
Preferences dialog on page 57

Respelling notes

You can change the enharmonic spelling of notes so they are shown as their enharmonic equivalents; for example, to show the stepwise movement in a phrase clearly, or to avoid altered unisons in a chord. You can do this for all layouts or only in the current part layout.

By default, Dorico Elements uses an algorithm that automatically decides the spelling of pitches, based on key signature and context.

There are always at least three options for every pitch, as Dorico Elements allows enharmonic spellings to show up to two accidental glyphs. This means the same note can be spelled four ways if the original pitch can be spelled with the note name either two notes below or two notes above, using a maximum of two accidental glyphs. For example, Bth is a possible enharmonic spelling of G# because a triple-flat uses a single accidental glyph, whereas an F# uses two accidental glyphs.

PROCEDURE

1. In the music area, open the layout in which you want to respell accidentals. You can do this in Write mode and Engrave mode.

NOTE

By default, respelling notes in score layouts also affects their spelling in all other layouts, but respelling notes in part layouts only affects their spelling in the current part layout.

2. Select the notes you want to respell.

NOTE

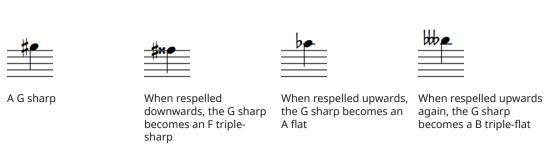
If you want to respell individual noteheads in tie chains, you must be in Engrave mode.

- **3.** Respell the selected notes in any of the following ways:
 - To respell them upwards, press **Alt/Opt-=** or click **Respell Using Note Name Above** in the Keyboard panel toolbar.
 - To respell them downwards, press **Alt/Opt--** or click **Respell Using Note Name Below** in the Keyboard panel toolbar.
 - To respell them automatically, choose Write > Respell > Respell Notes Automatically to open the Respell Notes Automatically dialog.
- **4.** Optional: If you opened the **Respell Notes Automatically** dialog, change the settings for respelling as required, then click **OK** to close the dialog and respell the selected notes.

RESULT

The enharmonic spelling of the selected notes is changed.





AFTER COMPLETING THIS TASK

You can copy note spellings to other layouts, such as if you respelled notes in a part layout but want the same spelling to appear in the full score layout.

RELATED LINKS

Keyboard panel on page 202

Switching between layouts on page 42

Selecting notes/items on page 410 Inputting accidentals on page 239

Accidental selection during MIDI input on page 240

Tonality systems on page 1009

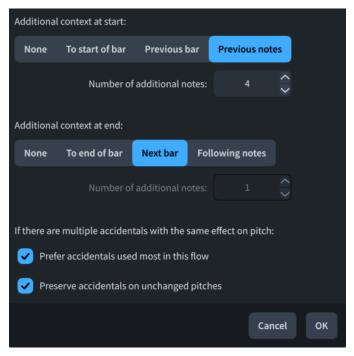
Mapping notes to pitches on page 469

Mapping notes to scales on page 471

Respell Notes Automatically dialog

The **Respell Notes Automatically** dialog allows you to simplify the note spelling of all notes in specific selections based on the musical context, including respelling some notes upwards and other notes downwards.

• You can open the **Respell Notes Automatically** dialog in Write mode when at least one note is selected in the music area by choosing **Write** > **Respell** > **Respell Notes Automatically**.



The **Respell Notes Automatically** dialog contains the following options:

Additional context at start

Allows you to specify additional musical context before the selected notes that you want Dorico Elements to consider when calculating automatic note spellings.

- None: Only notes in the selection.
- To start of bar: Includes notes back to the start of the earliest selected bar.
- **Previous bar**: Includes notes back to the start of the previous bar.
- **Previous notes**: Includes a specified number of notes before the selection.
- Number of additional notes: Allows you to specify the number of additional notes you want to consider. Only available if you have activated Previous notes.

Additional context at end

Allows you to specify additional musical context after the selected notes that you want Dorico Elements to consider when calculating automatic note spellings.

- None: Only notes in the selection.
- To end of bar: Includes notes up to the end of the last selected bar.
- **Next bar**: Includes notes up to the end of the next bar.
- **Following notes**: Includes a specified number of notes after the selection.
- **Number of additional notes**: Allows you to specify the number of additional notes you want to consider. Only available if you have activated **Following notes**.

Prefer accidentals used most in this flow

Allows you to specify whether to choose accidentals based on how frequently they are used in the flow or the default accidental for the corresponding pitch delta. Useful in tonality systems that contain multiple accidentals with the same pitch delta.

Preserve accidentals on unchanged pitches

Allows you to specify whether existing accidentals on notes that are not respelled are retained or chosen according to your setting for **Prefer accidentals used most in this flow**. Useful in tonality systems that contain multiple accidentals with the same pitch delta.

RELATED LINKS

Selecting notes/items on page 410 Tonality systems on page 1009

Copying note spellings to other layouts

You can copy note spellings to other layouts; for example, if you originally respelled notes in a part layout but want those spellings to appear in the full score layout as well.

PROCEDURE

- 1. In Write mode, open the layout containing the note spellings you want to copy.
- 2. Select the notes you want to respell.
- 3. Choose Write > Respell > Propagate Note Spellings.

RESULT

The spellings of the selected notes in the current layout are copied to all other layouts in which those notes appear.

RELATED LINKS

Switching between layouts on page 42 Part formatting propagation on page 626

Resetting note spellings

You can reset changes to note spellings so they follow the spelling in score layouts; for example, if you want future revisions to note spellings you make in the full score layout to affect notes whose spelling you previously overrode in a part layout. You can do this in either one part layout only or in all layouts.

PROCEDURE

- 1. Optional: If you want to reset note spellings in one part layout only, open that layout in the
- 2. In Write mode, select the notes whose spellings you want to reset.
- 3. Reset their note spellings in one of the following ways:
 - Choose Write > Respell > Reset Note Spellings in Current Layout.
 - Choose Write > Respell > Reset Note Spellings in All Layouts.

RESULT

The spellings of the selected notes are reset either in the current part layout only or in all layouts. Their link to the score note spelling is restored, meaning all future changes you make to the spelling of the selected notes in score layouts also affect their spelling in either the current part layout or all layouts.

RELATED LINKS

Switching between layouts on page 42 Transposing selections on page 456

Musical transformations

Dorico Elements provides multiple tools for transforming pitches and rhythms, including reversing and inverting pitches and rotating rhythms.

In Dorico Elements, the term "musical transformations" covers the following methods of changing the pitch and/or rhythm of notes:

Inversion

The melodic contours of phrases are switched upside-down by forcing pitch intervals between notes in the opposite direction, such as a note originally a fifth above the previous note becoming a fifth below the previous note.

Reversal

The order of notes, including pitches and/or rhythms, and items is reversed so they are played backwards; for example, the first note of a phrase becoming the last note. Also known as "retrograde".

Rotation

Notes, including pitches and/or rhythms, and items are shifted along by a specified number of steps either forwards or backwards, so that, for example, the first note in a phrase's original pitch is given to the second note, the second note's pitch to the third note, and so on.

Repetition

The pitches of the specified number of notes at the start of a phrase is repeated across all subsequent notes in the selection.

Pitch mapping

Specified pitches are transposed to become other specified pitches, such as mapping all C‡s to Dbs.

Scale mapping

All notes in the specified source scale are transposed to become the equivalent notes in the destination scale according to their scale degree.

RELATED LINKS

Arranging tools on page 443

Note tools popover on page 473

Adding notes above/below existing notes on page 253

Transposing existing notes with the note tools popover on page 458

Inverting pitches

You can invert the pitches of selected notes, which switches the melodic contour of phrases upside-down by forcing pitch intervals between notes in the opposite direction, such as a note originally a fifth above the previous note becoming a fifth below the previous note. This transformation is also known as "inversion".

PROCEDURE

- 1. In Write mode, select the notes you want to invert.
- **2.** Do one of the following:
 - To invert pitches only, choose Write > Transform > Pitches > Invert Pitches to open the Invert Pitches dialog.
 - To invert and reverse pitches, choose Write > Transform > Pitches > Reverse and Invert Pitches to open the Reverse and Invert Pitches dialog.
 - To invert and reverse pitches and reverse rhythms, choose Write > Transform > All >
 Reverse and Invert Pitches and Reverse Rhythms to open the Reverse and Invert
 Pitches and Reverse Rhythms dialog.
- **3.** Change the settings as required for your inversion.
- **4.** Click **OK** to save your changes and close the dialog.

RESULT

The selected notes are transformed according to your initial menu selection and your settings in the dialog.

TIP

You can also invert pitches using the note tools popover.

RELATED LINKS

Reverse and Invert Pitches and Reverse Rhythms dialogs on page 465 Note tools popover on page 473 Selecting notes/items on page 410

Reversing pitches/rhythms

You can reverse notes, including pitches and/or rhythms, and staff-attached items so that selections are played backwards; for example, the first note of a phrase becomes the last note. This transformation is also known as "retrograde".

PROCEDURE

1. In Write mode, select the notes and staff-attached items whose pitches and/or rhythms you want to reverse.

For example, to reverse dynamics alongside notes, include dynamics in your selection.

- **2.** Do one of the following:
 - To reverse pitches only, choose Write > Transform > Pitches > Reverse Pitches.
 - To reverse rhythms only, choose Write > Transform > Rhythm > Reverse Rhythms.
 - To reverse pitches and rhythms, choose Write > Transform > All > Reverse Pitches and Rhythms.
 - To reverse and invert pitches, choose Write > Transform > Pitches > Reverse and Invert Pitches to open the Reverse and Invert Pitches dialog.
 - To reverse and invert pitches and reverse rhythms, choose Write > Transform > All >
 Reverse and Invert Pitches and Reverse Rhythms to open the Reverse and Invert
 Pitches and Reverse Rhythms dialog.
- **3.** Optional: If you chose to reverse and invert pitches, change the settings as required for your inversion.
- **4.** Click **OK** to save your changes and close the dialog.

RESULT

The selected notes and staff-attached items are transformed according to your initial menu selection and optionally your settings in the dialog.

TIP

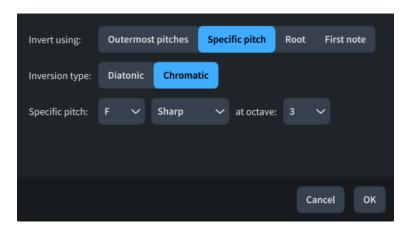
You can also reverse pitches/rhythms using the note tools popover.

Reverse and Invert Pitches and Reverse Rhythms dialogs

The Invert Pitches, Reverse and Invert Pitches, and Reverse and Invert Pitches and Reverse Rhythms dialogs allow you to invert and reverse the pitches and reverse the rhythms of selected notes. These transformations are also known as "inversion" and "retrograde inversion".

You can open these dialogs in Write mode when at least one note is selected in the music area in the following ways:

- To open the Invert Pitches dialog, choose Write > Transform > Pitches > Invert Pitches.
- To open the Reverse and Invert Pitches dialog, choose Write > Transform > Pitches > Reverse and Invert Pitches.
- To open the Reverse and Invert Pitches and Reverse Rhythms dialog, choose Write > Transform > All > Reverse and Invert Pitches and Reverse Rhythms.



The dialogs contain the following options:

Invert using

Allows you to change the inversion behavior.

- **Outermost pitches**: Inverts pitches within the range of the highest and lowest notes in the selection.
- **Specific pitch**: Inverts pitches around the specified pitch.
- **Root**: Inverts pitches around the root of the prevailing key. In open keys or music without key signatures, C is used.
- **First note**: Inverts pitches around the first note in the selection.

Inversion type

Allows you to change how intervals are handled in the inversion.

- **Diatonic**: Inversions use the interval degree, according to the scale degrees in the prevailing key signature. Diatonic inversions preserve the interval relationship between pitches, which can result in, for example, a minor second interval below becoming a major second interval above.
- Chromatic: Inversions use the specified number of half-steps (semitones), regardless of the prevailing key signature.

Not available when **Outermost pitches** is chosen for **Invert using**.

Specific pitch

Allows you to specify the central pitch for inversion. You can select the note name, accidental, and octave, according to your middle C numbering convention setting. The available accidentals depend on the prevailing tonality system.

Only available when **Specific pitch** is chosen for **Invert using**.

When first note is a chord, use

Allows you to specify which pitch to use as the central pitch for inversion when the first note is part of a chord.

- **Top note of chord**: The highest note in the chord is used.
- **Bottom note of chord**: The lowest note in the chord is used.

Only available when **First note** is chosen for **Invert using**.

RELATED LINKS

Tonality systems on page 1009 Changing the middle C numbering convention on page 50

Rotating pitches/rhythms

You can rotate notes, including pitches and/or rhythms, and staff-attached items by a specified number of steps either forwards or backwards, so that, for example, the first note in a phrase's original pitch is given to the second note, the second note's pitch to the third note, and so on.

PROCEDURE

1. In Write mode, select the notes and staff-attached items whose pitches and/or rhythms you want to rotate.

For example, to rotate dynamics alongside notes, include dynamics in your selection.

- **2.** Do one of the following:
 - To rotate pitches only, choose **Write** > **Transform** > **Pitches** > **Rotate Pitches** to open the **Rotate Pitches** dialog.
 - To rotate rhythms only, choose **Write** > **Transform** > **Rhythm** > **Rotate Rhythms** to open the **Rotate Rhythms** dialog.
 - To rotate pitches and rhythms, choose Write > Transform > All > Rotate Pitches and Rhythms to open the Rotate Pitches and Rhythms dialog.
- **3.** Change the settings as required for your rotation.
- **4.** Click **OK** to save your changes and close the dialog.

RESULT

The selected notes and staff-attached items are rotated according to your settings in the dialog.

TIP

You can also rotate pitches/rhythms using the note tools popover.

RELATED LINKS

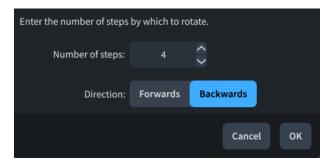
Note tools popover on page 473 Selecting notes/items on page 410

Rotate Pitches/Rhythms dialogs

The **Rotate Pitches**, **Rotate Rhythms**, and **Rotate Pitches and Rhythms** dialogs allow you to rotate the pitches and/or rhythms of selected notes.

You can open these dialogs in Write mode when at least one note is selected in the music area in the following ways:

- To open the **Rotate Pitches** dialog, choose **Write > Transform > Pitches > Rotate Pitches**.
- To open the Rotate Rhythms dialog, choose Write > Transform > Rhythm > Rotate Rhythms.
- To open the Rotate Pitches and Rhythms dialog, choose Write > Transform > All > Rotate
 Pitches and Rhythms.



The dialogs contain the following options:

Number of steps

Allows you to set the number of steps in the rotation.

Direction

Allows you to set the rotation direction.

- Forwards: Rotates forwards; that is, pitches/rhythms shift to the right.
- Backwards: Rotates backwards; that is, pitches/rhythms shift to the left.

Repeating pitches across notes

You can repeat a specified number of pitches across all subsequent notes in the selection; for example, if you want to change the harmonic pattern for a passage.

PROCEDURE

- 1. In Write mode, make a selection that includes both of the following:
 - The notes whose pitches you want to repeat
 - The notes across which you want to repeat pitches
- 2. Choose Write > Transform > Pitches > Repeat Pitches to open the Repeat Pitches dialog.
- 3. Change the value in the value field.
- **4.** Click **OK** to save your changes and close the dialog.

RESULT

The specified number of pitches at the start of the selection is repeated across the following notes in the selection.

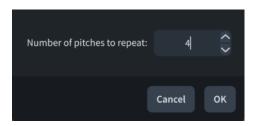
TIP

You can also repeat pitches using the note tools popover.

Repeat Pitches dialog

The **Repeat Pitches** dialog allows you to set the number of pitches you want to repeat across all subsequent notes in the selection.

• You can open the **Repeat Pitches** dialog in Write mode when at least one note is selected in the music area by choosing **Write** > **Transform** > **Pitches** > **Repeat Pitches**.



The **Repeat Pitches** dialog contains the following option:

Number of pitches to repeat

Allows you to set the number of pitches you want to repeat across the selection, starting from the first selected note.

Mapping notes to pitches

You can map multiple source pitches to destination pitches in a single transformation; for example, if you want to transform all C#s, F#s, and A#s into Dbs, Gbs, and Bbs.

PROCEDURE

- 1. In Write mode, select the notes whose pitches you want to map.
- 2. Choose Write > Transform > Pitches > Map Pitches to open the Map Pitches dialog.
- **3.** Change the settings for **Map pitch** to specify the source pitch.
- 4. Activate/Deactivate Include enharmonic equivalents.
- **5.** Change the settings for **To** to specify the destination pitch.
- 6. Click Add mapping.
- **7.** Optional: Repeat steps 3 to 6 for each pitch you want to map.
- **8.** Click **OK** to save your changes and close the dialog.

RESULT

The specified source pitches are mapped to the specified destination pitches according to your settings.

TIP

You can also map pitches using the note tools popover.

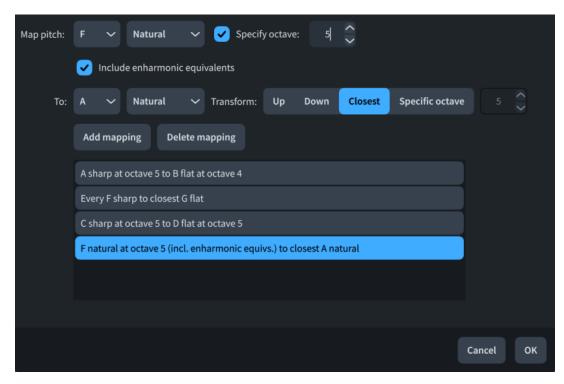
RELATED LINKS

Note tools popover on page 473 Selecting notes/items on page 410 Respelling notes on page 460

Map Pitches dialog

The **Map Pitches** dialog allows you to set multiple pitch mappings in a single transformation; for example, if you want to transform all C#s, F#s, and A#s into Dbs, Gbs, and Bbs.

 You can open the Map Pitches dialog in Write mode when at least one note is selected in the music area by choosing Write > Transform > Pitches > Map Pitches.



The Map Pitches dialog contains the following options:

Map pitch

Allows you to specify the source pitch you want to map to the destination pitch. You can select a note name and accidental, and you can also optionally specify the octave, according to your middle C numbering convention setting. The available accidentals depend on the prevailing tonality system.

Include enharmonic equivalents

When activated, enharmonic equivalents to the specified source pitch are included in the mapping. For example, if you want to map A‡s and B♭s to Gs.

When deactivated, enharmonic equivalents to the specified source pitch are excluded from the mapping.

То

Allows you to specify the destination pitch to which you want to map the source pitch. You can select a note name and accidental. The available accidentals depend on the prevailing tonality system.

Transform

Allows you to specify the octave selection for the mapping.

- **Up**: Destination pitches are higher than the source pitch.
- **Down**: Destination pitches are lower than the source pitch.
- **Closest**: Destination pitches use the octave the smallest interval from the source pitch.
- **Specific octave**: Destination pitches use the octave specified in the value field. Follows your middle C numbering convention setting.

Add mapping

Adds the set mapping to the mapping list.

Delete mapping

Removes the selected mapping from the mapping list.

Mapping list

Contains the set mappings for the transformation.

RELATED LINKS

Changing the middle C numbering convention on page 50

Mapping notes to scales

You can map all notes in a specified source scale to equivalent degrees of a destination scale; for example, if you want to transform a passage from major to minor with the same root.

PROCEDURE

- 1. In Write mode, select the notes whose pitches you want to map.
- 2. Choose Write > Transform > Pitches > Map Scale to open the Map Scale dialog.
- **3.** Adjust the parameters required for your scale mapping, such as scale roots and scale patterns.
- **4.** Click **OK** to save your changes and close the dialog.

RESULT

The specified pitches in the source scale are mapped to the specified pitches in the destination scale according to your settings.

TIP

You can also map scales using the note tools popover.

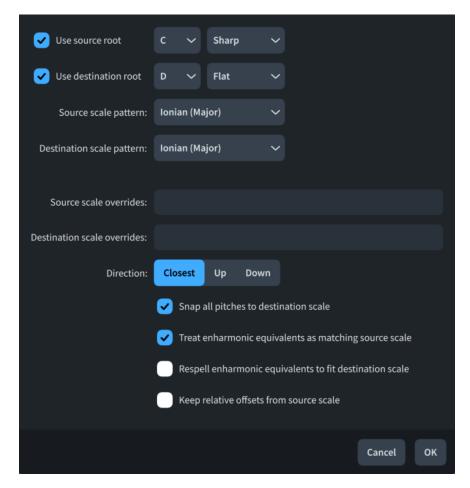
RELATED LINKS

Note tools popover on page 473 Selecting notes/items on page 410 Respelling notes on page 460

Map Scale dialog

The **Map Scale** dialog allows you to map all notes in the specified source scale to equivalent degrees of the destination scale; for example, if you want to transform a passage from major to minor with the same root.

• You can open the **Map Scale** dialog in Write mode when at least one note is selected in the music area by choosing **Write** > **Transform** > **Pitches** > **Map Scale**.



The **Map Scale** dialog contains the following options:

Use source root

When activated, allows you to specify the source scale root you want to map to the destination scale root. You can select a note name and accidental. The available accidentals depend on the prevailing tonality system.

When deactivated, Dorico Elements uses the scale root implied by the prevailing key signature.

Use destination root

When activated, allows you to specify the destination scale root to which you want to map the source scale root. You can select a note name and accidental. The available accidentals depend on the prevailing tonality system.

When deactivated, Dorico Elements uses the scale root implied by the prevailing key signature.

Source scale pattern

Allows you to select the scale type of the source scale.

Destination scale pattern

Allows you to select the scale type of the destination scale.

Source scale overrides

Allows you to customize the source scale by specifying pitches that deviate from its preset pattern. Notes are mapped relative to the customized scale pattern. For example, if you add a sharp sixth source scale override when mapping C major to C harmonic minor, A\s are treated as flattened sixths and become A\subsets.

- To specify flat scale degrees, enter **b[n]**, such as **b2**.
- To specify sharp scale degrees, enter **#[n]**, such as **#6**.

Destination scale overrides

Allows you to customize the destination scale by specifying pitches that deviate from its preset pattern. Notes are mapped relative to the customized scale pattern. For example, if you add a flattened second destination scale override when mapping C major to C harmonic minor, D\\$s become D\\$s.

- To specify flat scale degrees, enter b[n], such as b2.
- To specify sharp scale degrees, enter #[n], such as #6.

Direction

Allows you to specify the octave selection for the mapping.

- Closest: Destination pitches use the octave the smallest interval from the source pitch.
- **Up**: Destination pitches are higher than the source pitch.
- **Down**: Destination pitches are lower than the source pitch.

Snap all pitches to destination scale

When activated, all notes are snapped to the nearest pitch in the destination scale, including notes outside the source scale. When deactivated, only notes in the source scale are mapped to the destination scale.

Treat enharmonic equivalents as matching source scale

When activated, notes that are enharmonic equivalents to notes in the source scale are included in the mapping. When deactivated, only notes whose enharmonic spelling is in the source scale are mapped to the destination scale.

Respell enharmonic equivalents to fit destination scale

When activated, enharmonic equivalent notes included in the mapping are respelled to fit the destination scale. When deactivated, enharmonic equivalent notes are transposed according to the scale mapping without being respelled.

Only available when **Treat enharmonic equivalents as matching source scale** is activated.

Keep relative offsets from source scale

When activated, Dorico Elements preserves the relative offsets between notes in the source scale. For example, if you map C major to D Aeolian, a Bb would be mapped to Cb.

When deactivated, Dorico Elements changes the relative offsets between notes in the source scale if different intervals are more appropriate in the destination scale. For example, if you map C major to D Aeolian, a Bb would be mapped to Ch.

Note tools popover

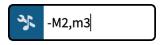
The note tools popover allows you to add notes above and below existing notes, transpose existing notes, and transform the pitches and rhythms of selected notes.

It makes much of the functionality provided by the **Add Notes Above or Below**, **Transpose**, **Reverse and Invert Pitches/Rhythms**, **Rotate Pitches/Rhythms**, **Map Pitches**, **Map Scale**, and **Repeat Pitches** dialogs accessible directly via the keyboard.

You can open the note tools popover in Write mode in any of the following ways when notes are selected, including during note input:

- Press Shift-I.
- In the Notations toolbox, click Popovers =, then Note Tools ...
- Choose Write > Add Intervals.

The icon on the left-hand side of the popover matches the corresponding button in the Notations toolbox on the right of the window.





Note tools popover with an example entry

Note Tools button in the Notations toolbox

The following tables contain examples of what you can enter into the note tools popover to transform selections, transpose notes, or add notes above/below existing notes.

Intervals

Interval or quality	Popover entry
Interval degree	1, 2, 3, 4, 5, and so on, up to 15
Unison, second, third, fourth, fifth, and so on, up to two octaves	
Major	M, maj, or major
Minor	m, min, or minor
Perfect	p, per, or perf
Diminished	d, dim, or diminished
Augmented	a, aug, or augmented
Diatonic	diat or diatonic
[n] octave divisions in any tonality system	[n] d, [n] div, or [n] divisions
[n] half-steps (semitones) in 12-EDO	[n] s, [n] st, [n] semi, or [n] semitones
[n] quarter tones in 24-EDO	[n] q, [n] qt, or [n] quartertones

NOTE

- You must include an interval degree before a specified total number of octave divisions, such
 as 5 8 div. Together, they specify the desired note name and accidental.
- **M** and **m** entries for major and minor are case-sensitive.

Note additions

Type of addition	Popover entry
Add notes a third above	3 or 3rd
Add notes a fourth below	-4 or -4th
Add notes [n] octave divisions above, using the note name a fifth above	5 8 div in any tonality system5 8 st in 12-EDO5 16 qt in 24-EDO
Add notes [n] octave divisions below, using the note name a sixth below	-6 9 div in any tonality system -6 9 st in 12-EDO -6 18 qt in 24-EDO
Add chords containing multiple notes	3,6 or -3,3,4
Add notes only to the top notes in chords	top
Add notes only to the bottom notes in chords	bottom

NOTE

- When adding multiple notes, you must separate notes with commas, not spaces.
- If you do not specify the interval quality, the interval degree follows the prevailing key signature. For example, in C major, if you enter **3** to add a third above a D4, the added note is an F4. You can specify the interval quality by including it before the interval degree, such as **maj3**.

EXAMPLE

- To add notes a major second below and minor third above the bottom notes in the selected chords, enter **-M2,m3 bottom**.
- To add G#s above C4s in 24-EDO, enter **5 16 qt**.

Transposition

Example transposition	Popover entry
Transpose notes upwards by a third	t3
Transpose notes downwards by a sixth	t-6

Example transposition	Popover entry
Transpose notes upwards by [n] octave divisions, using the note name a fifth above	t 5 8 div in any tonality system
	t 5 8 st in 12-EDO
	t 5 16 qt in 24-EDO
Transpose notes downwards by [n] octave divisions, using the note name a sixth below	t -6 9 div in any tonality system
	t -6 9 st in 12-EDO
	t -6 18 qt in 24-EDO

EXAMPLE

To transpose Cq upwards by nine quarter tones in 24-EDO, you can enter **t 3 9 qt** for Et or **t 4 9 qt** for Fd.

Inversion

Type of inversion	Popover entry
Invert pitches within the range of the highest and lowest notes in the selection	inv, invert, inversion, or mirror
Specify the central pitch for inversion	C4 , eb4 , F5 , g#6 , and so on
For example, C4, E64, F5, G#6, and so on	
Specify the central octave division for inversion	d1/24 4 or A-3/24 5
For example, D ² 4 or A ² 5 in 24-EDO	
Specify root of prevailing key as central pitch for inversion	root
NOTE	
In open keys or music without key signatures, C is used.	
Specify first note as central pitch for inversion	first
Specify top note in first chord as central pitch for inversion	top
Specify bottom note in first chord as central pitch for inversion	bottom
Diatonic inversion	diatonic or diat
Chromatic inversion	chromatic or chrom

EXAMPLE

To invert pitches around Eb4, enter **inveb4**.

Reversal

Type of reversal	Popover entry
Reverse the selection, including pitches and rhythms	retrograde, ret, reverse, or rev
Specify pitches only	pitch or pt
Specify rhythms only	rhythm or rm
Reverse and invert pitches	ret invert, rev inv, and so on
TIP	
You can also include additional specifications for the inversion.	
Include additional items belonging to the same player as the selection	player
Include only items belonging to the same voice as the selection	voice

EXAMPLE

To reverse the pitches and items in the selected voice only, enter **rev pt voice**.

Rotation

Type of rotation	Popover entry
Rotate the selection, including pitches and rhythms	rotate or rot
Specify pitches only	pitch or pit
Specify rhythms only	rhythm, rhy, or rm
Specify number of steps forwards	1, 2, 3, 4, and so on
Specify number of steps backwards	-1, backwards 2, bw 3, prev 4, and so on

EXAMPLE

To rotate only the rhythms of the selected notes backwards three steps, enter **rot rm bw 3**.

Repetition

Type of repetition	Popover entry
Repeat the first two pitches in the selection across the selection	repeat 2 pitches
Repeat the first eight pitches in the selection across the selection	repeat 8 pitches

This list is not comprehensive as you can repeat any number of pitches. It is intended to illustrate how you can structure your entry.

Pitch mapping

Type of pitch mapping	Popover entry
Specify source and destination pitches	c4=eb4,f4=g4,a4=bb5
For example, to map C4 to Eb4, F4 to G4, and A4 to Bb4.	
NOTE	
 Separate source and destination pitches with equals signs, and pairs of pitches with commas. 	
The octave number is optional.	
Include enharmonic equivalents of specified notes	* after note name and octave, if specified
Specify that destination pitch is higher than source pitch	up
Specify that destination pitch is lower than source pitch	down
EXAMPLE	

To map A‡s and enharmonic equivalents, including B♭s, to the G below, enter **a#*=Gdown**.

Scale mapping

Type of scale mapping or scale	Popover entry
Scale mapping structure	[source scale] to [destination scale], such as c M to c m or Fmin to Dmaj

Type of scale mapping or scale	Popover entry
Snap pitches outside the source scale to the nearest pitch by interval in the destination scale	snap
Specify snapped pitches should be raised	up or higher
Specify snapped pitches should be lowered	down or lower
Respell notes to the specified scale	spell [scale], such as spell Cmaj
Snap notes to the specified scale	snap [scale], such as snap cmin
Scale roots	c , Db , e , f# , g , and so on
Alterations	#4 , b6 , and so on
Major	maj or M
Minor	min or m
Ionian major	ion maj or ion M
Harmonic minor	harm m or hmc min
Melodic minor (ascending)	me m or mdc min
Dorian	dor or drn
Phrygian	phryg, phry, or phr
Lydian	lyd
Mixolydian	mixlyd, mlyd, mixo, mix, or ml
Aeolian or natural minor	aeol m, aeo m, aln min, or nat min
Locrian	loc
Super Locrian (altered scale)	super loc, sup loc, or spr loc
Major pentatonic	pent maj, 5tonic M, or 5ton M
Minor pentatonic	pent min, 5tonic m, 5ton m
Major blues	blue maj or bls M
Minor blues	blue min or bls m

Type of scale mapping or scale	Popover entry
Whole tone	wholetone, whole-tone, wtone, wton, whole, or wt
Half-whole diminished	half whole dimin, halfwhole dimin, hw dim, half-tone dimin, half tone dimin, halftone dimin, htone dim, hton dim, half dim, or ht dim
Half-whole octatonic	half whole octa, halfwhole octa, hw oct, half-tone octa, half tone octa, halftone octa, htone oct, hton oct, half oct, or ht oct
Whole-half diminished	whole half dimin, wholehalf dimin, wh dim, whole tone dimin, whole-tone dimin, wholetone dimin, wtone dim, wton dim, whole dim, or wt dim
Whole-half octatonic	whole half octa, wholehalf octa, wh oct, whole tone octa, whole-tone octa, wholetone octa, wtone oct, wton oct, whole oct, or wt oct
Locrian ₩7 or harmonic major mode 7	loc maj mode7 or harm M mod7
Super locrian #7 or harmonic minor mode 7	sup loc min mode7 or spr loc m mod7

NOTE

- You can use scale type entries in any combination, such as me min, me m, mdc min, and mdc m.
- **M** and **m** entries for major and minor are case-sensitive.
- You must separate roots from **M** and **m** with a space, such as **c M**.

EXAMPLE

To respell all Fbs in a selection as E\(\text{ts}\), and snap A\(\text{bs}\) to A\(\text{ts}\), enter **spell snap Cmaj**.

RELATED LINKS

Notations toolbox on page 197 Large selections on page 410 Equal Division of the Octave (EDO) on page 1009 Changing the middle C numbering convention on page 50 Adding notes above/below existing notes on page 253

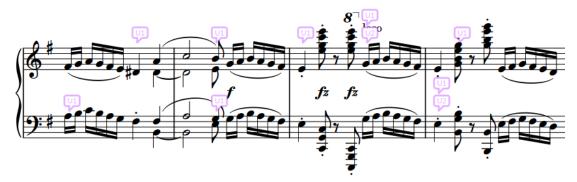
Transposing existing notes with the note tools popover on page 458

Arranging tools on page 443

Comments

Comments allow you to add notes or instructions at precise positions in your project without affecting the music. They are considered annotations in Dorico Elements, meaning they are not printed by default.

Comments exist outside of the music, so they do not affect note spacing, vertical spacing, or casting off. However, you can attach them to specific items and staves in order to show the precise subject of each comment.



A passage with comments and replies

By default, comments are shown in the music area. They appear as speech bubble symbols as close as possible to their attached position. Comments that are replies are stacked vertically below the original comment.

All comments in the current layout are listed in the Comments panel in Write mode. Clicking a comment, either in the Comments panel or in the music area, automatically moves the view to bring that rhythmic position into focus.

In addition to its content, each comment identifies the following by default:

- Author of the comment, using either the current user account name or a custom name
 On macOS, the user account name uses the long account name; on Windows, it uses the
 full name associated with the account. If Dorico Elements cannot determine your account
 name, a dialog appears into which you can add the name and initials you want to use for
 comments. You can also change these in **Preferences**.
- Date the comment was added
- Instrument to which the comment applies
- Bars to which the comment applies

NOTE

In the music area, only the initials of the author are shown.

You can hide/show comments in the music, and hide/show comment information in the Comments panel. You can also choose to include comments, alongside other view options, when printing/exporting layouts.

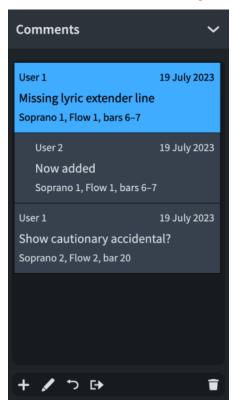
RELATED LINKS
Annotations on page 581

Comments panel

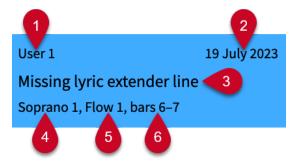
The Comments panel shows all the comments in the current layout as a list. Replies to comments are indented to indicate their relationship to the original comment. The Comments panel is located in the right zone in Write mode.

• You can hide/show the Comments panel by clicking **Panels** ②, then **Comments** ② in the Notations toolbox.

You can also hide/show the right zone by pressing **Ctrl/Cmd-9**.



Each comment in the panel shows the following information by default:



- **1 Author name**: This uses either the current user account or a custom name, depending on the preference that was set when the comment was added.
- 2 Date the comment was added to the project
- 3 Comment content
- 4 Instrument to which the comment applies
- 5 Flow to which the comment applies
- **6** Bars to which the comment applies

The action bar at the bottom of the panel contains the following options:

Create Comment



Adds a comment to the selected rhythmic position and staff.

Edit Comment



Opens the selected comment in the **Comment** dialog and allows you to change its content

Reply to Comment



Adds a comment that is a reply to the selected comment. Replies are shown indented in the Comments panel and stacked in the music area.

Export Comments



Exports all the comments in the project as an HTML file, which opens automatically in your default web browser. The HTML file is automatically saved in the same location as the project.

Delete Comment



Deletes the selected comments.

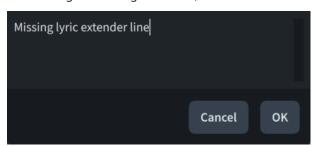
RELATED LINKS

Notations toolbox on page 197
Hiding/Showing comment information on page 485
Changing the author name used for comments on page 486
Reordering comments on page 486
Exporting comments on page 486

Comment dialog

The **Comment** dialog allows you to enter and edit text as comments.

• You can open the **Comment** dialog by adding a comment, replying to a comment, or double-clicking an existing comment, either in the music area or in the Comments panel.



Adding comments

You can add comments at any rhythmic position in your project, including adding different comments to multiple staves at the same rhythmic position.

PROCEDURE

- **1.** In Write mode, select an item on the staff and at the rhythmic position where you want to add a comment. If you want your comment to apply to a range, select multiple items.
- 2. Press Alt/Opt-C to open the Comment dialog.
- 3. Enter your comment into the dialog.
- **4.** Click **OK** to close the dialog and add the comment.

RESULT

The text you entered into the dialog is saved as a comment.

- In the music area, it is indicated by a speech bubble symbol that contains your initials.
- In the Comments panel, the text you entered is shown alongside additional comment information.

TIP

You can also add comments by clicking **Create Comment** in the Comments panel, or by choosing **Write** > **Create Comment**.

EXAMPLE



A comment in the music area

Replying to comments

You can add replies to existing comments, which is useful when co-ordinating with others, as this organizes the list of comments in the Comments panel into clear sections.

PROCEDURE

- 1. In Write mode, select the comment to which you want to reply. You can do this in the music area and in the Comments panel.
- 2. Press Alt/Opt-R to open the Comment dialog.
- **3.** Enter your reply into the dialog.
- **4.** Click **OK** to close the dialog and add the reply.

RESULT

The text you entered into the dialog is saved as a reply to the selected comment.

• In the music area, it is indicated by a speech bubble symbol that contains your initials and is positioned immediately below the selected comment.

In the Comments panel, the reply is indented below the selected comment.

TIP

You can also reply to comments by clicking **Reply to Comment** in the Comments panel, or by choosing **Write** > **Reply to Comment**.



A reply to a comment

Editing existing comments

You can change the contents of existing comments after you have added them; for example, to correct misspellings or add further information.

PROCEDURE

- 1. Double-click the comment you want to edit to open the **Comment** dialog. You can do this in the music area and in the Comments panel.
- **2.** Change the text in the dialog.
- 3. Click **OK** to save your changes and close the dialog.

Hiding/Showing comment information

You can change which pieces of information appear in comments, independently of each other. For example, if you mostly create comments for yourself, showing the author name might be superfluous.

PROCEDURE

- 1. In Write mode, in the Notations toolbox, click **Panels** ♣, then **Comments** ▶ to show the Comments panel.
- Right-click in the Comments panel, then choose Show > [information].
 For example, to hide the author name, choose Show > Author, so that no tick appears beside it in the menu.

RESULT

The corresponding information is hidden/shown in all comments in the current project and all future projects on your computer.

Changing the author name used for comments

You can change the author name used for comments to either your user account name or a custom name. This affects subsequent comments you add to the project without changing the author name used for existing comments.

For the custom name, you can specify both the full name that is shown in the Comments panel and the initials shown in the music area.

PROCEDURE

- 1. Press Ctrl/Cmd-, to open Preferences.
- 2. In the category list, click **General**.
- **3.** In the **Comments** subsection, choose one of the following options for **Author name for comments**:
 - User Name
 - Custom Name
- Optional: If you chose Custom Name, enter the full name you want to use into the Full name field.
- **5.** Optional: If you chose **Custom Name**, enter the initials you want to use into the **Initials** field.
- 6. Click Apply, then Close.

Reordering comments

You can change the order in which layouts appear in the Comments panel. By default, comments are sorted according to their flow and bar number.

PROCEDURE

- 1. In Write mode, in the Notations toolbox, click **Panels** , then **Comments** □ to show the Comments panel.
- Right-click in the Comments panel, then choose Sort By > [information].
 For example, to sort comments according to their instrument, choose Sort By > Instrument.

RESULT

The order of all comments is changed in the current project and all future projects on your computer.

Exporting comments

You can export all comments from all flows in the layout currently open in the music area to an HTML file. For example, if you want to view them all in a single place.

PROCEDURE

- 1. In Write mode, open the layout whose comments you want to export.
- 2. In the Notations toolbox, click **Panels** , then **Comments** □ to show the Comments panel.
- 3. In the Comments section action bar, click Export Comments ...

RESULT

All comments in the layout currently open in the music area are saved as an HTML file, which opens automatically in your default web browser. Comments are displayed in a table, with columns corresponding to the comment information currently shown in the Comments panel.

The HTML file is automatically saved in the same location as the project. Its file name includes the layout name.

RELATED LINKS

Hiding/Showing comment information on page 485 Switching between layouts on page 42 Exporting lyrics on page 1015 Exporting text on page 101

Hiding/Showing comments

You can hide/show comments at their positions in the music; for example, if you want to hide them when inputting music but show them when engraving.

Comments are considered annotations in Dorico Elements, meaning they are not printed by default.

PROCEDURE

Choose View > Comments.

RESULT

Comments are hidden/shown. When shown, comments appear in the music as speech bubbles.

RELATED LINKS

Annotations on page 581

Hiding/Showing comment information on page 485

Splitting flows

You can split flows at specific rhythmic positions. For example, if you want the music from a specific bar onwards to be a new flow, separate from the preceding music.

PROCEDURE

- 1. In Write mode, select a note or item at the position where you want to split the flow.
- 2. Choose Write > Split Flow.

RESULT

The flow is split into two flows: the existing flow, and a new flow that begins from the position of the item you selected.

By default, new flows in full score layouts start on a new page in page view, and are shown on a separate background in galley view.

AFTER COMPLETING THIS TASK

You can set options for each flow independently in the **Notation Options** dialog.

RELATED LINKS

Flows on page 167

Deleting flows on page 170

Notation Options dialog on page 730

Deleting empty bars/beats at the end of flows on page 795

Allowing/Disallowing multiple flows on the same page on page 593

Switching between layouts on page 42

Switching to galley/page view on page 49

Engrave mode

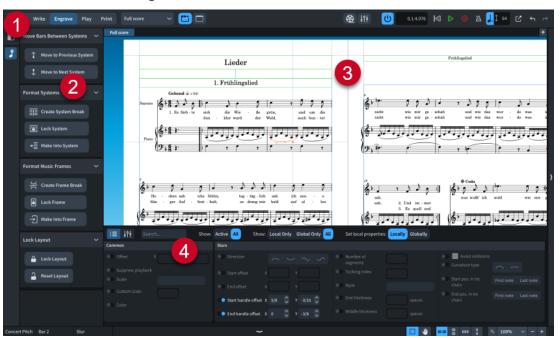
Engrave mode allows you to manipulate and modify every item in your project, but without deleting them, moving them rhythmically, or changing the pitch of notes. You can also determine the casting off in each layout of your project using system and frame breaks.

Project window in Engrave mode

The project window in Engrave mode contains a toolbox and panels with all the tools and functions that allow you to format the pages, systems, and properties of individual notations in your score.

You can switch to Engrave mode in any of the following ways:

- Press Ctrl/Cmd-3.
- In the toolbar, click **Engrave**.
- Choose Window > Engrave.



The project window in Engrave mode contains the following:

1 Engrave toolbox

Allows you to switch between Engrave mode tools, and to hide/show the left zone.

2 Left zone

Contains the Formatting panel, which allows you to change how systems and frames are formatted on pages, including inserting system/frame breaks.

The left zone is hidden automatically when either **Note Spacing** \blacksquare or **Staff Spacing** \blacksquare is selected in the Engrave toolbox.

3 Music area

Displays layouts in page view. Additional engraving aids are shown on pages, according to the current selection in the Engrave toolbox.

- Frame outlines are always shown.
- System and frame fullness indicators are shown when either Graphic Editing 3, Staff
 Spacing 5, or Note Spacing 1 is selected.
- When **Staff Spacing** is selected, staff/system spacing handles, gap measurements, and music frame margin highlights are shown.
- When Note Spacing
 is selected, note spacing handles, system handles, and dashed lines that represent spacing columns are shown.

4 Lower zone

Can display either the Properties panel or Mixer panel, according to the current selection in the lower zone toolbar.

RFLATED LINKS

System fullness indicators on page 493 Frame fullness indicators on page 493 Hiding/Showing crosshairs on page 503 Properties panel on page 646 Mixer panel on page 700

Engrave toolbox

The Engrave toolbox allows you to change the panel shown in the left zone and to activate note and staff spacing. The Engrave toolbox is located on the left of the window in Engrave mode.

Show Left Zone



Hides/Shows the left zone.

Graphic Editing



Allows you to select and edit items in the music area or page template editor. Shows the Formatting panel in the left zone, which contains options for formatting systems, frames, brackets, braces, and barline joins.

Staff Spacing



Allows you to move individual staves and systems vertically.

Note Spacing



Allows you to edit the graphical horizontal positions of individual notes and other items, such as clefs and key signatures.

TIP

 By default when you switch to Engrave mode, Dorico Elements automatically selects Graphic Editing . You can choose to remember your last selected tool instead on the General page in Preferences. You can assign key commands for Engrave mode tools on the Key Commands page in Preferences.

RELATED LINKS

Hiding/Showing zones on page 43
Staff spacing on page 604
Note spacing on page 494
Moving items graphically on page 501
Preferences dialog on page 57

Formatting panel

The Formatting panel allows you to change how systems and frames are formatted on pages, including inserting system/frame breaks. It is located in the left zone in Engrave mode.

You can show the Formatting panel by showing the left zone, then clicking **Graphic Editing** in the Engrave toolbox.

The Formatting panel contains the following sections:

Moving Bars Between Systems

The Moving Bars Between Systems allows you to move selected bars to other systems.

Move to Previous System



Moves the selected bars to the previous system. Inserts system breaks at the start and end of the system to which the bars were moved.

You can also move bars to the previous system by pressing , .

Move to Next System



Moves the selected bars to the next system. Inserts system breaks at the start and end of the system to which the bars were moved.

You can also move bars to the next system by pressing ..

Format Systems

The **Format Systems** section allows you to change how the music in the layout currently open in the music area is arranged into systems.

Insert System Break



Forces music from the selected item onwards onto the next system. Depending on your staff size and other settings, this may mean the music is forced onto the next page.

You can insert system breaks by pressing **Shift-F**.

Lock System



Fixes the formatting of the selected systems, even if you change the formatting of surrounding musical material and other systems.

Make into System



Forces all music between the selected items into the same system.

Format Music Frames

The **Format Music Frames** section allows you to change how the music in the layout currently open in the music area is arranged into frames.

Insert Frame Break



Forces music from the selected item onwards onto the next frame, which is often on the next page. This allows you to control what music appears on each page.

You can insert frame breaks by pressing Shift-F.

Lock Frame



Fixes the formatting of the selected frames, even if you change the formatting of surrounding frames.

Make into Frame



Forces all music between the selected items into the same frame. You can use this option to force music onto a single page.

Lock Layout

The Lock Layout section allows you to fix and reset all systems and pages in the current layout.

Lock Layout



Inserts system and frame breaks on all systems in the current layout as required to fix its current casting off.

Reset Layout



Removes all system and frame breaks from the current layout.

RELATED LINKS

Hiding/Showing zones on page 43 Engrave toolbox on page 490 Frame breaks on page 620 System breaks on page 617 Page templates on page 630 Page formatting on page 583 Casting off on page 612

System fullness indicators

System fullness indicators are highlighted regions that are shown to the right of systems in Engrave mode. They use colors and percentages to indicate the horizontal fullness of the corresponding system.

The following colors are used in system fullness indicators:

- Green: the system is comfortably full. Notes have enough horizontal space to be legible but are not too far apart. Systems that are 60-100% full are considered comfortably full.
- Purple: the system is under-full, meaning notes might appear overly stretched. Systems that are less than 60% full are considered under-full.
- Red: the system is over-full, meaning notes might appear squashed with not enough horizontal space between them. Systems that are more than 100% full are considered overfull.

The fullness of systems is also expressed using a percentage. The percentage indicated is calculated by dividing the number of spaces occupied in the system by the total number of available spaces in the system, which is measured from the start of the rhythmic space to the right of the initial clef/time signature/key signature up to the final barline in the system.

Both the color of the system fullness indicator and the fullness percentage are updated in real time as you adjust note spacing in the system.



RELATED LINKS

Engrave toolbox on page 490 Note spacing on page 494 Adjusting note spacing at individual rhythmic positions on page 496 Positions of lyrics on page 1016 Margins on page 598

Frame fullness indicators

Frame fullness indicators are highlighted regions that are shown outside the bottom left corners of music frames in Engrave mode. They use colors and percentages to indicate the vertical fullness of the corresponding music frame, which in most cases represents a full page.

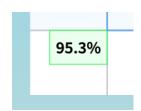
The following colors are used in frame fullness indicators:

- Green: the frame is comfortably full. Staves and systems have enough vertical space to be legible but are not too far apart. Frames that are 60-100% full are considered comfortably full
- Red: the frame is over-full, meaning staves and systems might appear squashed with not enough vertical space between them. Frames that are more than 100% full are considered over-full.

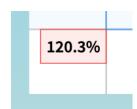
The fullness of frames is also expressed using a percentage. The percentage indicated is calculated by dividing the number of spaces occupied in the frame by the total number of

available spaces in the frame, which is measured using the vertical distance between the top and bottom music frame padding margins.

Frame comfortably full



Frame over-full



RELATED LINKS

Engrave toolbox on page 490

Per-layout vertical spacing options on page 605

Changing the default staff/system spacing on page 587

Changing the vertical justification of staves/systems on page 588

Margins on page 598

Note spacing

The positions of notes and rests relative to each other, and the automatic gaps between them, are known as note spacing.

You can change note spacing in your project at different levels:

- Change the default note spacing in each layout in **Layout Options** > **Note Spacing**.
- Change the note spacing at individual rhythmic positions and for individual voice columns.

RELATED LINKS

System fullness indicators on page 493

Staff spacing on page 604

Changing the default staff size on page 587

Hiding/Showing staff labels on page 1288

Changing the horizontal justification of final systems on page 597

Changing the first system indent on page 1305

Changing the gap before codas on page 1221

Enabling/Disabling vertical line collision avoidance on page 1179

Changing the default note spacing

You can change the default note spacing in each layout independently. For example, you can have tighter note spacing in full score layouts compared to part layouts. The options available include changing the default space for quarter notes and the scale space for grace notes and cues.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- 2. In the Layouts list, select the layouts in which you want to change note spacing.
 By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking

and dragging across multiple layouts, **Shift** -clicking adjacent layouts, and **Ctrl/Cmd** -clicking individual layouts.

- **3.** In the category list, click **Note Spacing**.
- **4.** Change the values of the options you want to change.
- 5. Click Apply, then Close.

RESULT

The default note spacing is changed in the selected layouts.

RELATED LINKS

Changing the horizontal justification of final systems on page 597 Locking layouts on page 615

Per-layout note spacing options

Dorico Elements provides multiple options that you can use to control the default note spacing in each layout. You can also change how full the final system in flows must be before it is automatically justified.

 You can access per-layout note spacing options by opening the Layout Options dialog and clicking Note Spacing in the category list.

The **Note Spacing** page in **Layout Options** contains the following options:

Default space for crotchet/quarter note

Sets the default note spacing for quarter notes (crotchets). The spacing of other durations is scaled proportionally. Increasing the value increases note spacing, decreasing the value decreases note spacing. This is reflected in the preview as you change the value.

Minimum space for short notes

Sets the minimum note spacing for notes with short durations. This can be independent of the default note spacing value.

Custom spacing ratio

Sets the spacing of notes in relation to other notes according to their rhythmic values. For example, setting **Custom spacing ratio** to **2** means half notes (minims) take up twice as much space as quarter notes, and eighth notes (quavers) take up half as much space as quarter notes.

Scale space for grace notes by

Sets the note spacing for grace notes as a percentage of the note spacing normally used for notes of their duration. The value cannot be greater than 100%. Increasing the value increases the note spacing for grace notes, decreasing the value decreases the note spacing for grace notes.

Scale space for cue notes by

Sets the note spacing for cues as a percentage of the note spacing normally used for notes of their duration. The value cannot be greater than 100%. Increasing the value increases the note spacing for cues, decreasing the value decreases the note spacing for cues.

Make space for lyrics

Controls whether or not lyrics are included in note spacing calculations. When deactivated, lyrics are excluded from note spacing calculations, producing a result where notes are spaced as if lyrics were not there.

We recommend using this option with caution and only if you intend to space lyrics manually, such as in tightly-spaced hymnals.

Only justify final system in flow when more than [n]% full

Allows you to change how full the final system in each flow must be before it is justified to the full width of the frame. By default, final systems that are 50% full or less are not justified.

Use optical spacing for beams between staves

When activated, stems in cross-staff beams are evenly spaced, which can mean the noteheads are unevenly spaced. When deactivated, noteheads in cross-staff beams are evenly spaced, which can mean stems appear unevenly spaced.

When justifying music

Allows you to change the material that Dorico Elements includes in note spacing calculations.

- **Use actual widths**: Everything that occupies solid space is considered, including accidentals and rhythm dots.
- Use ideal widths only: Only notes are considered. This option can produce more
 consistent results if your music requires extensive manual adjustments in over-full
 systems.

RELATED LINKS

Layout Options dialog on page 728

Changing to optical cross-staff beam spacing on page 833

Creating cross-staff beams/tremolos on page 832

Changing the horizontal justification of final systems on page 597

Positions of lyrics on page 1016

Changing the paragraph style used for lyrics on page 1023

Per-layout vertical spacing options on page 605

Adjusting note spacing at individual rhythmic positions

You can make adjustments to the note spacing at individual rhythmic positions independently of your project-wide settings.

When **Note Spacing** is activated in the Engrave toolbox, the following are shown:

- Dashed lines that represent spacing columns.
- Note spacing handles: square handles on every staff for each spacing-significant item, such as notes, grace notes, rests, clefs, key signatures, and time signatures.
- System handles: larger square handles at the start/end of each system, which control the start/end horizontal position of individual systems. System handles are positioned on the top left and bottom right corners of each system.



Handles and dashed lines are shown when **Note Spacing** is activated.

PREREOUISITE

Note Spacing is selected in the Engrave toolbox.

PROCEDURE

1. In Engrave mode, select a square note spacing handle on the dashed line at each rhythmic position whose spacing you want to adjust.



- 2. Move the handles in any of the following ways:
 - To increase the space to the left of selected handles, press **Alt/Opt-Right Arrow**.
 - To decrease the space to the left selected handles, press **Alt/Opt-Left Arrow**.

NOTE

- To move handles by large increments, press Ctrl/Cmd plus the standard key command; for example, Ctrl/Cmd-Alt/Opt-Left Arrow.
- To move handles by moderate increments, press **Shift** plus the standard key command; for example, **Shift-Alt/Opt-Left Arrow**.
- To move handles by small increments, press Ctrl/Cmd Shift plus the standard key command; for example, Ctrl/Cmd-Shift-Alt/Opt-Left Arrow.
- You cannot move note spacing handles with the mouse, you can only move them using the keyboard.

RESULT

The selected note spacing handles are moved, which increases/decreases the spacing to the left of their original rhythmic position. This also affects the spacing of each selected rhythmic position on all staves in the system. The color of the handles changes to indicate that you have moved them.

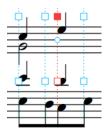
System breaks are automatically inserted at the start/end of each system in which you adjusted note spacing.

NOTE

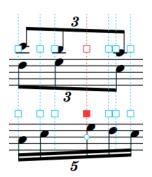
- Moving notes too far away from their intended rhythmic positions can be misleading for players reading the music.
- You can also adjust the spacing of individual notes/items independently of their rhythmic positions.

• When **Note Spacing** is activated, you cannot select or edit anything other than note spacing handles. To resume normal selection and editing, click **Graphic Editing** in the Engrave toolbox or return to Write mode.

EXAMPLE



Moving note spacing handles to the left reduces spacing to the left of the rhythmic position



Moving note spacing handles to the right increases spacing to the left of the rhythmic position

RELATED LINKS

Engrave toolbox on page 490
System fullness indicators on page 493
Changing the horizontal justification of final systems on page 597
Enabling/Disabling vertical line collision avoidance on page 1179
System breaks on page 617
Signposts on page 438

Adjusting the spacing of individual notes/items independently of their rhythmic positions

You can change the graphical position of notes according to their voice column, independently of their rhythmic positions. These steps also apply to certain notation items, such as key signatures, time signatures, and clefs.

PREREQUISITE

Note Spacing ⋈ is selected in the Engrave toolbox.

PROCEDURE

1. In Engrave mode, select the square note spacing handle at the rhythmic position of the note/item you want to move graphically.



A circular handle appears beside each voice/item.

2. Press **Tab** to select the circular handle.



- **3.** Move the handle in any of the following ways:
 - To move it a standard amount to the right or left, press Alt/Opt plus the corresponding arrow key. For example, press Alt/Opt-Left Arrow to move handles to the left.
 - To move it a large amount, press Ctrl/Cmd plus the standard key command; for example, Ctrl/Cmd-Alt/Opt-Left Arrow.
 - To move it a moderate amount, press Shift plus the standard key command; for example, Shift-Alt/Opt-Left Arrow.
 - To move it a small amount, press **Ctrl/Cmd Shift** plus the standard key command; for example, **Ctrl/Cmd-Shift-Alt/Opt-Left Arrow**.

NOTE

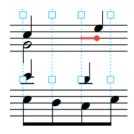
You cannot move note spacing handles with the mouse, you can only move them using the keyboard.

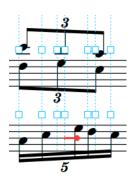
RESULT

The graphical position of the selected note/item is changed without changing the note spacing of its rhythmic position. Other notes in the same voice column at the same rhythmic position are also moved.

System breaks are automatically inserted at the start/end of each system in which you adjusted the position of individual notes/items.

EXAMPLE





Removing individual changes to note spacing

You can remove changes you have made to the note spacing at individual rhythmic positions and reset note spacing handles to their original default positions.

PREREQUISITE

Note Spacing is selected in the Engrave toolbox.

PROCEDURE

- **1.** In Engrave mode, select the note spacing handles you want to restore to their original positions.
- **2.** Press **Backspace or Delete**.

RESULT

The selected rhythmic positions are reset to their default positions.

TIP

You can also reset all note spacing changes within selected systems, frames, or all note spacing changes in the layout by choosing one of the options in the **Engrave** > **Note Spacing** menu.

Moving the start/end of systems

You can change the horizontal start/end position of each system individually; for example, if you want to indent a single system or increase the gap before an individual coda section.

NOTE

- If you want to increase the space before staff labels, you can change the minimum indent for systems with staff labels.
- If you want to change the end position of systems because they do not fill the entire width of the page, you can change the minimum fullness for horizontal justification.
- If you want to change the width of all systems on a page by the same amount, you can change the width of the music frame.

PREREQUISITE

Note Spacing ⋈ is selected in the Engrave toolbox.

PROCEDURE

1. In Engrave mode, select the system handle at the start/end of each system whose start/end position you want to change.





System handle at the start of a system

System handle at the end of a system

- 2. Move the handles in any of the following ways:
 - To move them a standard amount to the right or left, press Alt/Opt plus the
 corresponding arrow key. For example, press Alt/Opt-Left Arrow to move handles to
 the left.
 - To move them a large amount, press Ctrl/Cmd plus the standard key command; for example, Ctrl/Cmd-Alt/Opt-Left Arrow.
 - To move them a moderate amount, press **Shift** plus the standard key command; for example, **Shift-Alt/Opt-Left Arrow**.
 - To move them a small amount, press Ctrl/Cmd Shift plus the standard key command; for example, Ctrl/Cmd-Shift-Alt/Opt-Left Arrow.

NOTE

You cannot move note spacing handles with the mouse, you can only move them using the keyboard.

RESULT

The start/end position of the selected systems is changed. Notes on the selected systems appear more/less tightly spaced, depending on whether moving the system handles made their system narrower or wider.

Dorico Elements automatically inserts system breaks at the start of the moved and subsequent systems.

RELATED LINKS

Changing the horizontal justification of final systems on page 597
Changing the first system indent on page 1305
Changing the minimum indent for systems with staff labels on page 1289
Changing the gap before codas on page 1221
System breaks on page 617

Moving items graphically

You can move items graphically without changing the rhythmic positions or notes to which they are attached; for example, to offset individual items on specific pages without moving other items of the same type elsewhere in the layout. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

You can move individual instances of system objects, such as tempo marks or system-attached text, independently of other instances shown at different staff positions. You can also move each end of items with duration, such as gradual dynamics or octave lines, independently, allowing you to adjust their graphical length and angle.

NOTE

- These steps do not apply to the following: text in text frames, accidentals, notes, clefs, barlines, key signatures, or time signatures shown on staves.
- You can only move some items and handles in specific directions. For example, you can move:
 - Articulations upwards/downwards only, not to the right/left.
 - Octave line end handles to the right/left only, not upwards/downwards.
- When using the mouse, you can only move whole guitar bends and vibrato bar dives/returns upwards/downwards.

PREREQUISITE

- **Graphic Editing !** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- 1. In Engrave mode, select any of the following that you want to move.
 - Whole items or segments of items that cross system/frame breaks
 - Lines extending from items, such as figured bass hold lines or lyric extender lines
 - Individual handles on items

TIP

You can cycle through handles on a selected item by pressing Tab.

- 2. Move the selected items in any of the following ways:
 - To move items a standard amount to the right, left, up, or down, press Alt/Opt plus the
 corresponding arrow key. For example, press Alt/Opt-Left Arrow to move items to the
 left. This moves beams by 1/4 space and all other items by 1/8 space per press.
 - To move items a large amount, press Ctrl/Cmd plus the standard key command; for example, Ctrl/Cmd-Alt/Opt-Left Arrow. This moves items by 1 space per press.
 - To move items a moderate amount, press Shift plus the standard key command; for example, Shift-Alt/Opt-Left Arrow. This moves items by 1/2 space per press.
 - To move items a small amount, press Ctrl/Cmd Shift plus the standard key command; for example, Ctrl/Cmd-Shift-Alt/Opt-Left Arrow. This moves items by 1/32 space per press.
 - Click and drag them in any direction.

NOTE

- To constrain movement either horizontally or vertically, start dragging, then press and hold **Shift**.
- You cannot move vibrato bar scoops using the mouse.

RESULT

The selected items are moved graphically without changing the rhythmic positions or notes to which they are attached. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

Attachment lines link items to the rhythmic positions to which they apply, so it is always clear where they belong.

Moving some items, such as notehead brackets and jazz articulations, causes other nearby items, such as ties and slurs, to move automatically to avoid collisions. This might affect note spacing and casting off.

If you move dynamics linked to other dynamics, all dynamics linked to the selected dynamics in the current layout are also moved.

Moving items with continuation or hold lines, such as playing techniques or figured bass, moves them both together. Moving continuation/hold lines or continuation/hold line handles moves the continuation/hold lines independently of the item. Dorico Elements automatically lengthens hold lines between figured bass suspensions and resolutions when you move resolution figures.

Lengthening/Shortening lyric hyphens does not change the size or shape of the hyphens themselves. Instead, you increase/decrease the distance between the handles in which hyphens can appear.

By default, player labels erase their backgrounds if positioned in the staff so they do not collide with staff lines.

NOTE

- Moving the start handle of hairpins with the keyboard changes the vertical position of whole
 hairpins, not their angles. You must change the end offset position as well to change the
 angle of hairpins. Dragging hairpin handles with the mouse always changes the angle.
- Properties that control the graphic offsets of items are activated automatically when you
 move items. You can find these properties in the corresponding group of the Properties
 panel for the item, or in the **Common** group for some items, such as text items and lyrics.

Some offset properties have separate value fields for horizontal offsets on the X axis and vertical offsets on the Y axis. Similarly, items with length or duration have separate offset properties for each end.

You can also use these properties to move items graphically by changing the values in the value fields. Deactivating offset properties resets the selected items to their default positions.

RELATED LINKS

Resetting the position of items on page 425 Changing the property scope on page 648 Hiding/Showing attachment lines on page 426 Selecting notes/items on page 410

Selecting handles on items

In Engrave mode, you can select individual handles on items; for example, if you want to move the graphical end of a gradual dynamic without moving its start.

PROCEDURE

- 1. Select a handle in any of the following ways:
 - Select the whole item and press **Tab** until the handle you want is selected.
 - Click the handle you want.
- 2. Optional: Select handles on other items as well by Ctrl/Cmd -clicking them.

NOTE

You cannot select subsequent handles on other items by selecting the items and pressing **Tab**.

Hiding/Showing crosshairs

You can hide/show crosshairs in Engrave mode for selected items and/or when dragging items using the mouse. Crosshairs can make it easier to align items graphically.

PROCEDURE

- In Engrave mode, do one or both of the following:
 - To hide/show crosshairs when dragging items, choose Engrave > Crosshairs > Show When Dragging.
 - To hide/show crosshairs for selected items, choose Engrave > Crosshairs > Show When Selected.

RESULT

Crosshairs are hidden/shown in the corresponding context.

EXAMPLE







Crosshairs hidden

RELATED LINKS

Hiding/Showing attachment lines on page 426 Hiding/Showing signposts on page 438 Hiding non-printing elements on page 425 Annotations on page 581

Tucking index properties

The tucking index of notations determines their position relative to other notations in the vertical stacking order when multiple notations exist at the same rhythmic positions.

In most published music, the order in which items appear relative to each other is consistent. Dorico Elements uses established conventions to determine the position and placement of notations automatically. For example, where slurs and tuplet brackets exist at the same positions, Dorico Elements calculates their placement based on their relative lengths. If the slur is longer than the tuplet bracket, the slur is placed outside the tuplet bracket; if the tuplet bracket is longer than the slur, the slur is placed inside the tuplet bracket.

However, rules for the order and placement of articulations, slurs, tuplets, and octave lines frequently vary, based on their lengths and musical context. Therefore, you can override the automatic order and manually change the order in which they appear in specific contexts.

To allow you this flexibility, slurs, octave lines, and tuplets all have **Tucking index** properties in their respective Properties panel groups.

NOTE

- Articulations are considered alongside these notations when calculating the stacking order, but do not have a tucking index property.
- Playing techniques have a separate tucking index that allows you to change the vertical order of playing techniques relative to each other.

A **Tucking index** value of **0** positions items closest to notes. The higher the number, the further away the item is positioned from notes in the stacking order.

RELATED LINKS

Changing the vertical order of playing techniques on page 1165 Changing the vertical stacking order of octave lines on page 900

Play mode

Play mode allows you to change how your music sounds in playback, including by adjusting the mix, changing the playback template, and assigning VST instruments.

Project window in Play mode

The project window in Play mode contains all the tools and functions for setting up your project for playback. In Play mode, your project appears in a similar way to that used in a digital audio workstation, or "DAW", such as Cubase.

You can switch to Play mode in any of the following ways:

- Press Ctrl/Cmd-4.
- In the toolbar, click Play.
- Choose Window > Play.



The project window in Play mode comprises the following:

1 Left zone

Can display either the Track Inspector or VST and MIDI panel, according to the current selection at the top of the left zone.

2 Track overview

Allows you to view the tracks in the selected flow, mute/solo instrument tracks, and select the track whose music you want to show in the Key Editor or whose sounds you want to edit in the Track Inspector.

3 Lower zone

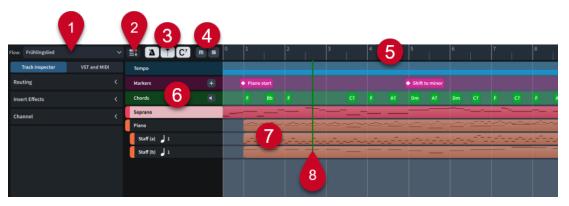
Can display either the Key Editor panel or Mixer panel, according to the current selection in the lower zone toolbar.

RELATED LINKS

Track Inspector on page 507 VST and MIDI panel on page 511 Key Editor panel on page 650 Mixer panel on page 700

Track overview

The track overview allows you to view the tracks in the selected layout and flow, and to mute and solo instrument tracks. It also allows you to select a single track whose music you want to show in the Key Editor, if it is unlocked, or whose sounds you want to edit in the Track Inspector. It is the central part of the window in Play mode.



The track overview contains the following:

1 Flow selector

Allows you to select the flow you want to show in the track overview. Only a single flow can be shown at a time. Only available when nothing is selected in any flow.

2 Track height button

Allows you to cycle through different heights for all tracks in the track overview.

3 Track visibility buttons

Allow you to hide/show the corresponding track.

- **Tempo** : Hides/Shows the Tempo track.
- Markers T: Hides/Shows the Markers track.
- **Chords** C': Hides/Shows the Chords track.

4 Mute m/Solo s buttons

Allow you to mute/solo tracks. Shown in track headers when tracks are sufficiently tall, and at the top of the track overview when tracks appear short. They apply to the corresponding track when shown in track headers, and the selected track when shown at the top of the track overview.

5 Ruler

Displays bar numbers and shows beat divisions.

6 Track headers

Display the name of each track and contain appropriate options for the track type.

Percussion kit track headers contain disclosure arrows, which allow you to show a separate track for each instrument in the kit.

7 Tracks

Rows that display an overview of the corresponding musical element, such as notes in instrument tracks and chord symbols in the chord symbols track.

8 Playhead

Shows the current rhythmic position in playback.

RELATED LINKS

Instrument tracks on page 516

Tempo track on page 517

Markers track on page 519

Chords track on page 520

Key Editor on page 650

Playhead on page 523

Zooming in/out of tracks on page 522

Switching between layouts on page 42

Switching between flows in the track overview

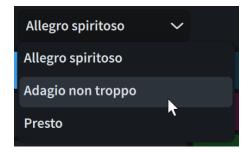
You can change which flow is displayed in the track overview in Play mode manually. Only a single flow can be shown at a time.

PREREQUISITE

You have deselected all notes/items. You cannot switch flows when notes/items are selected.

PROCEDURE

 In Play mode, click the flow selector at the top of the track overview and select a flow from the menu.



RELATED LINKS

Selecting/Deselecting notes and items individually on page 411 Switching between layouts on page 42

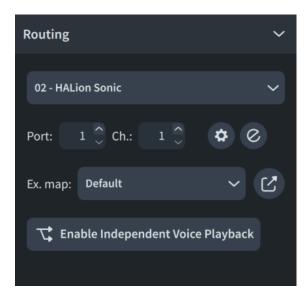
Track Inspector

The Track Inspector allows you to edit sounds for the track currently selected in the track overview. It is located in the left zone in Play mode.

The Track Inspector contains the following sections:

Routing

Allows you to change the sound routing of the selected track.



The following routing controls are available:

Audio plug-in menu



Allows you to select the VST or MIDI instrument plug-in you want to use for the selected track. Only plug-ins already loaded in the project are available.

Port field

Allows you to change the endpoint to which the selected track is assigned by entering the port you want to use. Only necessary when using a plug-in that has multiple ports of 16 channels.

Channel field

Allows you to change the endpoint to which the selected track is assigned by entering the channel you want to use in the loaded VST or MIDI instrument.

NOTE

- You must assign a VST or MIDI instrument and a channel for the Chords track in order to hear chords in playback.
- If you manually load sounds into the channel you selected for your Chords track and later add more instruments to your project, the sounds for the new instruments overwrite the sounds you manually loaded in that channel.

Endpoint Setup



Opens the **Endpoint Setup** dialog for the corresponding plug-in instance.

Edit Instrument



Opens the corresponding VST or MIDI instrument in a window, which allows you to edit its settings.

Expression map/Percussion map

Allows you to change the expression/percussion map for the endpoint to which the selected track is assigned.

Percussion map is only available for unpitched percussion tracks.

Edit Expression Map/Edit Percussion Map



Opens the **Expression Map/Percussion Map** dialog, with the corresponding expression/percussion map selected automatically.

Enable Independent Voice Playback



Allows you to enable independent voice playback for the selected instrument track. This shows each voice belonging to the instrument as a separate voice track below the instrument track.

Dorico Elements automatically loads enough additional channels, and additional plugin instances if necessary, to accommodate all voices belonging to the corresponding instrument project-wide, according to the current playback template. Voices are automatically assigned to endpoints according to their voice order.

Disable Independent Voice Playback



Allows you to disable independent voice playback for the selected instrument track and return it to using a single endpoint for all voices.

Edits apply to

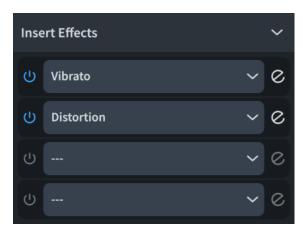
Allows you to determine whether changing the routing of the selected voice affects the current flow only or all flows in the project.

Only applies to future changes you make immediately after choosing either **This flow** or **All flows**.

Only available for voice tracks belonging to instruments with independent voice playback enabled.

Insert Effects

Allows you to add and manage inserts on the Mixer channel for the selected instrument track. Each instrument track's Mixer channel has four insert slots.



Each slot contains the following:

Activate Insert



Activates/Deactivates the insert slot.

Insert menu



Allows you to select an insert to load into the slot.

Edit Insert



Opens the corresponding effect in a window, which allows you to edit its settings.

TIP

- You can also access inserts for all channels in the Mixer.
- For more information about the plug-ins included with Dorico Elements, see the separate document **Plug-in Reference**.

Channel

Shows the Mixer channel strip for the selected track and allows you to adjust the channel.



TIP

You can also access all channels in the Mixer.

RELATED LINKS

Instrument tracks on page 516

Endpoint Setup dialog on page 552

Expression Maps dialog on page 745

Percussion Maps dialog on page 764

Mixer on page 700

Changing the sound used for chord symbol playback on page 520

Loading VST/MIDI instruments manually on page 513

VST and MIDI panel

The VST and MIDI panel contains the VST and MIDI instruments available and used in your project, and allows you to edit their settings. It is located in the left zone in Play mode.

VST Instruments

The **VST Instruments** section of the panel contains plug-in instances that each contain a VST instrument plug-in. Dorico Elements automatically loads plug-ins and enough plug-in instances for the instruments you add to your project according to the current playback template, but you can also load VST instruments manually.

NOTE

Dorico Elements only shows VST 3 instruments in the **VST Instruments** section by default. If you also want VST 2 instruments to be available, you must allow them. Only Kontakt and NotePerformer are allowed by default.



Each VST plug-in instance contains the following:

1 Activate Instance

Activates/Deactivates the plug-in instance.

2 Name

Displays the number and name of the plug-in instance. Plug-in instances are automatically numbered to help you differentiate between instances when you have multiple instances of the same plug-in.

3 VST Instruments menu

Displays the VST instrument currently loaded in the plug-in instance and allows you to select another available VST instrument from the menu.

4 Endpoint Setup

Opens the **Endpoint Setup** dialog for the corresponding plug-in instance.

5 Edit Instrument

Opens/Closes the VST instrument window.

The action bar at the bottom of the section contains the following options:

- Add +: Adds a new empty plug-in instance.
- **Duplicate** : Creates a copy of the selected plug-in instance that you can edit separately from the original.
- Save Endpoint Configuration **!**: Opens the Save Endpoint Configuration dialog, which allows you to save the current state of all plug-in instances in the section as a custom endpoint configuration.
- **Delete** : Deletes the selected plug-in instance.

MIDI Instruments

The **MIDI Instruments** section of the panel contains plug-in instances that each contain a MIDI device to use for output during playback. Which MIDI devices are available depends on your operating system.

- On Windows, you can select any MIDI device that is plugged into your computer.
- On macOS, you can select any MIDI device that is plugged into your computer, and any other
 device set up in the Audio MIDI Setup application. For example, this allows you to use MIDI
 from one application in another application.

TIP

We recommend plugging MIDI devices into your computer before starting Dorico Elements. Similarly, if your device is not recognized, we recommend restarting Dorico Elements.



Each MIDI plug-in instance contains the following:

1 Name

Displays the number and name of the plug-in instance. Plug-in instances are automatically numbered to help you differentiate between instances when you have multiple instances of the same plug-in.

2 MIDI Instruments menu

Displays the MIDI device currently loaded in the plug-in instance and allows you to select another available MIDI device from the menu.

3 Endpoint Setup

Opens the **Endpoint Setup** dialog for the corresponding plug-in instance.

The action bar at the bottom of the section contains the following options:

- Add :: Adds a new empty plug-in instance.
- Save Endpoint Configuration : Opens the Save Endpoint Configuration dialog, which allows you to save the current state of all plug-in instances in the section as a custom endpoint configuration.
- **Delete** : Deletes the selected plug-in instance.

RELATED LINKS

Playback templates on page 543
Endpoints on page 552
Endpoint Setup dialog on page 552
Custom endpoint configurations on page 556
Save Endpoint Configuration dialog on page 558

Allowing/Blocking VST plug-ins

You can allow individual VST 2 instrument plug-ins that you want to use in Dorico Elements and block plug-ins you want to prevent Dorico Elements from using. Allowed plug-ins are subsequently available in any project.

Dorico Elements automatically blocks plug-ins that crash and plug-ins that Steinberg has not already qualified for use with Dorico Elements. Only Kontakt and NotePerformer are allowed by default.

NOTE

This application runs natively on Apple Silicon and supports native VST 3 plug-ins only. Support for VST 2 plug-ins is available in Rosetta mode.

PROCEDURE

- 1. Press Ctrl/Cmd-, to open Preferences.
- 2. In the category list, click VST Plug-ins.
- 3. In the Allowed VST 2 Plug-ins subsection, allow plug-ins in any of the following ways:

 - To allow all blocked plug-ins, click **Allow All** in the **Blocked Plug-ins** list action bar.
 - To allow a plug-in not included in the **Blocked Plug-ins** list, click **Add plug-in name** in the **Allowed Plug-ins** list action bar, then enter the name of the plug-in in the new entry.
- **4.** Block plug-ins in any of the following ways:
 - To block individual allowed plug-ins, select them in the **Allowed Plug-ins** list and click **Block selected plug-ins** ▶ in the action bar.
 - To block all allowed plug-ins, click **Block All** in the **Allowed Plug-ins** list action bar.
- 5. Click Apply, then Close.
- 6. Quit Dorico Elements.

RESULT

When Dorico Elements next opens, your allowed VST plug-in entries are available for use in the program.

RELATED LINKS

Preferences dialog on page 57 Track Inspector on page 507 Playing back music on page 525 Playback templates on page 543

Loading VST/MIDI instruments manually

Dorico Elements automatically loads plug-in instances as required, according to the instruments in the project and the current playback template. However, you can also load VST/MIDI instruments manually, either into new plug-in instances or into existing ones to replace existing VST/MIDI instruments.

PREREQUISITE

Any VST instruments you want to use are saved on your computer.

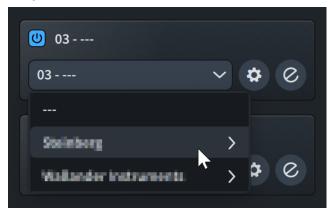
You have connected any MIDI devices you want to use.

TIP

We recommend plugging MIDI devices into your computer before starting Dorico Elements. Similarly, if your device is not recognized, we recommend restarting Dorico Elements.

PROCEDURE

- 1. In Play mode, choose **VST and MIDI** in the left zone to show the VST and MIDI panel.
- 2. Optional: If you want to load a VST/MIDI instrument into a new plug-in instance, click Add + in the corresponding section of the VST and MIDI panel.
- **3.** In the plug-in instance into which you want to load a new VST/MIDI instrument, select the one you want to load from the menu.



AFTER COMPLETING THIS TASK

- You can edit VST instruments, such as by loading sounds into channels.
- You can assign instruments/voices and expression/percussion maps to endpoints in the VST/ MIDI instruments you loaded.
- You can save your changes to VST instruments and endpoints as custom endpoint configurations for reuse in other projects.

NOTE

If you loaded a MIDI instrument, we strongly recommend disabling it for MIDI input to avoid feedback loops.

RELATED LINKS

Playback templates on page 543

Endpoint Setup dialog on page 552

Enabling/Disabling MIDI input devices on page 265

Assigning instruments/voices to endpoints on page 554

Assigning expression/percussion maps to endpoints on page 555

Saving custom endpoint configurations on page 557

Creating custom playback templates on page 549

Importing drum set patterns from Groove Agent SE on page 93

Editing VST instruments

You can edit the sounds and effects loaded into VST instruments; for example, if you are using a third-party sound library.

PREREQUISITE

You have loaded the VST instruments that you want to edit, either manually or by applying a playback template.

PROCEDURE

- 1. In Play mode, choose **VST and MIDI** in the left zone to show the VST and MIDI panel.
- 2. In a plug-in instance containing the VST instrument that you want to edit, click **Edit**Instrument ② to open the VST instrument window.
- **3.** Edit the VST instrument using the available options.

For example, you can:

- Load sounds into channels, such as a different type of guitar or "Oo" vocals.
- Adjust controls, such as the amount of air for flute sounds.
- Change effects, such as loading distortion and delay effects for guitars.

TIP

- For more information about the sounds and effects you can edit and load, see the documentation for your sound libraries.
- You can assign a key command for Show VST Plug-in Window For Selected Staff on the Key Commands page in Preferences. This command opens the VST instrument window for the first selected staff/voice in the music area, or the track selected in the track overview.

AFTER COMPLETING THIS TASK

- You can assign instruments/voices and expression/percussion maps to endpoints in VST instruments.
- You can save your changes to VST instruments and endpoints as custom endpoint configurations for reuse in other projects.

Tracks

Tracks are rows that represent a musical element across time, extending from left to right. They allow you to control multiple musical elements in a project simultaneously but independently of each other.

The term was established when audio mixing was done on tapes, and multitracking allowed separate elements of the music to be recorded and edited independently of each other before being combined into the final piece of music.

In modern programs, such as Cubase, tracks can contain many types of sounds, including audio recordings and software instruments. Tracks containing audio recordings often display the waveform of the audio, while tracks containing software instruments often display the pitches as rectangular note events positioned horizontally in time and vertically in pitch on a piano roll.

Dorico Elements provides the following types of tracks in Play mode:

Instrument tracks

Display previews of the notes belonging to the corresponding instrument. Each instrument in the project has its own instrument track, including when a single player holds multiple instruments.

Selecting an instrument track shows its music in the Key Editor, if it is unlocked, and its track settings in the Track Inspector.

Tempo track

Displays a preview of any tempo changes in the flow. Each project contains a single Tempo track.

Selecting the Tempo track shows the Tempo editor in the Key Editor panel, if it is unlocked, and its track settings in the Track Inspector.

Markers track

Displays any markers in the flow, including their text. Each project contains a single Markers track.

Chords track

Displays any chord symbols in the flow. Each project contains a single Chords track. Selecting the Chords track shows its track settings in the Track Inspector.

RELATED LINKS

Track overview on page 506 Track Inspector on page 507 Key Editor on page 650 Tempo track on page 517 Chords track on page 520 Markers track on page 519

Instrument tracks

Instrument tracks allow you to preview notes belonging to the corresponding instrument and select the instrument you want to show in the Key Editor.

Each instrument in the project has its own instrument track in Play mode, including when a single player holds multiple instruments. Instrument tracks are labeled using the full instrument name set for each instrument.

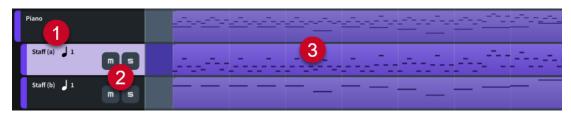
When independent voice playback is enabled, each voice belonging to the corresponding instrument appears as a separate voice track below the instrument track.

Similarly, you can expand percussion kit tracks to show a separate track for each instrument in the kit.

Instruments are automatically assigned a color according to their player order in the current layout, so that you can tell them apart more easily. This color is used consistently for the corresponding instrument, including in the Mixer and Key Editor.

When an instrument track is selected in the track overview, you can do the following:

- View and edit its notes and data in the Key Editor panel, if it is unlocked.
- Use the Track Inspector to change the routing of the track.



Piano instrument track with two voice tracks below

Each instrument track comprises the following:

1 Track name

Shows the name of the track.

- Instrument tracks display the full instrument name set for the instrument.
- Voice tracks display the stem direction and number of the corresponding voice. For instruments with multiple staves, the staff of the corresponding voice is also included.

2 Mute m/Solo s buttons

Allow you to mute/solo the track. Shown in track headers when tracks are sufficiently tall, and at the top of the track overview when tracks appear short. They apply to the corresponding track when shown in track headers, and the selected track when shown at the top of the track overview.

3 Track preview

Displays a preview of notes belonging to the instrument.

RELATED LINKS

Key Editor on page 650

Piano roll editor on page 661

Percussion editor on page 663

Player, layout, and instrument names on page 176

Voices on page 1416

Enabling independent voice playback on page 530

Endpoint Setup dialog on page 552

Assigning instruments/voices to endpoints on page 554

Changing the default player order on page 123

Tempo track

The Tempo track displays tempo changes in the selected flow. It appears at the top of the track overview in Play mode, and is one of the tracks you can hide/show. Each project contains a single Tempo track.



Tempo track

When the Tempo track is selected in the track overview, you can do the following:

- Edit and input tempo changes in the Tempo editor in the Key Editor panel, if it is unlocked.
- Use the Track Inspector to change the sound used for the click.

RELATED LINKS

Hiding/Showing tracks on page 521

Tempo editor on page 689

Track Inspector on page 507

Tempo marks on page 1313
Input methods for tempo marks on page 286
Changing the click settings on page 262
Exporting MIDI on page 94

Changing the sound used for the click

You can change the sound used for the click in playback by assigning the Tempo track to the required endpoint, including loading a new sound manually if required; for example, if you want to use a sound that is not provided by default.

TIP

You can choose an available factory default click sound in **Playback Options** > **Click** > **Metronome Click**. Click, beep, and wood block sounds are provided by default.

PREREQUISITE

- The Tempo track is shown.
- You have loaded the VST/MIDI instrument you want to use for the click.

PROCEDURE

- 1. In Play mode, select the Tempo track in the track overview.
- **2.** In the Track Inspector, in the **Routing** section, select the VST/MIDI instrument plug-in you want to use for the click from the audio plug-in menu.
- 3. Optional: If the sound you want to use is not already loaded in the plug-in instance, click **Edit**Instrument ☑ to open the corresponding VST or MIDI instrument in a window, then load the required sound into an available channel.
- **4.** Select the required endpoint in the plug-in instance using the following value fields, individually or together:
 - To assign the Tempo track to a different port in the selected plug-in instance, enter the required port in the **Port** field.

NOTE

Only necessary when using a plug-in that has multiple ports of 16 channels.

 To assign the Tempo track to a different channel in the selected port, enter the required channel in the Ch. field.

RELATED LINKS

Applying/Resetting playback templates on page 549 Loading VST/MIDI instruments manually on page 513 Track Inspector on page 507 Endpoints on page 552 Playback Options dialog on page 732

Markers track

The Markers track displays markers in the selected flow and allows you to input new markers. It appears at the top of the track overview in Play mode, and is one of the tracks you can hide/ show. Each project contains a single Markers track.



The Markers track comprises the following:

1 Add Marker

Opens the **Add Marker** dialog, which allows you to input a marker.

2 Markers

Show the position of each marker in the flow, including their text.

RELATED LINKS

Hiding/Showing tracks on page 521 Markers on page 1201 Editing marker text on page 1203 Videos on page 185

Inputting markers in the Markers track

You can input markers directly into the Markers track in Play mode.

PREREQUISITE

The Markers track is shown.

PROCEDURE

1. In Play mode, move the playhead to the time position where you want to input a marker.

NOTE

You cannot input markers in negative time, such as when a video starts three bars into the flow, causing the initial timecode of the flow to be in negative time.

- 2. In the Markers track header, click **Add Marker** 1 to open the **Add Marker** dialog.
- 3. Enter the marker text you want into the **Text** field.
- **4.** Optional: Change the timecode in the **Timecode** field.
- **5.** Click **OK** to input the marker and close the dialog.

RESULT

A marker is input at the position of the playhead. It shows the text you entered, or the default text "Marker" if you did not change the marker text.



Marker in the Markers track

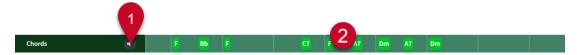
RELATED LINKS

Moving the playhead on page 523 Add Marker dialog on page 391 Editing marker text on page 1203 Changing the start position of videos on page 187

Chords track

The Chords track displays chord symbols in the selected flow and allows you to hear the corresponding chords in playback. It appears at the top of the track overview in Play mode, and is one of the tracks you can hide/show. Each project contains a single Chords track.

When the Chords track is selected in the track overview, you can use the Track Inspector to change its routing.



The Chords track comprises the following:

1 Enable Chords Playback

Allows you to include chords in, or exclude chords from, playback.

2 Chords

Indicates where chord symbols exist in the flow and shows the chord symbol name.

RELATED LINKS

Chord symbols on page 852
Track overview on page 506
Track Inspector on page 507
Hiding/Showing tracks on page 521

Enabling chord symbol playback

You can include chord symbols in playback. They are played as sustained chords, with their duration taken from the gap between one chord symbol and the next. Chord symbols input via a MIDI keyboard use the voicing you played when inputting them, whereas chord symbols input via a computer keyboard use a default voicing.

PREREQUISITE

The Chords track is shown.

PROCEDURE

• In Play mode, activate **Enable Chords Playback** In the Chords track header.

Changing the sound used for chord symbol playback

You can change the sound used for chord symbol playback by assigning the Chords track to the required endpoint, including loading a new sound manually if required; for example, if you want to use a sound that is not used by any of the instrument tracks in your project.

PREREQUISITE

- The Chords track is shown.
- You have loaded the VST/MIDI instrument you want to use for chord symbol playback.

PROCEDURE

- 1. In Play mode, select the Chords track in the track overview.
- **2.** In the Track Inspector, in the **Routing** section, select the VST/MIDI instrument plug-in you want to use for chord symbol playback from the audio plug-in menu.
- 3. Optional: If the sound you want to use is not already loaded in the plug-in instance, click **Edit Instrument** to open the corresponding VST or MIDI instrument in a window, then load the required sound into an available channel.
- **4.** Select the required endpoint in the plug-in instance using the following value fields, individually or together:
 - To assign the Chords track to a different port in the selected plug-in instance, enter the required port in the **Port** field.

NOTE

Only necessary when using a plug-in that has multiple ports of 16 channels.

• To assign the Chords track to a different channel in the selected port, enter the required channel in the **Ch**. field.

RFLATED LINKS

Applying/Resetting playback templates on page 549 Loading VST/MIDI instruments manually on page 513 Track Inspector on page 507 Endpoints on page 552

Resetting the voicing of chord symbols

When you input chord symbols via a MIDI keyboard, the voicing you used is retained for chord symbol playback. You can reset the voicing of chord symbols input using MIDI keyboards; for example, if you prefer to hear the default voicing for that chord symbol in playback.

PROCEDURE

- 1. In Write mode, select the chord symbols whose voicing you want to reset.
- 2. Choose Edit > Notations > Chord Symbols and Diagrams > Clear Chord Symbol Played Pitches. You can also choose this option from the context menu.

RELATED LINKS

Inputting chord symbols on page 310

Hiding/Showing tracks

You can hide/show the Tempo, Markers, and Chords tracks at the top of the track overview independently of each other.

NOTE

You cannot hide/show player and instrument tracks.

PROCEDURE

At the top of the track overview, hide/show tracks in the following ways:

- To show/hide the Tempo track, activate/deactivate **Tempo 3**.
- To show/hide the Markers track, activate/deactivate Markers 1.
- To show/hide the Chords track, activate/deactivate **Chords** C'.

RELATED LINKS

Track overview on page 506 Tempo track on page 517 Chords track on page 520 Markers track on page 519

Changing the height of tracks

You can change the height of all types of tracks; for example, to preview more tracks simultaneously. This does not affect the width of tracks.

PROCEDURE

• In Play mode, click **Track height** at the top left of the track overview to cycle through different track heights.

NOTE

When tracks appear short, **Mute** m and **Solo** subttons appear at the top of the track overview. They only appear in each track header when there is sufficient vertical space.

RELATED LINKS

Track overview on page 506
Changing the height of the Key Editor on page 656
Zooming in/out of the Key Editor on page 657

Zooming in/out of tracks

You can change the width of tracks in the track overview; for example, to preview more bars simultaneously. This does not affect the height of tracks.

PROCEDURE

- **1.** Zoom in horizontally in any of the following ways:
 - Click in the ruler and drag upwards.
 - **Ctrl/Cmd** -scroll upwards in the ruler.
 - Click **Zoom In** + at the bottom of the track overview.
- 2. Zoom out horizontally in any of the following ways:
 - Click in the ruler and drag downwards.
 - **Ctrl/Cmd** -scroll downwards in the ruler.
 - Click **Zoom Out =** at the bottom of the track overview.

Playhead

The playhead is a vertical line that moves during playback, showing the current rhythmic position. It is also known as a "playback line".

The playhead appears at all times in Play mode and during playback in other modes, and its current position is displayed in both the **Transport** window and the mini transport in the toolbar. You can also choose to show the playhead when playback is stopped in other modes.



The playhead in the Key Editor

Dorico Elements automatically keeps the playhead in view during playback by moving it along with the music, but you can disable playhead following to keep the view stationary. When playhead following is enabled, Dorico Elements tries to keep systems in a consistent place on the screen.

You can also move the playhead manually.

NOTE

The playhead never appears in Print mode.

RELATED LINKS

Transport window on page 540 Mini transport on page 31 Changing music area colors on page 53

Moving the playhead

The playhead automatically moves along with the music during playback, but you can also move the playhead manually in any mode.

You can move the playhead both when it is stopped and during playback, but not all methods of moving the playhead work during playback.

By default, the playhead is only shown during playback but you can choose to show the playhead at all times.

PROCEDURE

- Move the playhead in any of the following ways:
 - To move the playhead forwards, press Num + (plus on a numeric keypad) or click Fast
 Forward in the Transport window.
 - To move the playhead backwards, press Num (minus on a numeric keypad) or click
 Rewind a in the Transport window.

- To move the playhead back to the start of the flow, press Num. (period on a numeric keypad) or click Rewind to Beginning of Flow I in the Transport window or mini transport.
- To move the playhead to the start of the earliest selected item, press Alt/Opt-P.
- To move the playhead forwards by frames, press Ctrl/Cmd-Num + or Ctrl/Cmd-F9.
- To move the playhead backwards by frames, press Ctrl/Cmd-Num or Ctrl/Cmd-F7.
- In Play mode or the Key Editor, click the ruler at any position.

NOTE

You cannot click the ruler to move the playhead during playback.

RELATED LINKS

Playing back music on page 525 Transport window on page 540 Mini transport on page 31 Preferences dialog on page 57

Hiding/Showing the playhead

You can hide/show the playhead when playback is stopped; for example, to help line up your music when working with timecodes and video. By default, the playhead is hidden when playback is stopped, except in Play mode, where it always appears.

PROCEDURE

- 1. Press Ctrl/Cmd-, to open Preferences.
- 2. In the category list, click Play.
- **3.** In the **Playhead** subsection, activate/deactivate **Show playhead when stopped**.
- 4. Click Apply, then Close.

RESULT

The playhead is shown outside of playback when **Show playhead when stopped** is activated, and hidden when it is deactivated.

NOTE

This does not apply to Play mode or Print mode. The playhead always appears in Play mode and never appears in Print mode.

Enabling/Disabling playhead following

You can enable/disable views to follow the playhead during playback in each project window independently; for example, if you want keep a specific system in view while listening to your music.

PROCEDURE

• In the status bar, activate/deactivate Follow playhead.

RESULT

Playhead following during playback is enabled when **Follow playhead** is activated, and disabled when it is deactivated.

TIP

- You can change whether playhead following is enabled/disabled by default in all projects in Preferences > Play > Playhead.
- You can assign a key command for **Toggle Follow Playhead** on the **Key Commands** page in **Preferences**.

RELATED LINKS

Status bar on page 37

Opening multiple project windows on page 48 Moving the view in the music area on page 430 Preferences dialog on page 57

Playing back music

You can listen to the music you have written from the beginning of your project or from a specific point. You can use playback key commands in any mode.

PREREQUISITE

- Playback is activated in the current project.
- You have applied a playback template to the project that includes sounds for the instruments in your project.
- If you want to use different sounds for different voices, you have enabled independent voice playback for those instruments.
- If you do not want to hear sounds from connected MIDI devices, you have disabled MIDI thru.

PROCEDURE

- **1.** Start playback in one of the following ways:
 - To play back from the earliest selected item, make a selection, then either press P, click Play From Selection in the Transport window, or choose Play > Play From Selection.

TIP

- To play back all instruments, select a single note.
- To play back only a single staff, select multiple items on the staff.
- To play back multiple staves, select items on multiple staves.

This does not affect which channels are soloed or muted in the Mixer.

- To continue playback from the playhead position, either press Space or Enter, click Play
 in the mini transport, click Play From Playhead Position
 in the Transport window, or choose Play > Play From Playhead Position.
- To move the playhead and start playback from its new position simultaneously, doubleclick the ruler at the top of the track overview or Key Editor at the required position.

- To play back from the start of the flow, press **Shift-Alt/Opt-Space** or choose **Play** > **Play From Start of Flow**.
- To play back from the start of the project, choose Play > Play From Start of Project.
- 2. Optional: Move the playhead during playback to later/earlier positions.
- 3. Optional: To enable/disable the metronome click, click **Click** in the **Transport** window or mini transport.

TIP

You can assign a key command for **Enable Click** on the **Key Commands** page in **Preferences**.

- **4.** Stop playback in any of the following ways:
 - Press Space or Enter or P.
 - Press Num 0 (0 on a numeric keypad).
 - In the mini transport, click Stop ...
 - In the **Transport** window, click **Stop**
 - Double-click the ruler at the top of the track overview or Key Editor.

TIP

If you notice a change in sound when stopping playback, you can deactivate **Reset** controllers and send 'all notes off' when stopping playback on the Play page in **Preferences**.

RELATED LINKS

Applying/Resetting playback templates on page 549

Enabling independent voice playback on page 530

Enabling/Disabling MIDI thru on page 212

Allowing/Blocking VST plug-ins on page 513

Playhead on page 523

Muting/Soloing tracks on page 532

Repeats in playback on page 534

Including/Excluding pauses in playback on page 997

Track overview on page 506

Key Editor panel on page 650

Transport window on page 540

Mini transport on page 31

Status bar on page 37

Preferences dialog on page 57

Activating/Deactivating playback

You can activate/deactivate playback and transport functions in each project independently. For example, to prevent re-loading of sounds when copying material between projects with different playback templates.

PROCEDURE

• In the toolbar or **Transport** window, activate/deactivate **Activate Project U**.

RESULT

Playback and transport functions are activated/deactivated.

TIP

You can change the default playback activation behavior in **Preferences** > **Play** > **Project Activation**.

RELATED LINKS

Toolbar on page 29 Transport window on page 540 Preferences dialog on page 57

Scrubbing

You can use scrub playback to listen to your music at variable speeds and both forwards and backwards, according to how you move the mouse pointer. This can help you locate specific rhythmic positions to edit.

PREREQUISITE

- Playback is activated in the current project.
- You have applied a playback template to the project that includes sounds for the instruments in your project.
- If you want to scrub specific instruments only, you have activated the appropriate instrument filter or selected at least one note/item on the corresponding staves.

PROCEDURE

- 1. In Write mode, activate scrub playback in any of the following ways:
 - In the toolbar, activate **Scrub Playback** ...
 - Choose Play > Scrub Playback.
 - To scrub all staves, press and hold **Ctrl-Space (Windows) or Opt-Space (macOS)**.
 - To solo the instrument underneath the mouse pointer, press and hold Ctrl-Shift-Space (Windows) or Shift-Opt-Space (macOS).
- **2.** Scrub in any of the following ways:
 - Move the mouse pointer to the rhythmic positions and instruments you want to hear played back.
 - When scrubbing all staves, press **Right Arrow** / **Left Arrow** to move the playhead to the next/previous note.

During scrub playback, the playhead is shown at the mouse pointer position and the mouse pointer appears as a speaker icon.



- **3.** Deactivate scrub playback in any of the following ways:
 - Press Esc.
 - In the toolbar, deactivate **Scrub Playback** ...
 - Choose Play > Scrub Playback.
 - Release the key command.

RESULT

Music at the mouse pointer position is played back and sustained. The speed of playback depends on how fast you move the mouse pointer. During solo scrubbing, the instrument played back depends on the staff the mouse pointer is over.

NOTE

- Non-rhythmic notes, including grace notes, are not played back during scrubbing.
- When scrubbing music with repeats, Dorico Elements plays back music from the first playthrough.
- You can assign a key command for **Toggle Scrub Playback** on the **Key Commands** page in **Preferences**.

RELATED LINKS

Applying/Resetting playback templates on page 549
Muting/Soloing tracks on page 532
Activating/Deactivating instrument filters on page 436
Selecting/Deselecting notes and items individually on page 411
Key Commands page in the Preferences dialog on page 58

Changing the tempo mode

You can switch the tempo mode at any time between using a single fixed tempo and following tempo changes; for example, if you have a project with multiple tempo changes but want to use a single fixed tempo when recording MIDI.

PREREQUISITE

Playback is activated in the current project.

PROCEDURE

- 1. Change the tempo mode in any of the following ways:
 - Click **Tempo Mode** J 120 in the toolbar.
 - Choose Play > Fixed Tempo Mode.

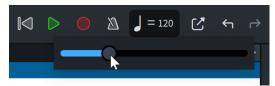




Fixed Tempo Mode

Follow Tempo Mode

2. Optional: When **Fixed Tempo Mode J** = 120 is active, change the metronome mark value by clicking the **Fixed Tempo Mode** number in the toolbar to show a slider, then dragging the slider to the right/left.



RESULT

In follow tempo mode, the tempo for playback and recording is set by tempo marks in the project.

In fixed tempo mode, the tempo for playback and recording is a single tempo, as determined by the **Fixed Tempo Mode** metronome mark value.

RELATED LINKS

Toolbar on page 29

Tempo marks on page 1313

Tempo editor on page 689

MIDI recording on page 258

Including/Excluding pauses in playback on page 997

Transport window on page 540

Changing the pre-roll duration

In Dorico Elements, pre-roll is the time added to playback before the first beat of the first bar in each flow. You can change the pre-roll duration before all flows project-wide; for example, if some flows in your project start with grace notes and you want to hear them in playback.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-P to open Playback Options.
- **2.** In the category list, click **Timing**.
- In the Flows section, change the value for Pre-roll before flow.
 For example, for flows starting with a single grace note, 0.25 seconds is usually sufficient.
- 4. Click Apply, then Close.

RESULT

The duration of the pre-roll before each flow in playback, measured in seconds, is changed.

RELATED LINKS

Playing back music on page 525

Playback Options dialog on page 732

Changing the gap between flows in playback

You can change the gap between all flows in playback, measured in seconds; for example, if the flows in your project should be played *attacca* and you want no gap between them.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-P to open Playback Options.
- **2.** In the category list, click **Timing**.
- 3. In the Flows section, change the value for Gap between flows during playback.
- 4. Click Apply, then Close.

Changing the playback tuning

You can change the tuning used for playback, based on the pitch of the A above middle C; for example, if you want to hear your music played at the Baroque pitch of A=415 Hz.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-P to open Playback Options.
- **2.** In the category list, click **Tuning**.
- 3. Change the value for Pitch of first A above middle C.
- 4. Click Apply, then Close.

RESULT

The tuning of all notes in the project is changed, which affects their sounding pitch in playback.

TIP

The sample rate of the current playback device also affects the playback tuning.

RELATED LINKS

Preferences dialog on page 57

Changing the audio device buffer size on page 264

Changing the middle C numbering convention on page 50

Enabling independent voice playback

By default, all voices belonging to a single instrument, including divisi staves, use the same endpoint for playback. You can enable independent voice playback for individual instruments; for example, to hear the different playing techniques in playback for a string divisi where some parts are *pizzicato* and some parts are *arco*.

NOTE

You cannot enable independent voice playback for unpitched percussion instruments and percussion kits.

PROCEDURE

1. In Play mode, in the track overview, select the instrument track for which you want to enable independent voice playback.

2. In the Track Inspector, click **Enable Independent Voice Playback** to in the **Routing** section.

RESULT

Independent voice playback is enabled for the selected instrument. Each voice belonging to the instrument appears as a separate voice track below the instrument track.

Dorico Elements automatically loads enough additional channels, and additional plug-in instances if necessary, to accommodate all voices belonging to the corresponding instrument project-wide, according to the current playback template. Voices are automatically assigned to endpoints according to their voice order.

NOTE

When independent voice playback is enabled, you can only change the routing and effects of each voice track.

AFTER COMPLETING THIS TASK

You can change the routing and effects of each voice track, including in each flow independently; for example, if some voices in some flows require a solo sound instead of an ensemble one.

RELATED LINKS

Track overview on page 506

Track Inspector on page 507

Instrument tracks on page 516

Playback templates on page 543

Playback techniques on page 770

Assigning instruments/voices to endpoints on page 554

Editing VST instruments on page 515

Loading inserts into channels on page 711

Tremolos in playback on page 1383

Articulations in playback on page 792

Slurs in playback on page 1285

Dynamics in playback on page 934

Disabling independent voice playback

You can disable independent voice playback for individual instrument tracks and return them to using a single endpoint for all voices.

PROCEDURE

1. In Play mode, in the track overview, select the instrument track for which you want to disable independent voice playback.

NOTE

You must select the instrument track, not any of its voice tracks.

2. In the Track Inspector, click **Disable Independent Voice Playback** in the **Routing** section.

RESULT

Independent voice playback is disabled for the selected instrument. Its voice tracks disappear from the track overview, and all voices belonging to the instrument return to using a single endpoint for playback.

Muting/Soloing tracks

You can mute/solo individual tracks, instruments, and voices belonging to instruments with independent voice playback enabled. This can be useful if you want to ensure only certain instruments are played back while you are working on a specific section of a project.

PROCEDURE

- **1.** Mute tracks in any of the following ways:
 - In the Mixer, click **Mute** in the corresponding channels.
 - In Play mode, click **Mute** m for the corresponding tracks in the track overview.
- **2.** Solo tracks in any of the following ways:
 - In the Mixer, click Solo s in the corresponding channels.
 - In Play mode, click **Solo s** for the corresponding tracks in the track overview.
 - To solo selected instruments and mute other instruments, select at least one note belonging to each instrument you want to solo, then press Alt/Opt-S or choose Play > Solo Selected Instruments.

RESULT

The corresponding tracks are muted/soloed. This affects playback until you change which tracks are muted/soloed, meaning you do not have to reselect the tracks you want to hear each time.

NOTE

- Soloing tracks automatically mutes all other tracks. If you solo a track that was muted, it is automatically unmuted.
- You can also play back only specific tracks/staves temporarily by selecting notes/items on each track/staff you want to hear, then starting playback.

EXAMPLE





Mute when enabled

Solo when enabled

RELATED LINKS

Track overview on page 506 Mixer on page 700 Playing back music on page 525

Deactivating mute/solo instrument states

You can deactivate the mute and solo states of all instruments in your project; for example, if you want to hear all instruments in playback after soloing a small selection.

PROCEDURE

- Deactivate mute/solo instrument states in the following ways:
 - To deactivate all mute instrument states, press Alt/Opt-U or click Deactivate All Mute States m in the Mixer toolbar.

To deactivate all solo instrument states, press **Shift-Alt/Opt-S** or click **Deactivate All Solo States** in the Mixer toolbar.

RESULT

All instruments in the project have the corresponding state removed. For example, removing both mute and solo instrument states reverts all instruments to their default state, causing all instruments to be included in playback.

RELATED LINKS

Mixer toolbar on page 702

Muting notes/items individually

You can mute individual notes and items to exclude them from playback without deleting them, and in specific playthroughs only. For example, if you want to hear chords without their arpeggios, a passage with multiple dynamics at a single volume level, or without tempo changes from specific tempo marks.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, Graphic Editing 3 is selected in the Engrave toolbox.

PROCEDURE

- 1. Select the notes/items you want to mute. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Suppress playback** in the **Common** group.
- **3.** Choose one of the following options:
 - To mute the selected notes/items in all playthroughs, choose Always.
 - To mute the selected notes/items only in specific playthroughs, choose **On Passes**.
- 4. Optional: If you chose On Passes, activate Suppress on passes.
- 5. Optional: Enter the playthroughs in which you want to mute the selected notes/items.
 - To specify a range of playthroughs, enter the first playthrough and last playthrough separated with a dash, such as **1-4**.
 - To specify individual playthroughs or separate ranges, enter each playthrough/range separated with commas, such as **1,3,5-8**.

RESULT

The selected items are muted in either all or only the specified playthroughs.

TIP

You can assign a key command for **Toggle Suppress Playback** on the **Key Commands** page in **Preferences**.

RELATED LINKS

Properties panel on page 646 Changing the tempo mode on page 528 Key Commands page in the Preferences dialog on page 58

Hiding/Showing colors for muted notes/items

You can hide/show colors for individual notes/items whose playback you have suppressed, which causes them to appear gray.

PROCEDURE

• Choose View > Note And Rest Colors > Suppressed Playback.

RELATED LINKS

View options for notes and rests on page 1044

Repeats in playback

Dorico Elements supports the playback of repeat structures, including repeat endings, repeat barlines, and repeat markers, provided all the correct jumps and sections are in place.

There is no limit to the number of repeat structures you can have in a single flow and still obtain correct playback.

By default, Dorico Elements plays sections between repeat barlines twice and includes repeats in playback, except after repeat jumps, such as D.S. al Coda.

During playback, the bars/beats and time displays in the mini transport and **Transport** window reflect the playhead position in repeat structures.

Dynamics and tempo marks are reflected in repeats by default. Repeats are also included in both audio and MIDI exports.

NOTE

- When repeat structures are unbalanced and would play back infinitely, Dorico Elements automatically excludes repeats from playback.
- You can mute individual notes/items to exclude them from playback in specific playthroughs only.

RELATED LINKS

Transport window on page 540

Mini transport on page 31

Repeat endings on page 1210

Repeat markers on page 1216

Types of barlines on page 799

Tremolos on page 1377

Rhythm slashes on page 1236

Bar repeats on page 1224

MIDI trigger regions on page 559

Muting notes/items individually on page 533

Including/Excluding repeats in playback

By default, Dorico Elements plays back all playthroughs in all types of repeat structures. You can include/exclude all repeats in playback project-wide. For example, you might exclude all repeats to listen to your music as a single playthrough.

NOTE

When repeat structures are unbalanced and would play back infinitely, Dorico Elements automatically excludes repeats from playback.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-P to open Playback Options.
- 2. In the category list, click Repeats.
- 3. In the Repeats section, activate/deactivate Play repeats.
- 4. Click Apply, then Close.

RELATED LINKS

Playback Options dialog on page 732
Including/Excluding pauses in playback on page 997
Including/Excluding slash voices in playback on page 1238

Including/Excluding repeats in playback after repeat jumps

By default, Dorico Elements plays back all playthroughs in all types of repeat structures. You can manually include/exclude repeats indicated by repeat markers, repeat endings, and repeat barlines in playback after individual repeat jumps, independently of your project-wide setting.

NOTE

You can only include/exclude repeats after repeat jumps, such as D.C. al Fine and D.S. al Coda.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing 3** is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the repeat jumps after which you want to include/exclude repeats in playback. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Replay repeats** in the **Repeat Markers** group.
- **3.** Activate/Deactivate the corresponding checkbox.

RESULT

Repeats are included in playback after the selected repeat jumps when the checkbox is activated, and excluded from playback when the checkbox is deactivated.

When the property is deactivated, repeat markers follow your project-wide setting for including repeats in playback after repeat jumps.

TIP

You can include/exclude all repeats after all repeat jumps project-wide on the **Repeats** page in **Playback Options**.

Changing the number of playthroughs at repeat barlines

End repeat barlines typically indicate that the preceding music is played through twice. You can change the number of playthroughs for each end repeat barline individually.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing 1** is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the end repeat barlines whose number of playthroughs you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Play n times** in the **Time Signatures** group.
- 3. Change the value in the value field.

NOTE

The minimum value is 2.

RESULT

The number of times the music preceding the selected end repeat barlines is played through is changed.

When repeats are included in playback, repeat counts are shown at system object positions for end repeat barlines set to have three or more playthroughs.

EXAMPLE



Final repeat barline with the default 2 playthroughs set



Final repeat barline with 4 playthroughs set and repeat count shown

RELATED LINKS

Properties panel on page 646

Engrave toolbox on page 490

Repeat counts on page 1222

Types of barlines on page 799

Input methods for bars, beats, and barlines on page 294

Including/Excluding repeats in playback on page 535

Changing the total number of playthroughs in repeat endings on page 1210 Muting notes/items individually on page 533

Swing playback

Swing is a style of performance where equally-notated notes are played in a regular pattern of alternating longer and shorter notes, which commonly entails eighth notes being played as a quarter note triplet followed by an eighth note triplet.





A swing phrase with simplified straight notation

How the same phrase sounds with a 2:1 swing ratio

Swing playback allows you to hear the uneven rhythms you want whilst retaining their simplified notation, including if the second eighth note beat is divided into two 16th notes. In Dorico Elements, you can enable swing playback for your whole project, only for certain sections, and only for individual instruments. You can swing either eighth notes or 16th notes.

Based on academic research into the rendering of swing by musicians, swing patterns in Dorico Elements are tempo-dependent by default. This means that the swing feels more pronounced at lower tempos, and straighter at higher tempos.

Swing ratios and rhythmic feels

Swing ratios express the strength of the swing using beat units. For example, a swing ratio of 2:1 means the first note in each pair is twice as long as the second, creating a triplet swing.

A swing ratio of 1:1 means the music is played straight, while a swing ratio of 5:1 means each pair of notes is played as if they were sextuplets, with the first note in the pair lasting five divisions and the second note lasting one.



6

Swing ratio 1:1

Swing ratio 5:1

The following rhythmic feels and swing ratios are provided by default in Dorico Elements:

2:1 swing 16ths (fixed)

Extends the first note in a pair of 16th notes to be twice as long as the second, creating a strict triplet 2:1 ratio. This is also known as a "triplet swing". This ratio is maintained regardless of the tempo by default.

2:1 swing 8ths (fixed)

Extends the first note in a pair of eighth notes to be twice as long as the second, creating a strict triplet 2:1 ratio. This is also known as a "triplet swing". This ratio is maintained regardless of the tempo by default.

3:1 swing 16ths (fixed)

Extends the first note in a pair of 16th notes to be three times as long as the second, creating a dotted 16th-32nd ratio (dotted semiquaver-demisemiquaver). This ratio is maintained regardless of the tempo by default.

3:1 swing 8ths (fixed)

Extends the first note in a pair of eighth notes to be three times as long as the second, creating a dotted eighth-16th ratio (dotted quaver-semiquaver). This ratio is maintained regardless of the tempo by default.

Heavy swing 16ths

Produces a tempo-dependent 16th note swing ratio of between 3:1 at low tempos and 1.5:1 at high tempos.

Heavy swing 8ths

Produces a tempo-dependent eighth note swing ratio of between 3:1 at low tempos and 1.5:1 at high tempos.

Light swing 16ths

Produces a tempo-dependent 16th note swing ratio of between 1.5:1 at low tempos and 1:1 at high tempos.

Light swing 8ths

Produces a tempo-dependent eighth note swing ratio of between 1.5:1 at low tempos and 1:1 at high tempos.

Medium swing 16ths

Produces a tempo-dependent 16th note swing ratio of between 2:1 at low tempos and 1.5:1 at high tempos.

Medium swing 8ths

Produces a tempo-dependent eighth note swing ratio of between 2:1 at low tempos and 1.5:1 at high tempos.

Straight (no swing)

Produces no swing; that is, even eighth notes in the ratio 1:1 at all tempos.

You can change the swing ratio used project-wide, and you can also change the swing ratio used for specific sections and for individual players.

Enabling swing playback project-wide

You can enable swing playback project-wide using any of the default swing ratios or custom swing ratios you have created in the project.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-P to open Playback Options.
- **2.** In the category list, click **Timing**.
- 3. In the **Rhythmic Feel** section, select the rhythmic feel you want from the **Default rhythmic** feel menu.

4. Click Apply, then Close.

RESULT

All pairs of either eighth notes or 16th notes in your project are played back with the selected swing ratio, depending on the swing unit for the selected ratio. This includes if the second beat is divided into two, such as two 16th notes in an eighth note swing.

RELATED LINKS

Playback Options dialog on page 732

Enabling swing playback for specific sections/instruments

You can enable swing playback for specific sections in your project and for individual instruments independently; for example, if you want only the trumpet player to swing for a twelve-bar section, or if you only want swing playback in one flow.

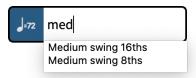
PROCEDURE

- 1. In Write mode, select one of the following:
 - If you want to enable swing playback from a specific rhythmic position onwards, select a single item at the start of the bar where you want swing playback/a different rhythmic feel to start.
 - If you want to enable swing playback within a section then return to straight playback, select multiple items that span the duration where you want swing playback/a different rhythmic feel.

NOTE

- If you want to enable swing playback for a single instrument, select items that belong to that instrument only.
- If you select an item in the middle of a bar, the rhythmic feel change only takes effect from the start of the next bar.
- 2. Open the tempo popover in any of the following ways:
 - Press Shift-T.
- 3. Enter the appropriate entry for the rhythmic feel you want into the popover.

When you start entering a rhythmic feel into the tempo popover, a menu appears that shows valid rhythmic feels containing the letters/words you enter, which you can select.



NOTE

If you do not enter the name of a rhythmic feel that exists in your project, the text you entered into the popover is input as a tempo mark and does not enable swing playback.

- **4.** Input the rhythmic feel change and close the popover in one of the following ways:
 - To input a rhythmic feel change for all staves, press Return.

• To input a rhythmic feel change only for the selected instrument, press **Alt/Opt-Return** .

RESULT

The rhythmic feel used for swing playback is changed from the start of the bar containing the earliest selected item, or the start of the next bar if you selected an item in the middle of a bar.

If you selected multiple items, the rhythmic feel is automatically reset at the position of the last selected item.

If you pressed **Alt/Opt-Return**, the rhythmic feel change only applies to the instrument on whose staff you selected an item or items. Rhythmic feels added to single instruments apply to all staves belonging to those instruments.

A signpost appears showing the name of the rhythmic feel you input. It is shown above the top staff in the system for rhythmic feel changes that apply to all staves, and directly above the top staff of the instrument for rhythmic feel changes that apply only to single instruments.

RELATED LINKS

Tempo popover on page 288 Swing ratios and rhythmic feels on page 537 Signposts on page 438

Deleting rhythmic feel changes

You can delete rhythmic feel changes you have enabled for specific sections or for individual players only.

PREREQUISITE

Rhythmic change signposts are shown.

PROCEDURE

- 1. In Write mode, select the signposts of the rhythmic changes you want to delete.
- 2. Press Backspace or Delete.

RESULT

The rhythmic changes are deleted. The affected staves return to the default non-swing playback until the next existing rhythmic change signpost, if applicable.

Transport window

The **Transport** window contains playback and MIDI recording functions, such as rewinding and fast-forwarding. It contains additional and more precise versions of the playback functions available in the toolbar.

You can hide/show the **Transport** window in any of the following ways:

- Press F2.
- In the toolbar, click Show Transport Bar @.



The **Transport** window contains the following information and functions:

Bars/Beats display

6.1.1.000

Shows the position of the playhead relative to bars and beats in the current flow in the following order of units: bars, beats, 16th notes, 120ths of a 16th note.

Time display

Shows the position of the playhead in one of the following formats:

- Elapsed time in the following order of units: hours, minutes, seconds, milliseconds
- Timecode in the following order of units: hours, minutes, seconds, frames



00:00:42:12

Time display showing elapsed time

Time display showing the timecode

You can change the content shown in the time display by clicking it.

Activate Project



Activates/Deactivates playback in the project. When playback is deactivated, transport and playback functions are disabled.

Rewind to Beginning of Flow



Moves the playhead back to the beginning of the flow.

Rewind



Moves the playhead back by a second each time you click.

Fast Forward



Moves the playhead forwards by a second each time you click.

Stop



Stops playback.

Play From Playhead Position



Plays back from the position of the playhead.

Play From Selection



Plays back from the position of the first selected item in the music area.

If you select items on multiple staves, or multiple items on a single staff, only the selected staves are played back.

Record

Starts/Stops MIDI recording.





Record outside of MIDI recording

Record during MIDI recording

Retrospective Record



Retrieves any MIDI notes you played during the previous playback and allows you to input them on any staff, even if you were not recording them explicitly.

Click



Plays/Mutes the metronome click during playback and recording.

Tempo Mode

Displays the tempo used for both playback and recording. The value changes according to the playhead position, and its appearance changes according to its mode.





Fixed Tempo Mode

Follow Tempo Mode

- You can change the tempo mode by clicking the beat unit.
- You can change the metronome mark value used in fixed tempo mode by clicking the number to show a slider, then dragging the slider to the right/left.



Scrub Playback

Activates/Deactivates scrub playback.





Scrub Playback outside of scrubbing

Scrub Playback during scrubbing

RELATED LINKS

Toolbar on page 29
Mini transport on page 31
Playing back music on page 525
Changing the tempo mode on page 528
MIDI recording on page 258
Changing the sound used for the click on page 518
Timecodes on page 1206

Changing the content shown in the transport display

You can switch between showing the timecode, the total elapsed time, and the current rhythmic position of the playhead expressed in bars, beats, and ticks in both the mini transport in the toolbar and the **Transport** window.

PROCEDURE

• In either the mini transport in the toolbar or the **Transport** window, click the transport display until the content you want appears.

In the **Transport** window, this is the display on the right.

RESULT

Each time you click in the mini transport display, it cycles through showing the rhythmic position of the playhead, elapsed time, and the timecode.

In the **Transport** window, it only switches between the timecode and elapsed time, as the rhythmic position of the playhead is shown permanently on the left of the window.

TIP

You can change what is shown in the mini transport by default for all future projects on the **Play** page in **Preferences**.

RELATED LINKS

Preferences dialog on page 57

Playback templates

Dorico Elements uses playback templates to allocate sounds from VST instruments and MIDI devices to the instruments in your project.

Playback templates combine the following information in order to obtain correct playback:

- The instrument sounds, articulations, and playback techniques provided by plug-ins, such as VST instruments
- The expression/percussion maps required to obtain those sounds
- The endpoint configurations required for the sounds for each instrument

When you add instruments to players in a project, Dorico Elements automatically loads plug-ins for them according to the current playback template and sets up expression maps and percussion maps as required. Dorico Elements also automatically loads enough plug-in instances, as many plug-ins can only load a limited number of sounds in each instance.

You can override playback templates and make your own manual changes to the sounds used by instruments in your project, such as by changing the expression maps assigned to endpoints.

You can then save such changes as custom endpoint configurations, which you can include in your own custom playback templates.

You can also export custom playback templates; for example, to share them with other users. Playback templates are saved as .dorico_pt files.

NOTE

- Playback templates are available in all projects you open or create on your computer, meaning any changes you make to playback templates affect all projects that use those playback templates.
- Dorico Elements automatically loads sounds for any new instruments you add to the project, using the sounds included in the current playback template. Therefore, we recommend that you always include a factory default playback template at the bottom of custom playback templates as a fallback to ensure that all instruments are assigned sounds.
- Any changes you make within plug-ins are saved when you save the project but are not communicated to Dorico Elements, which can lead to unexpected low notes sounding in playback because Dorico Elements is still using the expression and percussion maps for the original sounds. If you make changes in plug-ins, you must manually assign the correct expression and percussion maps to the appropriate endpoints.
- The **Silence** playback template prevents Dorico Elements from loading sounds. This can make project files significantly smaller.

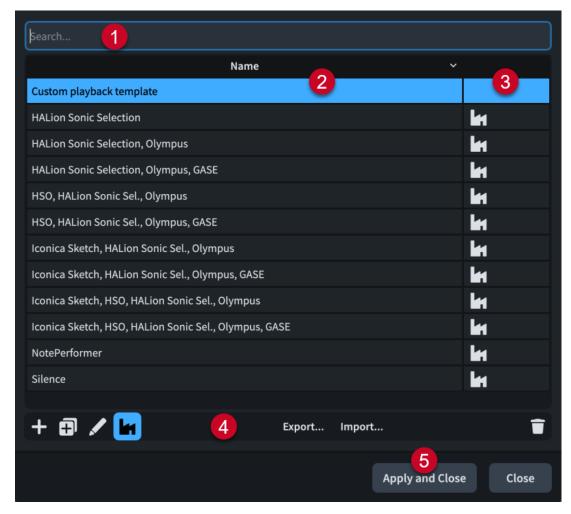
RELATED LINKS

Endpoints on page 552
Allowing/Blocking VST plug-ins on page 513
Loading VST/MIDI instruments manually on page 513
Editing VST instruments on page 515
Activating/Deactivating playback on page 527
MIDI trigger regions on page 559
Importing drum set patterns from Groove Agent SE on page 93

Apply Playback Template dialog

The **Apply Playback Template** dialog allows you to change the playback template applied to the current project and to import/export playback templates. It also allows you to access the **Edit Playback Template** dialog.

You can open the Apply Playback Template dialog by choosing Play > Playback Template.



The Apply Playback Template dialog comprises the following:

1 Search field

Allows you to filter playback templates in the list according to your entry.

2 Name column

Contains a list of the playback templates available on your computer. You can click the column header to change the sorting order.

NOTE

Dorico Elements only shows playback templates for sounds that you have installed and for which you own licenses.

3 Factory column

Contains the factory symbol if the playback template in the corresponding row is a factory default playback template. You can click the column header to change the sorting order.

4 Action bar

Contains the following options for playback templates:

- Add Playback Template :: Opens the Edit Playback Template dialog and allows you to create a new playback template.
- **Duplicate Playback Template** : Opens the **Edit Playback Template** dialog and allows you to create a new playback template that starts as a duplicate of the selected one.

• Edit Playback Template
☑: Opens the Edit Playback Template dialog and allows you to edit the existing selected playback template.

NOTE

You cannot edit factory default playback templates.

- **Show Factory** : Allows you to hide/show factory default playback templates in the table.
- **Export**: Opens the File Explorer/macOS Finder, where you can select the location to which you want to export the currently selected playback templates as .dorico_pt files. You can then import the .dorico_pt files into Dorico Elements on other computers and share them with other users.
- **Import**: Opens the File Explorer/macOS Finder, where you can select the .dorico_pt files that you want to import as playback templates.
- **Delete** : Deletes the selected playback templates.

NOTE

You cannot delete factory default playback templates.

5 Apply and Close

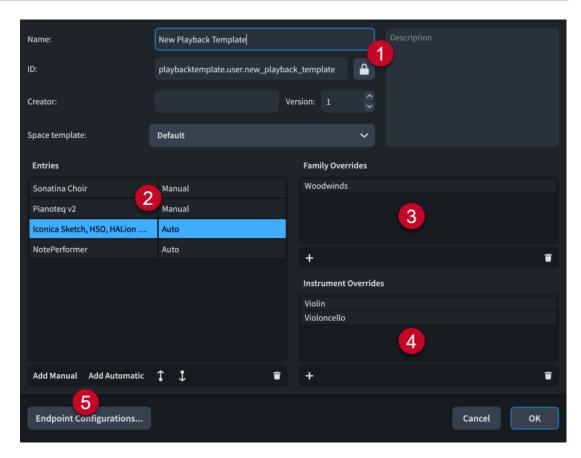
Applies the selected playback template to the project and closes the dialog.

Edit Playback Template dialog

The **Edit Playback Template** dialog allows you to create new custom playback templates and edit existing ones. You can use any combination of custom endpoint configurations and existing playback templates and specify the order in which they should be used.

Playback templates are available in all projects you open or create on your computer.

You can open the Edit Playback Template dialog from inside the Apply Playback Template dialog by clicking Add Playback Template ♣, Duplicate Playback Template ♠, or Edit Playback Template ✔.



The **Edit Playback Template** dialog contains the following sections and options:

1 Playback template data

Allows you to specify the following identifying information for the selected custom playback template:

- **Name**: Allows you to set the name of the playback template that appears in the program; for example, in the **Apply Playback Template** dialog.
- **ID**: Allows you to set the unique ID of the playback template. Dorico Elements automatically populates the **ID** field with the information you enter into the **Name** field.
- **Creator**: Allows you to name the creator if you are sharing your playback template with other users.
- **Version**: Allows you to indicate the playback template version so you can identify the most recent one; for example, you can increase the **Version** number each time you make changes to the playback template.
- **Space template**: Allows you to select the space template that you want the playback template to use.
- **Description**: Allows you to add any other information about the playback template.

NOTE

All fields in the playback template data section, except for **Name**, are locked by the **Lock Info** button. You must click this button in order to change the information in the fields.

2 Entries

Contains a table of all the custom endpoint configurations and existing playback templates used by the selected custom playback template. Entries are listed in order of priority, meaning that Dorico Elements assigns sounds from the top entry first. We recommend that

you always include a factory default playback template at the bottom of the list as a fallback to ensure that all instruments are assigned sounds.

In most cases, listing entries in your order of preference in the **Entries** section is sufficient to achieve your desired playback. However, if multiple entries in your custom playback template provide sounds for the same instrument, you must set family and/or instrument overrides; for example, if you only want to use woodwind sounds from the first entry and use all other sounds from the second entry.

The column on the right identifies the type of the entry in the corresponding row.

- Manual: Entries that cannot load sounds automatically, including custom endpoint configurations
- Auto: Entries that can load sounds automatically; that is, factory default playback templates

The action bar at the bottom of the section contains the following options:

- Add Manual: Allows you to add a manual entry to the playback template.
- Add Automatic: Allows you to add an automatic entry to the playback template.
- **Move Up 1**: Moves the selected entry up the list.
- Move Down 1: Moves the selected entry down the list.
- **Delete** : Removes the selected entry from the playback template.

3 Family Overrides

Contains a list of family overrides applied to the selected entry and allows you to add/ remove overrides. Family overrides allow you to specify the instrument family sounds you want to use; for example, if you only want to use the woodwind sounds from an entry that also includes brass and string sounds.

The action bar at the bottom of the section contains the following options:

- Add Instrument Family +: Allows you to select an instrument family to apply as an override to the selected entry.
- **Delete Instrument Family** : Removes the selected family override from the selected entry.

4 Instrument Overrides

Contains a list of instrument overrides applied to the selected entry and allows you to add/remove overrides. Instrument overrides allow you to specify individual instrument sounds you want to use; for example, if you only want to use a solo violin sound from an entry that also includes ensemble string sounds.

The action bar at the bottom of the section contains the following options:

- Add Instrument : Allows you to select an instrument to apply as an override to the selected entry.
- **Delete Instrument** : Removes the selected instrument override from the selected entry.

5 Endpoint Configurations

Opens the **Edit Endpoint Configurations** dialog, which allows you to rename and delete custom endpoint configurations, and view the plug-ins and players they contain.

RELATED LINKS

Edit Endpoint Configurations dialog on page 558 Custom endpoint configurations on page 556 Space templates on page 720

Applying/Resetting playback templates

You can change the playback template applied to the current project; for example, if you want to use a different sound library for playback. Re-selecting playback templates resets them to their default settings.

PREREQUISITE

You have installed all the sounds that you want to use for playback.

PROCEDURE

- 1. Choose Play > Playback Template to open the Apply Playback Template dialog.
- 2. Select the playback template you want to use.

NOTE

Dorico Elements only shows playback templates for sounds that you have installed and for which you own licenses.

3. Click Apply and Close.

RESULT

The playback template applied to the current project is changed. If you re-selected the playback template already in use, the playback template is reset.

Sounds are loaded into plug-in instances in their score order.

TIP

- You can change the default playback template used for all future projects on the Play page
 in Preferences. If Dorico Elements detects that you have installed new sounds, a dialog
 appears that allows you to update your default playback template.
- You can also load sounds only for instruments without assigned sounds by choosing Play > Load Sounds for Unassigned Instruments.

RELATED LINKS

Preferences dialog on page 57
Activating/Deactivating playback on page 527
Loading VST/MIDI instruments manually on page 513
Changing the default player order on page 123
Importing drum set patterns from Groove Agent SE on page 93

Creating custom playback templates

You can create custom playback templates that can include combinations of factory default playback templates, custom endpoint configurations, and other non-factory default playback templates that cannot load sounds automatically.

PREREQUISITE

You have saved custom endpoint configurations for any third-party sound libraries you want to include in your custom playback template.

PROCEDURE

1. Choose Play > Playback Template to open the Apply Playback Template dialog.

- **2.** Open the **Edit Playback Template** dialog to create a new playback template in one of the following ways:
 - To create an empty playback template, click Add Playback Template

 in the action bar.
 - To create a copy of an existing playback template, select it and click **Duplicate Playback Template** in the action bar.
- 3. In the **Edit Playback Template** dialog, click **Lock Info** to unlock the data fields.
- **4.** Enter information for your playback template in the relevant fields.
- **5.** In the **Entries** section, add the custom endpoint configurations and/or factory default playback templates you want.
 - To add a custom endpoint configuration or non-factory default playback template, click **Add Manual** and select the one you want from the menu.
 - To add a factory default playback template, click **Add Automatic** and select the one you want from the menu.

TIP

We recommend that you always include a factory default playback template at the bottom of the list as a fallback to ensure that all instruments are assigned sounds.

- **6.** Optional: To change the order of entries and their order of preference in the playback template, select an entry and click one of the following options in the action bar:
 - To move the selected entry upwards, click Move Up 1.
 - To move the selected entry downwards, click **Move Down 1**.
- 7. Optional: Repeat step 6 until all the entries are in the correct order of preference.
- **8.** Optional: Select an entry for which you want to specify instrument family overrides.
- **9.** In the **Family Overrides** section action bar, click **Add Instrument Family** + and select the one you want from the menu.
 - For example, if you only want to use the woodwind sounds from a sound library that also has string sounds, select **Woodwinds**.
- **10.** Optional: Select an entry for which you want to specify individual instrument overrides.
- **11.** In the **Instrument Overrides** section action bar, click **Add Instrument +** and select the one you want in the instrument picker.
 - For example, if you only want to use the piano sound from a sound library that has other keyboard instrument sounds, select **Piano**.
- **12.** Optional: Repeat steps 8 to 11 for other entries for which you want to specify instrument family and instrument overrides.
- **13.** Click **OK** to save your changes and close the dialog.

RESULT

Your new custom playback template is created. It is available to use in the current project and all projects you create/open on your computer.

RELATED LINKS

Apply Playback Template dialog on page 544 Edit Playback Template dialog on page 546 Endpoints on page 552 Saving custom endpoint configurations on page 557

Importing playback templates

You can import playback templates into projects; for example, if someone you are working with exported their custom playback template for you to use. Playback templates are saved as .dorico_pt files.

PROCEDURE

- 1. Choose Play > Playback Template to open the Apply Playback Template dialog.
- 2. Click **Import** to open the File Explorer/macOS Finder.
- 3. Locate and select the playback template file you want to import.
- 4. Click Open.

RESULT

The selected playback template is imported. It becomes available in the current project and all projects you create/open on your computer.

If the imported playback template included a space template, that space template is applied to the project automatically.

TIP

You can also import playback templates by dragging .dorico_pt files into a Dorico Elements project window.

RELATED LINKS

Space templates on page 720

Exporting playback templates

You can export playback templates so you can send them to other users or use them on other computers. By default, any playback templates you create are available in all projects on your computer.

PROCEDURE

- 1. Choose Play > Playback Template to open the Apply Playback Template dialog.
- 2. Select the playback templates you want to export.
- 3. Click **Export** to open the File Explorer/macOS Finder.
- **4.** Specify a name and location for the playback template files.
- 5. Click Choose.

RESULT

The selected playback templates are exported and saved in the selected location as separate .dorico_pt files.

Any space templates used by the selected playback templates are included in the export.

Endpoints

"Endpoint" is the term used for the unique combination of inputs and outputs that together allow the correct sounds to be played for each instrument.

In Dorico Elements, each endpoint brings together the following:

- A VST instrument or MIDI output device instance
- A specific channel on that VST instrument or MIDI output device
- The patch or program assigned to that channel
- The expression map and/or percussion map that describes the instrument or instruments that can be played by that patch or program, and the playback techniques and articulations provided

Each instrument in your project is connected to a specific endpoint. Assigning an expression/ percussion map to the same endpoint allows Dorico Elements to translate any playing technique changes and articulations you input into the key switches and controller switches necessary to produce the required sounds for the instrument in playback.

When you use a factory default playback template, Dorico Elements sets up endpoints and expression/percussion maps automatically. If you want to load other plug-ins or change the patches within HALion Sonic SE, you can do so in the **Endpoint Setup** dialog.

NOTE

Any changes you make within plug-ins are not communicated to Dorico Elements; for example, changing a sound that the expression map expects to use a modulation wheel for dynamics to one that uses note velocity instead. This can lead to unexpected low notes sounding in playback because Dorico Elements is still using the expression and percussion maps for the original sounds. If you make changes in plug-ins, you must manually assign the correct expression and percussion maps to the appropriate endpoints.

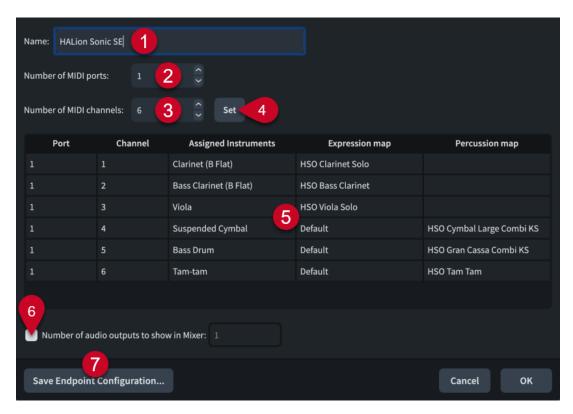
You can then save your changes as a custom endpoint configuration if you want to reuse them in other projects.

RELATED LINKS
Playback templates on page 543
Custom endpoint configurations on page 556

Endpoint Setup dialog

The **Endpoint Setup** dialog displays which expression and percussion maps are currently linked to each endpoint in the corresponding plug-in instance, and allows you to change these settings. It also allows you to save your current settings as custom endpoint configurations, which you can then include in custom playback templates.

• You can open the **Endpoint Setup** dialog by clicking **Endpoint Setup** in each plug-in instance in the VST and MIDI panel, or in the **Routing** section of the Track Inspector.



The **Endpoint Setup** dialog contains the following options and sections:

1 Name

Allows you to change the name of the selected plug-in instance. This affects the name shown in the VST and MIDI panel and in the Mixer.

2 Number of MIDI ports

Displays the number of MIDI ports the corresponding plug-in instance currently uses.

You can change the number of MIDI ports; for example, if you are using a plug-in that uses more than one port. Dorico Elements does not load multiple MIDI ports by default.

3 Number of MIDI channels

Displays the number of MIDI channels the corresponding plug-in instance currently uses. You can change the number of channels; for example, if you have a monotimbral plug-in such as a piano sampler which only has one MIDI channel, or a multitimbral plug-in with 16 MIDI channels and 16 audio outputs.

4 Set

Sets the plug-in instance to have the number of MIDI ports and channels specified in the **Number of MIDI ports** and **Number of MIDI channels** value fields. This changes the number of rows in the table.

5 Endpoint setup table

Contains the settings for the corresponding plug-in instance, arranged into the following columns:

• Port: Displays the port used by the instrument in the corresponding row of the table.

NOTE

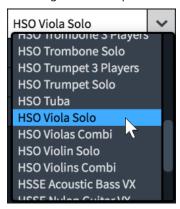
You cannot change the port from within the **Endpoint Setup** dialog. You must change the port in the Track Inspector.

• **Channel**: Displays the channel used by the instrument in the corresponding row of the table.

NOTE

You cannot change the channel from within the **Endpoint Setup** dialog. You must change the channel in the Track Inspector.

- Assigned Instruments: Displays the full name of the instrument in the corresponding row, as set for that instrument in the Edit Instrument Names dialog, and its instrument number, if applicable.
- **Expression map**: Displays the expression map currently assigned to the instrument in the corresponding row. You can change the expression map by double-clicking it and selecting another expression map from the menu.



• **Percussion map**: Displays the percussion map currently assigned to the instrument in the corresponding row. You can change the percussion map by double-clicking it and selecting another percussion map from the menu.

6 Number of audio outputs to show in Mixer

Allows you to change the number of audio outputs shown in the Mixer; for example, if you want to hide unused outputs when using plug-ins that provide more audio outputs than Dorico Elements uses.

7 Save Endpoint Configuration

Opens the **Save Endpoint Configuration** dialog, which allows you to enter a name for the current endpoint configuration and save it as a custom endpoint configuration.

RELATED LINKS

Track Inspector on page 507 VST and MIDI panel on page 511 Expression Maps dialog on page 745 Edit Instrument Names dialog on page 180 Mixer on page 700

Assigning instruments/voices to endpoints

You can assign instruments to any endpoint; for example, if you have loaded a plug-in with multiple ports and want to change the endpoint of an existing instrument to an endpoint on

one of your new ports. For instruments with independent voice playback enabled, you can assign each voice to a different endpoint.

PREREQUISITE

- If you want to assign different voices belonging to the same instrument to different endpoints, you have enabled independent voice playback.
- If you want to assign instruments to endpoints in specific plug-in instances, you have loaded those plug-in instances. You can do this by applying a suitable playback template or by loading VST/MIDI instruments manually.

PROCEDURE

- **1.** In Play mode, in the track overview, select the instrument/voice track whose assigned endpoint you want to change.
- **2.** Optional: If you selected a voice track, choose one of the following options for **Edits apply to** in the **Routing** section of the Track Inspector:
 - To change the assigned endpoint for the selected voice in the current flow only, choose **This flow**.
 - To change the assigned endpoint for the selected voice in all flows, choose **All flows**.
- **3.** Optional: To assign the instrument/voice to an endpoint in a different plug-in instance, select that plug-in instance from the audio plug-in menu in the **Routing** section of the Track Inspector.
- 4. Change the endpoint using the following value fields, individually or together:
 - To assign the instrument/voice to a different port in the selected plug-in instance, enter the required port in the **Port** field.

NOTE

Only necessary when using a plug-in that has multiple ports of 16 channels.

• To assign the instrument/voice to a different channel in the selected port, enter the required channel in the **Ch**. field.

RELATED LINKS

Enabling independent voice playback on page 530 Applying/Resetting playback templates on page 549 Loading VST/MIDI instruments manually on page 513 Editing VST instruments on page 515

Assigning expression/percussion maps to endpoints

You can assign expression/percussion maps to the endpoints in your project; for example, if you have created a custom percussion map and must link it to the endpoint for the corresponding VST patch.

TIP

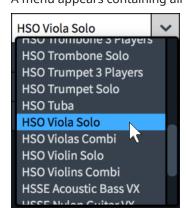
You can also assign expression/percussion maps to endpoints in the **Routing** section of the Track Inspector.

PREREQUISITE

You have made or imported any expression/percussion maps that you require but do not exist on your computer.

PROCEDURE

- 1. In Play mode, in the VST and MIDI panel, click **Endpoint Setup** in the plug-in instance in which you want to change the expression/percussion maps assigned to endpoints to open the **Endpoint Setup** dialog.
- 2. Double-click the expression/percussion map you want to change.
- Click the disclosure arrow to the right of the field.A menu appears containing all maps of the same type currently loaded in your project.



- **4.** Select the expression/percussion map you want from the menu.
- 5. Press Return.
- **6.** Optional: Repeat steps 2 to 5 for any other endpoints whose assigned expression/percussion maps you want to change.
- **7.** Click **OK** to save your changes and close the dialog.

RELATED LINKS

VST and MIDI panel on page 511 Track Inspector on page 507 Expression maps on page 744 Percussion maps on page 763

Custom endpoint configurations

Custom endpoint configurations save the current state and settings of plug-ins in your project, such as the number and type of VST/MIDI instruments loaded and the instruments and expression/percussion maps assigned to endpoints.

You can save custom endpoint configurations that include the settings for all plug-ins currently loaded or only a single one.

Custom endpoint configurations are available in all projects you open or create on your computer. You can view, rename, and delete the custom endpoint configurations on your computer in the **Edit Endpoint Configurations** dialog.

Saving custom endpoint configurations

You can save any overrides you have made to endpoint configurations, such as changing the instruments and expression maps assigned to particular endpoints. This allows you to use these overrides in custom playback templates and re-use the same endpoint configurations in other projects.

PREREQUISITE

- You have opened a project containing all instruments and plug-ins that are necessary for the custom endpoint configuration.
- You have created any necessary expression maps and playback technique combinations.
- You have created any necessary custom playing techniques.

PROCEDURE

1. Load the plug-ins you want.

You can do this by applying a playback template or by adding plug-in instances manually in the VST and MIDI panel in Play mode.

2. Change the settings for the endpoints as required.

For example, change the instruments or expression maps assigned to each endpoint.

- **3.** Open the **Save Endpoint Configuration** dialog in one of the following ways:
 - To save a custom endpoint configuration for only a single plug-in instance, open the **Endpoint Setup** dialog for that plug-in instance and click **Save Endpoint Configuration**.
 - To save a custom endpoint configuration that includes all VST instrument or MIDI instrument plug-in instances, click **Save Endpoint Configuration** In the action bar of the corresponding section of the VST and MIDI panel.
- **4.** Enter a name for your custom endpoint configuration in the **Name** field.

NOTE

If you enter a name that already exists, or select an existing custom endpoint configuration from the menu, the existing custom endpoint configuration is overwritten.

5. Click **OK** to save your changes and close the dialog.

RESULT

The current state of either the selected plug-in instance or all plug-in instances in the corresponding section is saved as a custom endpoint configuration. This includes any custom playing techniques included in any of the expression/percussion maps.

AFTER COMPLETING THIS TASK

You can include custom endpoint configurations in custom playback templates, which allows you to use endpoint configurations in other projects.

RELATED LINKS

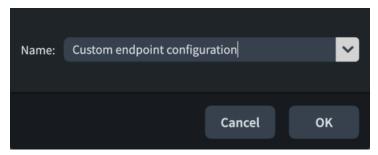
Playback templates on page 543
Allowing/Blocking VST plug-ins on page 513
Loading VST/MIDI instruments manually on page 513
Editing VST instruments on page 515
Creating new expression maps on page 759

Save Endpoint Configuration dialog

The **Save Endpoint Configuration** dialog allows you to save the current state and settings of plug-ins in your project. Saving custom endpoint configurations allows you to re-use them in other projects and include them in custom playback templates.

You can open the **Save Endpoint Configuration** dialog in Play mode in any of the following ways:

- In the VST and MIDI panel, click **Save Endpoint Configuration** in the **VST Instruments** or **MIDI Instruments** action bar. This saves the current state of all plug-ins in the corresponding section of the panel.
- In the **Endpoint Setup** dialog, click **Save Endpoint Configuration**. This saves the current state of the selected plug-in only.



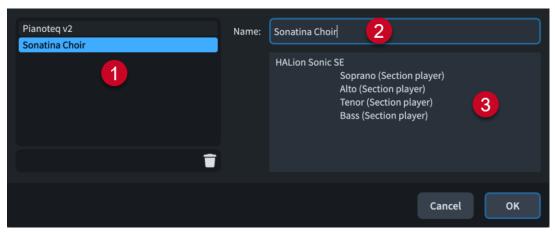
The **Save Endpoint Configuration** dialog contains a **Name** field that allows you to enter a name for the endpoint configuration you are saving. The arrow at the end of the field allows you to select an existing custom endpoint configuration to use to populate the field.

If you enter a name that already exists, you can overwrite the existing custom endpoint configuration. When you overwrite existing custom endpoint configurations, Dorico Elements moves the previous version to your recycle bin.

Edit Endpoint Configurations dialog

The **Edit Endpoint Configurations** dialog allows you to rename and delete custom endpoint configurations, and view the plug-ins and players they contain.

• You can open the **Edit Endpoint Configurations** dialog by clicking **Endpoint Configurations** in the **Edit Playback Template** dialog.



The **Edit Endpoint Configurations** dialog comprises the following:

1 Endpoint configurations list

Contains all the endpoint configurations on your computer.

Delete Endpoint Configuration in the action bar at the bottom of the list allows you to delete the selected endpoint configuration from your computer.

2 Name

Allows you to set the name of the selected endpoint configuration that appears in the program; for example, in the **Edit Playback Template** dialog.

3 Plug-ins and players list

Contains all the plug-ins and players contained within the selected endpoint configuration. If the endpoint configuration contains multiple instances of the same plug-in, each plug-in instance is listed separately.

RELATED LINKS

Edit Playback Template dialog on page 546

MIDI trigger regions

MIDI trigger regions allow you to play back notes in specific bars without showing them in the music. This can be particularly useful when using pattern-based software instruments, such as Groove Agent SE, for playback.

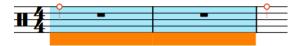


Multiple adjacent midi trigger regions

By default, MIDI trigger regions are highlighted with a solid colored line below the bottom staff line and a colored background. As you zoom out, the colored backgrounds become more opaque, which is especially useful when viewing full score layouts in galley view. These highlights are considered annotations, are not printed by default, and you can hide/show them.

The names of notes played by the MIDI trigger region are displayed at the start of the solid colored line, according to your middle C numbering convention setting. If the velocity is specified, it is displayed in parentheses after the note names.

In Write mode, each region has a handle at the start and end, which you can use to move and lengthen/shorten regions.



Handles on a selected MIDI trigger region

TIP

You can input slash regions at the same positions as MIDI trigger regions.

RELATED LINKS

Inputting MIDI trigger regions on page 408
Changing the middle C numbering convention on page 50
Moving notes/items rhythmically on page 448
Lengthening/Shortening items on page 419
Slash regions on page 1239
Annotations on page 581

Hiding/Showing MIDI trigger region highlights

You can hide/show colored highlights for MIDI trigger regions at any time; for example, if you want to show the highlights when inputting music but hide them when engraving.

PROCEDURE

• Choose View > Highlight MIDI Trigger Regions.

Print mode

Print mode allows you to print your layouts or to export them as graphics files, such as PDF and SVG.

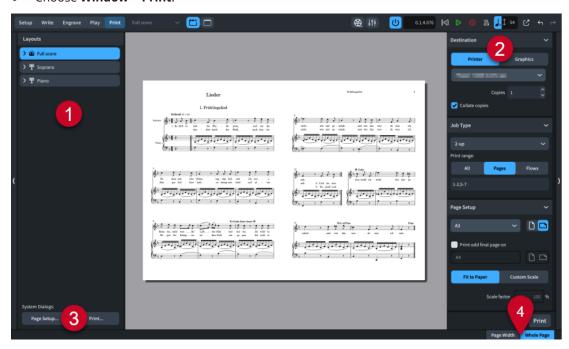
- When printing layouts, you can specify the paper size and other options, such as duplex or booklet printing.
- When exporting layouts, you can specify different graphics file types and the information you want to include in their exported file names.

Project window in Print mode

The project window in Print mode contains the print preview area and panels that provide all the necessary tools and functions for printing and exporting layouts.

You can switch to Print mode in any of the following ways:

- Press Ctrl/Cmd-5.
- In the toolbar, click **Print**.
- Choose Window > Print.



The following panels and options are available in Print mode:

1 Layouts panel

Shows a list of all layouts in your project and allows you to select the layouts you want to print or export.

NOTE

The layout selector in the toolbar is disabled in Print mode. To show a different layout in the print preview area, select it in the **Layouts** panel.

2 Print Options panel

Contains options for printing or exporting your layouts.

3 System Dialogs (macOS only)

Contains macOS-specific printing options.

4 View options

Allows you to change the print preview area to show pages in one of the following views:

- **Page Width**: The page fills the width of the print preview area, which might not show the whole page depending on the orientation and format of the page.
- **Whole Page**: Shows the whole page in the print preview area.

TIP

You can go directly to the first page in the layout by pressing **Home**, and to the last page by pressing **End**. You can change these key commands on the **Key Commands** page in **Preferences**.

RELATED LINKS

Toolbar on page 29

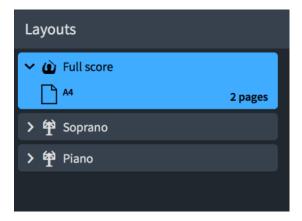
Key Commands page in the Preferences dialog on page 58

Layouts panel (Print mode)

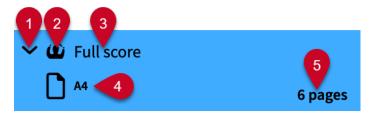
In Print mode, the **Layouts** panel shows a list of all layouts in your project and allows you to select layouts to preview, print, and export. It is located on the left of the window.

You can hide/show the **Layouts** panel in Print mode in any of the following ways:

- Press Ctrl/Cmd-7.
- Click the disclosure arrow on the left edge of the main window.
- Choose Window > Show Left Zone.



The **Layouts** panel contains all the layouts in your project, displayed as cards. Each layout card shows the following:



1 Disclosure arrow

Expands/Collapses the layout card.

2 Layout type

Shows the type of layout from the following options:

- Full score layout
- Instrumental part layout
- Custom score layout

3 Layout name

Shows the name of the layout. Dorico Elements automatically adds default names depending on the name of the instrument that is assigned to a player and on the type of layout that is added. For example, if you assign a flute to a player, the instrumental part layout automatically gets the same name. If you add an empty instrumental part layout, the layout name shows **Empty part** and an incremental number if you add multiple empty part layouts.

4 Page size and orientation

Shows the size and orientation of the layout as set on the **Page Setup** page in **Layout Options**.

5 Layout length

Shows the number of pages in the layout. You can use this in combination with its page size and orientation to determine the best job type for printing/exporting.

TIP

A layout with two pages might best be printed as 2-up, while a layout with five pages might best be printed as spreads with the final page printed on a different paper size. A layout with 12 pages might best be printed as a booklet.

The selected layouts are printed/exported when you click **Print** or **Export** in the Print Options panel. If you have selected some layouts set to print and some set to export graphics, the button reads **Print and Export**.

RELATED LINKS

Page arrangements for printing/exporting on page 575 Booklet printing on page 576 Layouts panel (Setup mode) on page 115

Print Options panel

The Print Options panel contains options for printing or exporting your layouts. It is located on the right of the window in Print mode.

You can hide/show the Print Options panel in any of the following ways:

- Press Ctrl/Cmd-9.
- Click the disclosure arrow on the right edge of the main window.

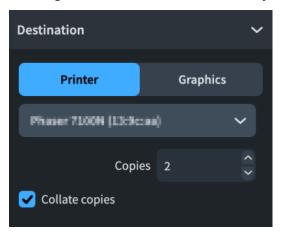
• Choose Window > Show Right Zone.

All the options that you set in the Print Options panel are saved with your project. The options are divided into the following sections:

Destination

Allows you to select a physical printer for printing or a file location for exporting a graphics file.

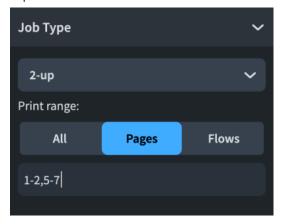
- For layouts set to print, you can change the number of copies.
- For layouts set to export as graphics files, you can specify the format, color mode, image resolution, file name, and directory of the saved file.



Job Type

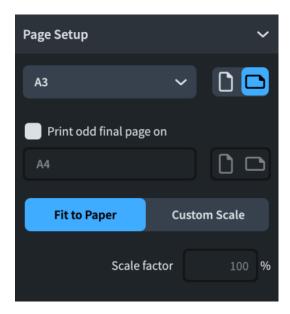
Allows you to choose the pages to be printed or exported, and how they are arranged. You can choose all pages, a range of pages, or a range of flows.

When exporting ranges of flows to PDF, you can also choose to export each flow as a separate PDF file.



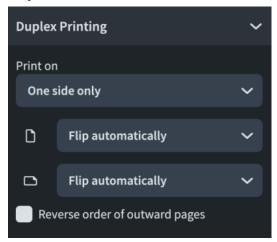
Page Setup

Allows you to set the paper size and orientation. You can specify the scale factor of the image to be printed or exported.



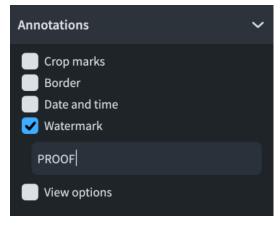
Duplex Printing

Allows you to specify whether to print on one or on both sides of each sheet of paper. Only available when **Printer** is selected in the **Destination** section.



Annotations

Allows you to activate options that are often required by publishing houses or printing agencies, such as crop marks or a border around the printed image.



Print button

Allows you to print/export selected layouts according to the settings you have set in the Print Options panel.

Depending on your selection, the print button can appear in one of the following ways:

- Print
- Export
- Print and Export

For example, if you selected layouts that are all set to print, **Print** is shown. If you selected some layouts set to export graphics and some layouts set to print, **Print and Export** is shown.

RELATED LINKS

Printers on page 574

Duplex printing on page 577

Page arrangements for printing/exporting on page 575

Page vs. paper size on page 578

Graphics file formats on page 579

Annotations on page 581

Printing layouts

You can print hard copies of individual layouts or multiple layouts together. You can specify print settings for each layout independently; for example, you can set different numbers of copies or select different printers for layouts in the same project.

Dorico Elements uses settings for layouts to create automatic print settings, so you might find that many print options are already appropriate for the layouts you want to print. For example, if you are connected to a printer that can print A3 paper and the page size of your full score layout is set to A3 in **Layout Options**, Dorico Elements automatically selects A3 in the **Page Setup** section of the Print Options panel.

TIP

- If you want to save layouts in graphics files formats, such as PDF or PNG, we recommend that you export them.
- You can select individual layouts and set up their printing options without printing straight away. Once you have set up the printing options you want for different layouts, you can then select all the layouts you want to print and click **Print**. Your existing print settings are applied, even if your selection contains layouts with different print settings.

For example, you can set your full score layout to print **3** booklet copies and the part layouts to print **1** 2-up copy each. You can then select all layouts to print them together and the previously set values are followed.

PROCEDURE

1. In the Layouts panel, select the layouts that you want to print.

NOTE

The layout selector in the toolbar is disabled in Print mode. To show a different layout in the print preview area, select it in the **Layouts** panel.

2. In the Print Options panel, enter the number of copies you want into the **Copies** field in the **Destination** section.

NOTE

The **Copies** field appears blank when you have selected layouts with different values.

- 3. Activate/Deactivate Collate copies.
- **4.** In the **Destination** section, choose **Printer** and select a printer from the menu.
- **5.** In the **Job Type** section, select the page arrangement you want from the menu.
- 6. Optional: Specify a range of pages/flows.
- 7. In the **Page Setup** section, select a paper size from the menu.
- **8.** Choose the paper orientation you want.
- 9. Optional: If you selected Spreads or 2-up for the job type, activate/deactivate Print odd final page on to specify the paper size on which you want to print final pages for layouts with odd numbers of pages.
- **10.** Select a paper size and paper orientation for the odd final page.
- **11.** Choose one of the following size options:
 - Fit to Paper
 - Custom Scale
- **12.** Optional: If you selected **Custom Scale**, enter the scale factor you want into the **Scale factor** field.
- **13.** In the **Duplex Printing** section, select one of the printing options from the **Print on** menu.
- **14.** Optional: If you selected a duplex printing option, use the bottom two menus to select how the printed image is flipped when printing on the reverse side of the paper.
- **15.** In the **Annotations** section, activate each annotation you want to add to the selected layouts.
- 16. Click Print.

RESULT

The selected layouts are printed according to the print settings you have applied.

If your selection included part layouts set to concert pitch that contain transposing instruments, Dorico Elements shows a warning and offers to switch them all to transposed pitch before printing/exporting. You can also select which layouts you want to switch to transposed pitch or proceed anyway with no changes.

TIP

- You can choose to show a warning when printing/exporting concert or transposed pitch full score and custom score layouts in Preferences > General > Files.
- You can assign key commands to different printing and exporting commands on the Key Commands page in Preferences.

RELATED LINKS

Preferences dialog on page 57
Printers on page 574
Export File Names dialog on page 572
Paper size and orientation setup on page 579

Changing the page size and/or orientation on page 584

Specifying ranges of pages/flows

By default, Dorico Elements prints/exports all pages in the selected layouts. You can specify ranges of either pages or flows for each layout independently.

NOTE

You can only print booklets using the complete range of pages. You cannot specify page or flow ranges.

PROCEDURE

- 1. In the **Layouts** panel, select the layouts for which you want to specify ranges of pages/flows.
- **2.** In the Print Options panel, in the **Job Type** section, choose one of the following options for **Print range**:
 - To specify ranges of pages, choose Pages.
 - To specify ranges of flows, choose Flows.
- 3. If you chose **Pages**, enter the pages you want into the value field.
 - To specify a range of pages, enter the first page and last page separated with a dash, such as **1-4**.
 - To specify individual pages or separate ranges, enter each page/range separated with commas, such as **1,3,5-8**.

NOTE

Separate ranges are exported as separate files.

4. If you chose **Flows**, click **Choose** to open the **Print Flows** dialog. Select the flows you want to print/export, then click **OK**.

RESULT

The pages set to be printed/exported from the selected layouts are changed. Ranges of flows include all pages on which those flows appear, in full or in part.

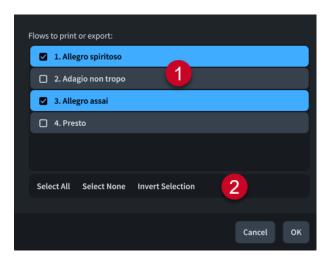
RELATED LINKS

Print Options panel on page 563
Export File Names dialog on page 572
Page arrangements for printing/exporting on page 575
Exporting flows on page 79

Print Flows dialog

The **Print Flows** dialog allows you to select the flows you want to print/export from the selected layouts. Ranges of flows include all pages on which those flows appear, in full or in part.

You can open the **Print Flows** dialog in Print mode by clicking **Choose** in the **Job Type** section of the Print Options panel. **Choose** is available when the selected layouts are set to print/export a range of flows.



1 Flows to print or export

Contains a list of all the flows in the selected layouts. Flows are included in the page range to be printed/exported when their checkbox is activated.

2 Selection options

Allow you to select/deselect flows. The following selection options are available:

- Select All: Selects all flows.
- Select None: Deselects all flows.
- **Invert Selection**: Switches your selection to include all flows not previously selected.

Specifying printing options (macOS only)

Dorico Elements allows you to access the standard printing options of your operating system.

NOTE

If you use the standard printing options of your operating system, the settings in the Print Options panel are ignored. macOS-specific print settings are not saved with your project. These must be set each time you want to print, whereas the Dorico Elements print options are always saved with your project.

PROCEDURE

- In the Layouts panel, click Page Setup in the OS X Dialogs section to open the macOS Page Setup dialog.
- 2. In the Page Setup dialog, set the paper size.
- 3. Click OK.
- **4.** In the **OS X Dialogs** section, click **Print** to open the macOS **Print**.
- 5. In the **Print** dialog, set up the printing options you want.

Exporting layouts as graphics files

You can export layouts as a variety of graphics files, such as PDF or PNG.

TIP

You can export layouts with different image settings and export paths simultaneously.

PROCEDURE

1. In the **Layouts** panel, select the layouts you want to export.

NOTE

The layout selector in the toolbar is disabled in Print mode. To show a different layout in the print preview area, select it in the **Layouts** panel.

- 2. In the Print Options panel, choose **Graphics** in the **Destination** section.
- 3. Optional: Change the image settings for the selected layouts.
- **4.** Optional: Change the export path for the selected layouts.
- **5.** Optional: If you want to change the file name recipe, click **File Name Options** to open the **Export File Names** dialog.
- **6.** Optional: In the **Export File Names** dialog, change the file name recipe for your selected graphics file formats.

TIP

- We recommend including the **Page number** token for PNG, SVG, and TIFF files as each page in layouts using these formats is exported as a separate file.
- When exporting ranges of flows to PDF as separate files, we recommend including either the flow name or flow number to prevent the files from overwriting each other.
- **7.** Optional: Specify a range of pages/flows.
- **8.** Optional: If you are exporting a range of flows to PDF, activate/deactivate **Separate file for each flow** in the **Job Type** section.
- **9.** In the **Page Setup** section, choose the page orientation you want.
- **10.** In the **Annotations** section, activate each annotation you want to add to the selected layouts.

NOTE

Watermarks are only included in layouts exported as **Color** graphics.

11. Click Export.

RESULT

The selected layouts are exported as the selected graphics format, using the file name recipe set for their graphics file format in the **Export File Names** dialog. They are saved in the folder set in the **Destination folder** field, or in the same folder as the project file if the set export path is no longer accessible.

Exported layouts use the page size set for the layout on the **Page Setup** page in **Layout Options**.

If your selection included part layouts set to concert pitch that contain transposing instruments, Dorico Elements shows a warning and offers to switch them all to transposed pitch before

printing/exporting. You can also select which layouts you want to switch to transposed pitch or proceed anyway with no changes.

TIP

- You can choose to show a warning when printing/exporting concert or transposed pitch full score and custom score layouts in **Preferences** > **General** > **Files**.
- You can assign key commands to different printing and exporting commands on the **Key** Commands page in **Preferences**.

RELATED LINKS

Specifying ranges of pages/flows on page 568
Page vs. paper size on page 578
Changing the page size and/or orientation on page 584
Annotations on page 581
Preferences dialog on page 57
Exporting flows on page 79
Exporting project statistics on page 106

Changing the image settings for layouts

You can change the graphics file format, color mode, and image resolution of layouts individually; for example, if you want to export some layouts as PDF files but others as PNG files.

PROCEDURE

- 1. In the **Layouts** list, select the layouts whose export path you want to change.
- 2. In the Print Options panel, choose **Graphics** in the **Destination** section.
- **3.** Select a graphics file format from the menu.
- **4.** Choose a color mode.
 - Mono exports the graphic in black and white.
 - **Color** exports the graphic in full color.

NOTE

- For layouts that you want to export with watermarks, or that contain colored or not completely transparent elements, you must choose **Color**. If you select **Mono**, such elements appear black in the exported file.
- When exporting graphics files with a resolution of 72 dpi, we recommend that you select **Color**. If you select **Mono**, staff lines can disappear.
- **5.** Optional: For **PNG** or **TIFF** files, do the following:
 - If you chose **Color**, activate/deactivate **Transparent background**.
 - Select a resolution from the **Resolution** menu.

TIP

The **Resolution** setting does not affect **PDF** and **SVG** files as they are vector formats.

RESULT

The image settings for the selected layouts are changed. This also changes the file name recipe used for the corresponding layouts when you export them.

RELATED LINKS

Graphics file formats on page 579 Monochrome and color graphics processing on page 580 Hiding/Showing noteheads on page 1041

Changing the export path for layouts

You can specify an export path to any folder to which you want to export layouts as graphics files. You can specify a different export path for each layout and still export them all simultaneously.

By default, Dorico Elements exports graphics files into the same folder as your project file. If you have not saved your project yet, graphics files are saved in your **Dorico Projects** folder.

PROCEDURE

- 1. In the **Layouts** list, select the layouts whose export path you want to change.
- 2. In the **Destination** section of the Print Options panel, click **Choose Folder** beside the **Destination folder** field to open the File Explorer/macOS Finder.
- **3.** Locate and select the destination folder you want.
- **4.** Click **Select Folder** (Windows)/**Open** (macOS) to insert the new path in the **Destination folder** field.
- 5. Optional: Repeat steps 1 to 4 for other layouts whose export path you want to change.
- **6.** Optional: If you want to change the file name recipe, click **File Name Options** to open the **Export File Names** dialog.
- **7.** Optional: In the **Export File Names** dialog, change the file name recipe for your selected graphics file formats.

TIP

We recommend including the **Page number** token for PNG, SVG, and TIFF files as each page in layouts using these formats is exported as a separate file.

RESULT

The export path for the selected layouts is changed. When exported, the layouts use the file name recipe set for their graphics file format in the **Export File Names** dialog.

NOTE

If the export path specified is no longer accessible, such as if you receive a project from someone who uses a different operating system, Dorico Elements automatically updates the export path to the same location as the project file.

Export File Names dialog

The **Export File Names** dialog allows you to determine the contents of file names for each graphics file format independently. You can use universal ingredients that update to show the

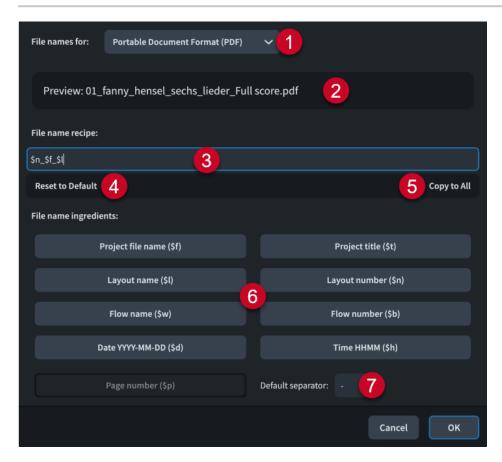
correct information for each layout automatically, and you can enter text that is the same for all layouts.

You can open the **Export File Names** dialog in any of the following ways:

- In Print mode, click **File Name Options** in the **Destination** section of the Print Options panel when the currently selected layout is set to **Graphics**.
- In Preferences > General > Exporting Files, click Edit.

NOTE

Your settings are linked between both ways of accessing the dialog and are saved as the default for all future projects.



The **Export File Names** dialog contains the following options:

1 File names for

Allows you to select different graphics file formats. You can set different file name recipes for each graphics file format.

2 Preview

Displays an example file name based on the current recipe. The layout used for the preview is the one shown in the layout selector in the toolbar.

For example, the preview for a full score PDF file name using the default recipe might be 01 - Full score - Lieder.pdf.

3 File name recipe

Displays the recipe for the selected graphics file format. You can enter text directly into this field, and click ingredients to add them automatically.

For example, the default PDF file name recipe is \$n - \$I - \$t.

4 Reset to Default

Resets the file name recipe to the default for the selected graphics file format.

5 Copy to All

Copies the file name recipe to all layouts in the project.

6 File name ingredients

Allow you to add ingredients to the file name recipe quickly that are automatically populated as appropriate for each layout. For example, the ingredient \$I becomes Piano when used to export a piano part layout.

The buttons for each ingredient display both the information to which the ingredient refers and the characters for it.

When you click file name ingredients, they are added to the end of the file name recipe. They are automatically separated from the previous ingredient using the default separator.

NOTE

The page number ingredient is not available for the PDF file name recipe as it is a multi-page format.

7 Default separator

Allows you to set the characters used to separate ingredients in the file name recipe by default.

RELATED LINKS

Exporting layouts as graphics files on page 570 Flow names and flow titles on page 183

Printers

You can print layouts from Dorico Elements projects to any printer to which your computer is connected.

You can select different printers for each layout in your project. This allows you to send layouts to the most appropriate printer for their requirements. You can select a printer when **Printer** is chosen in the **Destination** section of the Print Options panel.

Dorico Elements uses the same printer as designated by the operating system by default, unless you specify another printer. In this case, the settings in the following sections in the Print Options panel can change:

- In the **Page Setup** section, the list of available paper sizes lists only paper sizes that the chosen printer provides.
- In the **Duplex Printing** section, the option for automatic duplex printing is only available if the chosen printer has this function.

NOTE

The printer menu in the **Destination** section only shows the name of a printer if all currently selected layouts are set to print to the same printer. If you select a new printer from the menu, all selected layouts are set to print to that printer.

RELATED LINKS
Print Options panel on page 563
Printing layouts on page 566

Page arrangements for printing/exporting

Dorico Elements provides several page arrangements that you can use for printing/exporting your layouts.

In the **Job Type** section of the Print Options panel, you can specify how you want the layouts to be printed/exported. You can select the following job types from the **Job Type** menu:

Normal

Prints one page on each sheet of paper. This produces single-sided pages; for example, for instrumental parts that do not have regular page turns and must be bound in a continuous line.

Spreads

Prints two pages on each sheet of paper, with odd-numbered pages on the right-hand side and even-numbered pages on the left-hand side.

You can also specify a paper size on which to print odd final pages; for example, if you are printing a layout containing five pages.

2-up

Prints two pages on each sheet of paper. The first page in the range is printed on the left-hand side of the first sheet of paper. This can be useful for printing instrument parts as it reduces the number of edges that must be bound, because pages can also be folded in half.

You can also specify a paper size on which to print odd final pages; for example, if you are printing a layout containing five pages.

Booklet

Prints two pages on each sheet of paper according to imposition requirements. This means that if the paper is folded, the pages are laid out like a book. This can be useful for scores and choir parts in particular as they often contain more pages than instrumental parts.

NOTE

You can only print booklets using the complete range of pages. You cannot specify page or flow ranges.

NOTE

- Depending on the job type that you choose, Dorico Elements switches the page orientation automatically. The changed orientation is immediately displayed in the music area. If this is not what you want, you can override the orientation in the **Page Setup** section.
- All of the job types allow printing either onto a single side of each sheet of paper or on both sides of the paper.
- It is usual to print booklets, spreads, and 2-up onto paper in landscape orientation. Printing one page to each sheet typically uses portrait orientation, unless the layout itself uses landscape orientation.

Also in the Job Type section, you can choose which pages you want to print/export.

ΑII

Allows you to print/export all pages in the selected layouts.

Pages

Allows you to set a range of pages to be printed/exported. Choosing **Pages** makes the value field available.

- To specify a range, enter the first page and last page separated with a dash, such as 1-4.
- To specify individual pages or separate ranges, enter each page/range separated with commas, such as **1,3,5-8**.

Flows

Allows you to set a range of flows to be printed/exported. When **Flows** is chosen, you can click **Choose** to open the **Print Flows** dialog, which allows you to select the flows you want to print/export.

RELATED LINKS

Printing layouts on page 566
Exporting layouts as graphics files on page 570
Paper size and orientation setup on page 579
Specifying ranges of pages/flows on page 568
Margins on page 598

Booklet printing

Booklets are documents printed on both sides of the paper and folded to resemble the pages in a book. When printed as a booklet, pages are reordered so that you can fold the printed pages and read the content in the same order as they were in the project.

Printing layouts as a booklet can be much quicker than printing pages single-sided or double-sided. For example, if your full score is twenty pages long and you print it on both sides automatically, you must then bind one edge of the printed pages in order to keep them together. However, if you print the full score as a booklet, you can simply fold the printed pages in the middle.

Booklet printing settings reorder pages so that they appear in the correct order on the printed page. For example, a layout containing four pages printed as a booklet is laid out as follows:

- First side: page four on the left, page one on the right
- Reverse side: page two on the left, page three on the right

If the layout you are printing as a booklet contains an odd number of pages, Dorico Elements automatically places any empty last pages at the end of the booklet. This follows the convention of showing odd-numbered pages on the right. For example, if you print a layout containing six pages as a booklet, a total of eight pages are printed with the last two pages in the booklet left blank. If you want the empty pages to be positioned differently, you can add extra pages to the layout; for example, a title page.

NOTE

- You can only print booklets using the complete range of pages. You cannot specify page or flow ranges.
- If the order of inward pages is incorrect when you are printing booklets using manual duplexing, you can activate **Reverse order of outward pages** in the **Duplex Printing** section of the Print Options panel, which instructs Dorico Elements to output the first set of pages in the opposite order.

Duplex printing

Dorico Elements allows duplex printing, which means that you can print on both sides of each sheet of paper.

If your printer supports automatic duplex printing, you can use this function in Dorico Elements. If your printer can only print on one side of each sheet of paper, there is a manual duplex printing option.

The **Print on** menu in the **Duplex Printing** section of the Print Options panel contains the following options:

One side only

Prints on one side of each sheet of paper.

Both sides manually

Prints on both sides of each sheet of paper. Use this option if you printer lacks an automatic duplex printing function. After all outward pages have been sent to the printer, a message box informs you to turn over the stack of printed pages and put them back into the printer. Click **OK** to continue printing the inward pages.

Both sides automatically

Prints on both sides of each sheet of paper automatically. This option is only available if your printer supports this type of printing.

The other menus in the **Duplex Printing** section allow you to set how the printed image is flipped when printing on the reverse side of the paper.

Flip image (portrait)



Determines how the image is flipped for reverse side printing in portrait orientation.

- **Flip automatically** uses the printer's default settings for printing on the reverse side. If you find that the printer flips on a different edge than expected, use one of the other options.
- **Flip long side** sets the printer to flip the pages on the long edge.
- Flip short side sets the printer to flip the pages on the short edge.

Flip image (landscape)



Determines how the image is flipped for reverse side printing in landscape orientation.

- **Flip automatically** uses the printer's default settings for printing on the reverse side. If you find that the printer flips on a different edge than expected, use one of the other options.
- **Flip long side** sets the printer to flip the pages on the long edge.
- **Flip short side** sets the printer to flip the pages on the short edge.

Reverse order of outward pages at the bottom of the section instructs Dorico Elements, when activated, to output the first set of pages in the opposite order when printing booklets using manual duplexing. This is necessary for some printers so that you do not have to reverse sort the pages manually before returning them to the printer to print the other sides.

Page vs. paper size

In Dorico Elements, page sizes and paper sizes use different settings. This means that you can print layouts with any page size onto paper with a different paper size.

For each layout in your project, you can define a page size on the **Page Setup** page in **Layout Options**, which sets the dimensions of the layout.

When exporting layouts as graphics files, the layout's page size is always used. When printing layouts, you must usually choose a paper size that is provided by the printer that you are using.

Normally, the layout's page size and the printed paper size match. However, if you define a layout with an unusual page size that is not supported by your printer, such as 10" x 13", one of the standard page sizes for instrumental parts, you may have to print the layout onto a different paper size. You can change the paper size in the **Page Setup** section of the Print Options panel according to your needs. As long as your printer supports sufficiently large paper for your page size settings, and they match a standard paper size, your dimensions are included in the menu. Changing the paper size has no effect on your layout's page size, and does not, therefore, affect the way the music is laid out.

If you do not select a specific paper size, Dorico Elements automatically chooses a paper size that is based on your computer's locale settings. For example, if these are set to a European country, an international ISO standard might be used, such as A4. If they are set to a North American country, one of their typical standards might be used, such as US Letter.

If you have defined a page size for your layout that is larger than a typical standard, Dorico Elements automatically chooses the next larger paper size, provided that your printer supports this. For example, if the layout's page size is larger than A4/US Letter, A3/Tabloid is used.

If you print to a different paper size than the layout's page size, Dorico Elements automatically scales the image to fit the paper. You can change this setting by specifying a custom scale factor in the **Page Setup** section.

RELATED LINKS

Layout Options dialog on page 728
Changing the page size and/or orientation on page 584
Printing layouts on page 566
Exporting layouts as graphics files on page 570
Margins on page 598

Paper orientation

Paper orientation is the direction of rectangular paper for viewing and printing. Paper can have either landscape or portrait orientation.

Instrumental parts are most often printed using portrait orientation, as this allows two or three pages to be spread out at a time on most music stands.

Full scores for conductors are also commonly printed using portrait orientation, as this allows more staves to fit on the page than with landscape orientation. However, full scores for small ensembles might use landscape orientation as fewer staves have to fit on the page. Having more horizontal room on the page allows more bars to fit on each page, reducing the number of page turns required.

In Dorico Elements, you can set the orientation of pages independently of the paper orientation; for example, you can print portrait pages on landscape paper. You can also separately set the paper orientation of the odd final page in layouts using the **Spreads** and **2-up** page arrangements.

Paper size and orientation setup

Layouts can have different paper sizes and orientation settings.

NOTE

If you have selected **Graphics** in the **Destination** section of the Print Options panel, you can only change the paper orientation. No other options are available.

The **Page Setup** section of the Print Options panel contains the following options when you have chosen **Printer** in the **Destination** section:

Paper size

Allows you to select one of the available paper sizes from the menu. The paper sizes available depend on the capabilities of the selected printer.

Paper orientation

Allows you to choose one of the following paper orientation options:

- Portrait
- Landscape

Print odd final page on

For **Spreads** and **2-up** job types only: If this is activated, you can select a different paper size or orientation for the odd final page.

This setting is useful when printing layouts with an odd number of pages on A3 paper in landscape orientation. For example, if your layout contains five pages, the first four pages fit onto two sheets of A3, while the fifth page would occupy only the left-hand side of a third sheet of A3. This setting allows you to print the odd final page on A4 paper in portrait orientation instead.

Fit to Paper

The whole page is scaled to fit the paper size selected. For example, if you select a layout with a page size of A4 and select a paper size of A3, pages in the layout are enlarged to fit the larger paper size.

Custom Scale

The page is scaled to the set percentage of its original size. For example, if you are printing a layout with a page size of A3, select a paper size of A4, and set **Custom Scale** to **100**, the original page remains at its original size, exceeding the boundaries of the A4 paper.

RELATED LINKS

Page arrangements for printing/exporting on page 575 Changing the page size and/or orientation on page 584 Margins on page 598

Graphics file formats

Dorico Elements supports multiple graphics file formats as which you can export your layouts.

PDF

Stands for Portable Document Format. Exporting layouts to PDF allows you to create a platform-independent document that contains a fixed version of each layout; for example, to send to someone who does not have access to Dorico Elements.

PNG

Stands for Portable Network Graphics. PNG files are losslessly compressed, meaning they produce high-quality images.

SVG

Stands for Scalable Vector Graphics. Because SVG is an XML-based text format, it can be scaled to any size without any loss of quality. Dorico Elements renders SVG graphics using drawing instructions rather than rasterizing them, resulting in better resolutions and smaller file sizes.

TIFF

Stands for Tagged Image File Format. TIFF files are not compressed, which means their file sizes can be larger than other formats and the quality of the image is not reduced.

RELATED LINKS

Changing the image settings for layouts on page 571

Image resolution

Image resolution refers to the number of pixels contained in an image. The larger the number of pixels, the sharper and clearer the image appears.

In Dorico Elements, you can export PNG and TIFF files with different image resolutions. The image resolution is measured in dots per inch, or "dpi".

- 72
- 150
- 300
- 600
- 1200

NOTE

A resolution of 72 dpi is suitable for display on screen so that you can embed the graphic in an e-mail or on a web page. If you choose 300, 600, or 1200 dpi, a high-resolution image is saved that you can include as an illustration in a word processing or desktop publishing document.

Monochrome and color graphics processing

Dorico Elements applies different settings when you export monochrome and color graphics. The most appropriate setting depends on your intended purpose for the graphics.

Most musical scores are monochrome, meaning they use only black ink and are normally printed on white/near-white paper. Some educational books occasionally use colors to highlight particular notations; for example, to identify clefs, or to color notes according to their pitch. If you export graphics files and print them with your own printer, you can leave **Color** selected in the **Destination** section.

However, if you export graphics files in PDF format for direct printing on a platesetter or for further production work in a page layout program, select **Mono**, unless your layout actually contains elements with color or opacity set. If you select **Mono**, Dorico Elements uses a different color space for the resulting PDF, ensuring that the printed image only uses black ink. If you choose **Color**, then the black items in your layout are exported as rich black; that is, black produced by combining multiple colored inks. This can cause problems in production when making color separations at the pre-press stage.

Dorico Elements specifies colors using the RGB color model, rather than the CMYK color model that is used by platesetters and other professional printing machines. If you have colored objects in your layouts and your layouts are printed professionally, you must post-process the graphics files that are exported from Dorico Elements in another graphics application to convert the colors from RGB to CMYK.

Embedding of fonts in PDF and SVG files

How fonts are handled in PDF and SVG files mainly depends on the fonts that you use in the project.

PDF Files

The music and text fonts, and their sub-sets, that are supplied with Dorico Elements are embedded in PDF files during the export. If you open the PDF files on a different computer, they look the same, even if that computer does not have the fonts installed that are used in the document. If you use different fonts, make sure that these permit embedding.

SVG Files

SVG (Scalable Vector Graphics) files do not embed fonts directly. Some font characters, such as note heads, articulations, and accidentals, are converted into outlines, so that they do not depend on the font from which they are taken. Other font characters, such as time signature and tuplet digits, are only encoded using references to the font from which they are taken. The latter also applies to regular text, such as staff labels, tempo instructions, and dynamics. This means that the SVG file looks incorrect if rendered by a web browser on a computer that does not have the fonts installed. The appearance of SVG files depends on the browser or the rendering software, and on the fonts that are installed on the computer.

To ensure that the SVG file appears correctly if embedded in a web page, you can open the SVG file in an illustration program and convert all font characters to outline paths, then re-export the SVG file and embed that file. Alternatively, you can use web fonts to ensure that the necessary fonts are available on the web server.

SVG graphics that are exported from Dorico Elements conform to the SVG Tiny 1.1 specification, which defines a subset of features in the full SVG specification.

For information about using web fonts with SVG, refer to the Help Center on the Steinberg website.

RELATED LINKS

Changing the image settings for layouts on page 571

Annotations

Annotations provide additional information for printed or exported documents, such as the date and time it was printed. Publishers and printing agencies can use these to identify and register printed images correctly or to embed exported graphics files into a desktop publishing application.

When printing/exporting your layouts for publication, you can include typical annotations. You can also allow Dorico Elements to print or export any view options that you have activated in your project.

NOTE

Crop marks and the border can only be printed if the page size is smaller than the paper size.

The **Annotations** section of the Print Options panel contains the following options:

Crop marks

Adds short vertical and horizontal lines at each of the four corners of the page.

Border

Adds an outline around the edge of the page dimensions.

Date and time

Adds the date and time of printing at the bottom of each page.

Watermark

Adds large translucent text across the middle of each page. This is useful for indicating that this version is a draft, proof, or perusal score.

In the **Watermark** field at the bottom of the section, you can enter the text that you want to show on each page.

TIP

- Watermarks use the **Print Watermark Font** font style. You can edit the formatting
 of this font in the **Edit Font Styles** dialog; for example, to change its font size.
- Watermarks are only included in layouts exported as **Color** graphics.

View options

Adds all active view options, such as signposts, comments, and note and rest colors, to the printout or exported graphic.

RELATED LINKS

Signposts on page 438
Comments on page 481
Edit Font Styles dialog on page 737
Printing layouts on page 566
Exporting layouts as graphics files on page 570
Hiding non-printing elements on page 425

Page formatting

The formatting of pages in Dorico Elements is determined by a number of factors, including the layout's staff size, page margins, the page template applied to them, any casting off values applied to them, system and frame breaks, and frame padding.

Important factors that determine how pages are formatted in Dorico Elements include:

Staff size

Staff size refers to the distance between the top and bottom lines of staves. The most appropriate staff size depends on the intended purpose and contents of the layout. In many cases, changing the staff size is the quickest way to produce legible layouts.

Staff spacing

Staff spacing is the vertical spacing of your music. It involves the height of staves and the necessary gaps between staves and systems.

Note spacing

Note spacing is the horizontal spacing of your music. It involves the positions of notes and rests relative to each other, and the automatic gaps between them.

Casting off

"Casting off" is the term used to encompass fixing the layout of pages of music, such as setting the number of systems per page.

System and frame breaks

System and frame breaks allow you to adjust layouts at a more granular level, by determining which bars are shown on each system and where music is pushed into the next frame.

Page size

The page size determines the available space for music and frames for each layout.

Page margins

Page margins determine the dimensions of pages in layouts. Frames cannot exceed the boundaries set by the margins of the layout, which you can change on the **Page Setup** page in **Layout Options**. You can change the size of margins on each edge of each page.

Page templates

All pages in your layouts inherit their layout formats from page templates. Although you cannot create or edit page templates in Dorico Elements, we recommend being familiar with them as a concept, so you are aware of how pages are formatted. For example, if you override a page template, such as by editing the title directly in the music area, empty pages that are no longer required might not be deleted automatically.

TIP

We recommend entering information such as the composer, librettist, and flow/ project titles in the **Project Info** dialog. The default page templates display different information from the **Project Info** dialog according to their type.

Flow headings

Flow headings show the number and title of each flow immediately above their first system automatically. They have no fixed vertical position and follow the music if it moves. The default flow heading contains tokens to display the flow number and flow title; in a new project, this appears as "1. Flow 1".

You can hide/show flow headings on a per-layout basis. You can change the tokens included in flow headings; for example, if you want to remove flow numbers and only show flow titles. Deleting or editing individual flow headings is considered a page template override, which is a type of page format change.

Music frame margins

Music frames have margins at the top and bottom. Music frame margins provide padding to ensure that musical material displayed within the frame remains on the page. For example, if music frames have no padding, the top line on the top staff in the frame is positioned at the top of the frame. Any notes that require ledger lines above the staff might then be positioned off the top of the page. You can change the music frame margins for each layout.

We recommend familiarizing yourself with these concepts, and how to use them together and in different contexts, in order to produce well-formatted layouts.

NOTE

In Dorico Elements, you cannot edit all the objects and settings used to determine page formatting, such as frames and page templates. However, we have included basic information about these topics in this documentation for your information.

RELATED LINKS

Layout Options dialog on page 728
Page templates on page 630
Flow headings on page 634
Project Info dialog on page 74
Changing the default font family on page 743
Players, layouts, and flows on page 119

Changing the page size and/or orientation

You can change the page size and/or orientation of each layout independently. For example, you can use a large, landscape page in full score layouts and a small, portrait page for part layouts.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- **2.** In the **Layouts** list, select the layouts in which you want to change the page size and/or orientation.

By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, **Shift** -clicking adjacent layouts, and **Ctrl/Cmd** -clicking individual layouts.

- 3. In the category list, click Page Setup.
- **4.** In the **Page Size** section, select a page size from the **Size** menu.

For example, you can select fixed page sizes, such as **A3** or **Letter**, or select **Custom** to define your own page size.

- **5.** Optional: If you selected **Custom**, set the page dimensions by changing the values in the following value fields:
 - Width
 - Height
- **6.** Choose one of the following options for **Orientation**:
 - Portrait
 - Landscape
- 7. Click Apply, then Close.

RESULT

The page size and/or orientation is changed for all the selected layouts.

NOTE

Changing the page size of layouts might not change the paper size automatically selected for those layouts in the Print Options panel in Print mode. For example, if your default printer cannot print the page size selected for layouts, the largest paper size the printer can handle is selected. Similarly, if you had already set options for printing layouts before changing the page size in **Layout Options**, Dorico Elements attempts to preserve your original print options.

Similarly, the page orientation is independent of the paper orientation. We recommend that you check that layouts have the correct paper orientation set for their page orientation in the Print Options panel in Print mode before printing/exporting, as it is possible to print landscape layouts on portrait paper and vice versa.

RELATED LINKS

Page vs. paper size on page 578
Margins on page 598
Printing layouts on page 566
Exporting layouts as graphics files on page 570
Hiding/Showing status bar tools on page 39

Changing page margins

You can change the page margins of each layout independently; for example, if you want wider margins for layouts in your project that will be spiral bound.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- 2. In the Layouts list, select the layouts in which you want to change the page margins. By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, Shift-clicking adjacent layouts, and Ctrl/Cmd -clicking individual layouts.
- **3.** In the category list, click **Page Setup**.
- 4. In the Page Margins section, choose one of the following options for Page margins:
 - Same: All pages in the selected layouts have the same margins.

- **Different**: Left and right pages in the selected layouts can have completely different margins.
- **Mirrored**: Left and right pages in the selected layouts use the same margin values but they correspond to the inside/outside edges of pages.
- **5.** Optional: Change the margins by changing the values in the value fields.
- 6. Click Apply, then Close.

RESULT

The page margins in the selected layouts are changed.

RELATED LINKS

Margins on page 598
Hiding/Showing staff labels on page 1288
Changing the first system indent on page 1305
Changing the gap before codas on page 1221

Applying page template sets to layouts

You can change the page template set used by each layout in your project; for example, if you want a custom score layout to use the **Default Part** page template set because that set shows the layout name on the first page.

By default, full score and custom score layouts use the **Default Full Score** page template set and part layouts use the **Default Part** page template set.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- 2. In the Layouts list, select the layouts whose page template set you want to change. By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, Shift-clicking adjacent layouts, and Ctrl/Cmd -clicking individual layouts.
- 3. In the category list, click Page Setup.
- **4.** In the **Page Template** section, select the page template set you want from the **Page template** set menu.
- 5. Click Apply, then Close.

RESULT

The selected page template set is applied to the selected layouts.

RELATED LINKS

Page template sets on page 630 Changing when the First page template is used on page 594

Changing the default staff size

You can change the default size of staves in each layout independently. For example, you can have a small staff size in full score layouts but a larger staff size in part layouts.

NOTE

If the size of system object font styles is set to **Staff-relative**, the staff size of the top staff in each instrument family group affects the size of system objects if they are shown above that bracketed group. Font styles that are set to **Absolute** are unaffected by staff size.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- 2. In the Layouts list, select the layouts whose staff size you want to change. By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, Shift -clicking adjacent layouts, and Ctrl/Cmd -clicking individual layouts.
- 3. In the category list, click Page Setup.
- 4. In the Space Size section, select the staff size you want from the Rastral size menu.

NOTE

If you select **Custom**, you can set a custom value in the **Space size** field, expressed in your preferred unit of measurement.

You can also set a **Custom** value by changing the value when any **Rastral size** is selected.

- **5.** Optional: Repeat steps 2 to 4 for other layouts.
- 6. Click Apply, then Close.

RESULT

The staff size is changed throughout the selected layouts.

TIP

You can also change the size of individual staves.

RELATED LINKS

Staff size on page 601
Brackets and braces on page 845
System objects on page 1303
Text formatting on page 736

Changing the default staff/system spacing

You can change the default gaps between staves and systems in each layout independently. For example, you can have smaller gaps between staves in full score layouts to accommodate more

staves, and larger gaps between systems in part layouts to give players space to add pencil markings.

TIP

- If the staves in a layout are very close together, just decreasing the staff size might be sufficient to produce good results.
- We recommend that you set the ideal gaps to the minimum value acceptable to you, as Dorico Elements automatically allocates additional space for other items, such as system objects and dynamics, and avoids collisions between notes and staves above/below.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- **2.** In the **Layouts** list, select the layouts in which you want to change the default staff/system spacing.
 - By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, **Shift** -clicking adjacent layouts, and **Ctrl/Cmd** -clicking individual layouts.
- **3.** In the category list, click **Vertical Spacing**.
- **4.** In the **Ideal Gaps** section, change the values for the different contexts as required.
- 5. Click Apply, then Close.

RESULT

The minimum gaps between staves and systems in the corresponding contexts are changed. This affects how much space Dorico Elements allows for staves/systems in its casting off estimations and whether frames are considered full enough to justify vertically automatically.

RELATED LINKS

Staff spacing on page 604

Note spacing on page 494

Enabling/Disabling text collision avoidance on page 1334

Locking layouts on page 615

Changing the first system indent on page 1305

Hiding/Showing empty staves on page 590

Changing the default player order on page 123

Changing the vertical justification of staves/systems

You can change the minimum fullness threshold above which Dorico Elements automatically vertically justifies staves and systems, which means they are evenly distributed to fill the height of frames. You can also control whether staves and systems are both vertically justified or only systems are vertically justified.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- **2.** In the **Layouts** list, select the layouts in which you want to change the automatic vertical justification of staves/systems.
 - By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking

and dragging across multiple layouts, **Shift** -clicking adjacent layouts, and **Ctrl/Cmd** -clicking individual layouts.

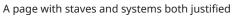
- **3.** In the category list, click **Vertical Spacing**.
- **4.** In the **Ideal Gaps** section, choose one of the following options for **Gap to use for divisi** staves:
 - Staff to staff
 - Braced staff to braced staff
- **5.** In the **Vertical Justification** section, change the values for the following options, individually or together:
 - Justify distance between staves and systems when frame is at least [n]% full
 - Justify distance only between systems when frame is at least [n]% full
- 6. Activate/Deactivate Justify staves when frame with single system is above this threshold.
- 7. Click Apply, then Close.

RESULT

The automatic vertical justification of staves and systems in the selected layouts is changed. Braced staves are never vertically justified.

EXAMPLE







The same page with only systems justified

RELATED LINKS

Per-layout vertical spacing options on page 605 Frame fullness indicators on page 493 Moving multiple systems simultaneously on page 610

Hiding/Showing empty staves

You can hide/show empty staves differently in each layout independently. For example, you can show all staves, including empty staves, in a full score layout for the conductor but hide empty staves in a full score layout intended for reference only.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- 2. In the **Layouts** list, select the layouts in which you want to hide/show empty staves. By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
- 3. In the category list, click Vertical Spacing.
- 4. In the **Staff Visibility** section, choose one of the following options for **Hide empty staves**:
 - After first system
 - All systems
 - Never
- 5. Activate/Deactivate Allow individual staves of multi-staff instruments to be hidden.
- **6.** Optional: For **Players excluded from Hide Empty Staves**, activate the checkbox for each instrument you want to be shown regardless of your choice for **Hide empty staves**.
- 7. Click Apply, then Close.

RESULT

Empty staves in the selected layouts are hidden/shown according to your choice. If you activated **Allow individual staves of multi-staff instruments to be hidden**, any single empty staves in multi-staff instruments, such as piano or harp, can be hidden in the selected layouts.

RELATED LINKS

Hiding/Showing blank staves after final flows on page 592 Hiding/Showing system dividers on page 1302 Hiding/Showing braces on single staves on page 848 Instrument filters on page 433 Staff spacing on page 604 Divisi on page 1307

Hiding/Showing staves from system/frame breaks

You can manually change staff visibility from the rhythmic positions of system/frame breaks onwards by hiding, showing, and resetting individual staves. For example, if you have hidden empty staves in the layout but want specific empty staves to appear in some sections, or you want to hide staves with music on them in some layouts.

PROCEDURE

- 1. Optional: If you want to change staff visibility manually from a rhythmic position that does not yet have a system/frame break, select an item at the position from which you want to change staff visibility.
- **2.** Open the **Manual Staff Visibility** dialog in one of the following ways:

- If a system/frame break signpost exists at the position where you want to change staff visibility, select it and press **Return** or double-click it.
- If no system/frame break exists, choose Edit > Notations > Staff > Manual Staff
 Visibility. You can also choose this option from the context menu.
- **3.** Change staff visibility as required.

For example, you can activate and change the setting for individual staves, or use the options in the action bar to change the setting for all staves simultaneously.

4. Click **OK** to save your changes and close the dialog.

RESULT

Staff visibility is changed from the selected rhythmic position or system/frame break signpost onwards until the next staff visibility change or the end of the flow, whichever comes first and whether the staves are empty or not.

If a system/frame break signpost did not yet exist at the selected rhythmic position, a system break with your staff visibility settings is inserted at the selected rhythmic position.

RELATED LINKS

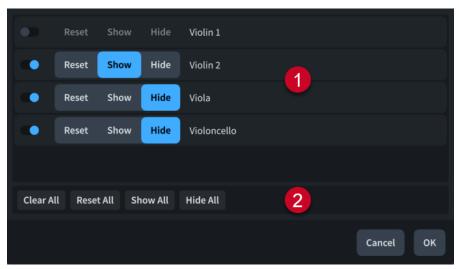
Frame breaks on page 620 System breaks on page 617

Manual Staff Visibility dialog

The **Manual Staff Visibility** dialog allows you to hide, show, and reset individual staves manually from system/frame breaks.

You can open the Manual Staff Visibility dialog in Write mode in any of the following ways:

- Choose **Edit** > **Notations** > **Staff** > **Manual Staff Visibility** when an item is selected in the music area. You can also choose this option from the context menu.
- Select a system/frame break signpost and press **Return** , or double-click a system/frame break signpost.



The Manual Staff Visibility dialog comprises the following:

1 Staff list

Contains all the staves that exist at the selected rhythmic position, including hidden empty staves. Activating staves includes them in the manual staff visibility change.

For each staff, the following staff visibility options are available:

- **Reset**: Resets the visibility of the staff to the default setting in the layout, as set on the **Vertical Spacing** page in **Layout Options**.
- **Show**: Shows the staff from the selected rhythmic position onwards, whether it is empty or not.
- **Hide**: Hides the staff from the selected rhythmic position onwards, whether it is empty or not.

2 Action bar

Contains options that allow you to change the staff visibility setting of all staves simultaneously.

- Clear All: Deactivates all staves.
- Reset All: Activates all staves and sets them to Reset.
- **Show All**: Activates all staves and sets them to **Show**.
- Hide All: Activates all staves and sets them to Hide.

Hiding/Showing blank staves after final flows

You can hide/show additional blank staves to fill the page after the final flow in each layout independently; for example, if you want to emulate the convention of showing additional blank staves between the final system and the bottom of the page when formatting part layouts for recording sessions.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- 2. In the **Layouts** list, select the layouts in which you want to hide/show blank staves after the ends of flows.
 - By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, **Shift** -clicking adjacent layouts, and **Ctrl/Cmd** -clicking individual layouts.
- **3.** In the category list, click **Page Setup**.
- 4. In the Flows section, activate/deactivate Fill frame with blank staves.
- **5.** If you activated **Fill frame with blank staves**, activate/deactivate **Show blank staves in systems identical to final flow**.
- **6.** Customize the appearance of blank staves in one of the following ways:
 - If you activated **Show blank staves in systems identical to final flow** and want to show clefs that follow the previous flow on blank staves, choose **Include clefs**.
 - If you activated **Show blank staves in systems identical to final flow** and want to hide clefs on blank staves, choose **Exclude clefs**.
 - If you deactivated Show blank staves in systems identical to final flow, change the number of staff lines in blank staves by changing the value for Number of staff lines for blank staves.

RESULT

Blank staves are shown after the final flow in the selected layouts when **Fill frame with blank staves** is activated, and hidden when it is deactivated. When shown, blank staves appear below

the final system in the final flow and fill the width of the final system if it is not fully horizontally justified.

When **Show blank staves in systems identical to final flow** is activated, blank staves follow the staff grouping of the final flow, such as two bracketed staves in a part layout with two players assigned to it. When it is deactivated, single blank staves without clefs are shown.

NOTE

You cannot input music or change brackets/braces on blank staves.

RELATED LINKS

Per-layout vertical spacing options on page 605 Changing the horizontal justification of final systems on page 597 Staff labels on page 1287 Brackets and braces on page 845

Starting layouts on left-hand pages

By default, all layouts start on a right-hand page, as convention dictates that odd numbered pages are always on the right-hand page. However, you can set individual layouts to start on a left-hand page; for example, to facilitate page turns better in that layout.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- 2. In the Layouts list, select the layouts you want to start on a left-hand page.
 By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, Shift-clicking adjacent layouts, and Ctrl/Cmd -clicking individual layouts.
- 3. In the category list, click Page Setup.
- **4.** In the **Page Numbers** section, change the value for **Initial page number** to an even number.
- 5. Click Apply, then Close.

RESULT

The first page in the selected layouts is shown on a left-hand page when the initial page number is even.

Allowing/Disallowing multiple flows on the same page

You can allow/disallow new flows to be shown on the same page as previous flows if there is space; for example, to reduce the number of pages required for parts in works with multiple movements. By default, new flows are allowed on the same page in part layouts and are not allowed in full score layouts.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- **2.** In the **Layouts** list, select the layouts in which you want to allow multiple flows to be shown on each page.

By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, **Shift** -clicking adjacent layouts, and **Ctrl/Cmd** -clicking individual layouts.

- **3.** In the category list, click **Page Setup**.
- **4.** In the **Flows** section, choose one of the following options for **New flows**:
 - Always start new page
 - Allow on existing page
- 5. Click Apply, then Close.

RESULT

Always start new page ensures flows in the selected layouts always begin at the start of the next page after the end of the previous flow.

Allow on existing page allows flows in the selected layouts to continue immediately after each other, including within the same music frame if there is sufficient space. Flow headings are automatically shown above the start of flows if you have chosen to show flow headings in the selected layouts.

NOTE

Flows are not automatically split into separate music frames. You must insert frame breaks manually to divide flows into separate music frames if required.

RELATED LINKS

Tokens on page 638

Inserting frame breaks on page 621

Assigning flows to layouts on page 173

Assigning players to flows on page 169

Hiding/Showing flow headings on page 595

Hiding/Showing information above flow headings on page 596

Hiding/Showing blank staves after final flows on page 592

Changing when the First page template is used

You can change the circumstances when the **First** page template is used in each layout independently; for example, if you want to use it for the start of every flow in the full score but only want to use it for the first flow in part layouts, even when subsequent flows start at the top of the page.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- 2. In the **Layouts** list, select the layouts in which you want to change when the **First** page template is used.
 - By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
- 3. In the category list, click Page Setup.
- **4.** In the **Flows** section, choose one of the following options for **Use 'First' page template**:

- Never
- First flow only
- Any flow starting at top of page
- 5. Click Apply, then Close.

RESULT

- Choosing **Never** means the **First** page template is not used for any page in the selected layouts.
- Choosing **First flow only** means the **First** page template is used for the first page in the layout but no other pages, even if some subsequent flows start at the top of a page.
- Choosing **Any flow starting at top of page** means the **First** page template is used for all pages in the layout that begin with the start of a flow.

RELATED LINKS

Types of page templates on page 631 Layout Options dialog on page 728

Hiding/Showing flow headings

You can hide/show flow headings in each layout independently; for example, if your project only contains a single flow and you only want to show the project title. You can also hide the heading for the first flow but show flow headings for subsequent flows.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- 2. In the Layouts list, select the layouts in which you want to hide/show flow headings.
 By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, Shift -clicking adjacent layouts, and Ctrl/Cmd -clicking individual layouts.
- 3. In the category list, click Page Setup.
- 4. In the Flows section, choose one of the following options for Show flow headings:
 - Never
 - Not for first flow
 - For all flows
- 5. Click Apply, then Close.

RESULT

Flow headings are shown above the first system in each flow in the selected layouts when you choose **For all flows**, hidden when you choose **Never**, and hidden above the first system in the first flow but shown above all other flows when you choose **Not for first flow**.

They are automatically positioned above each flow and below the preceding flow according to the margins set for each layout.

NOTE

Hiding flow headings does not hide the flow title shown at the top of the second page onwards by default.

RELATED LINKS

Flow headings on page 634

Allowing/Disallowing multiple flows on the same page on page 593

Project Info dialog on page 74

Types of page templates on page 631

Changing when the First page template is used on page 594

Hiding/Showing information above flow headings

You can hide/show flow titles, page numbers, and flow page numbers separately when they appear above flow headings at the top of a new page in each layout independently. Hiding such information in running headers is a custom in publishing.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- 2. In the **Layouts** list, select the layouts in which you want to hide/show information in running headers above flow headings.
 - By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, **Shift** -clicking adjacent layouts, and **Ctrl/Cmd** -clicking individual layouts.
- **3.** In the category list, click **Page Setup**.
- **4.** In the **Flows** section, choose one of the following options for **Flow title in header**:
 - Show above flow heading
 - Hide above flow heading
- 5. Choose one of the following options for Page number in header:
 - Show above flow heading
 - Hide above flow heading
- **6.** Choose one of the following options for **Flow page number in header**:
 - Show above flow heading
 - Hide above flow heading
- 7. Click Apply, then Close.

RESULT

The corresponding information is hidden/shown when they appear above flow headings at the top of the page.

NOTE

In order to hide running header information, the top of the music frame containing the flow heading frame must be lower than the top of text frames containing the corresponding

information. If the top of the music frame is the same height as a running header text frame, any corresponding information in the text frame is shown, regardless of your setting.

RELATED LINKS

Frames on page 636
Page templates on page 630
Hiding/Showing page numbers on page 1131

Changing the horizontal justification of final systems

You can change whether the final systems of flows always fill the width of frames or only do so above a certain fullness threshold in each layout independently. By default in Dorico Elements, the final systems of flows only justify to the full width of the frame when they are more than half full.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- **2.** In the **Layouts** list, select the layouts in which you want to change the justification of the final systems in flows.

By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, **Shift** -clicking adjacent layouts, and **Ctrl/Cmd** -clicking individual layouts.

- **3.** In the category list, click **Note Spacing**.
- **4.** Change the justification of final systems in flows in one of the following ways:
 - If you always want the final systems in flows to justify fully, deactivate **Only justify final** system in flow when more than [n]% full.
 - If you want to change the minimum fullness of final systems before they justify, change the value for **Only justify final system in flow when more than [n]% full**.
- 5. Click Apply, then Close.

RESULT

The automatic justification of the final systems in flows in the selected layouts is changed.

TIP

You can also change the width of individual systems independently of your default settings by changing their start/end positions.

EXAMPLE





Final system below fullness threshold, unjustified

Final system justified

RELATED LINKS

Note spacing on page 494

Moving the start/end of systems on page 500

Changing the first system indent on page 1305

Changing the gap before codas on page 1221

Margins

Margins determine the spacing around music on pages, such as on all four edges of each page and above/below flow headings.



In Dorico Elements, there are the following types of margins:

1 Page margins

The gaps between the four edges of pages and the boundary of the content on them. For example, systems that are horizontally justified span the full width of pages between the left and right page margins. You cannot position frames beyond the page margins.

2 Music frame margins

The gaps at the top and bottom of music frames. Also known as "music frame padding".

- Top music frame margins set the gap between the top edges of music frames and the top staff line of the highest staff in the frame.
- Bottom music frame margins set the gap between the bottom edges of music frames and the bottom staff line of the lowest staff in the frame.

3 Flow heading margins

The gaps above and below flow headings. When flow headings are positioned at the top of music frames, the flow heading bottom margin sets the gap at the top of the music frame, rather than the music frame margin.

- Flow heading top margins set the gap between the top of flow headings and the bottom staff line of the preceding flow, if applicable.
- Flow heading bottom margins set the gap between the bottom of flow headings and the top staff line of the next flow.

NOTE

Notes and notations above the highest staff and below the lowest staff extend into margins.

RELATED LINKS

Flow headings on page 634

Changing page margins on page 585

Changing the margins above/below tacets on page 625

Hiding/Showing used chord diagrams grids on page 880

Changing the page size and/or orientation on page 584

Changing the vertical justification of staves/systems on page 588

Changing the horizontal justification of final systems on page 597

Changing the margins above/below flow headings

You can change the margins both above and below flow headings, which control the gap between the preceding flow and the flow heading, and the gap between the flow heading and the start of the next flow.

PREREQUISITE

Flow headings are shown in the layouts in which you want to change the margins above/below flow headings.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- **2.** In the **Layouts** list, select the layouts in which you want to change the margins above/below flow headings.

By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, **Shift** -clicking adjacent layouts, and **Ctrl/Cmd** -clicking individual layouts.

- 3. In the category list, click Page Setup.
- **4.** In the **Flows** section, change the values for the following options, individually or together:
 - Flow heading top margin
 - Flow heading bottom margin
- 5. Click Apply, then Close.

RESULT

The margins above/below flow headings in the selected layouts are changed.

- **Flow heading top margin** sets the gap between the top of flow headings and the end of the preceding flow.
- **Flow heading bottom margin** sets the gap between the bottom of flow headings and the start of the next flow.

For example, when the bottom margin is set to **0**, the bottom of the lowest frame in the flow heading aligns with the top staff line of the first system in the flow below the flow heading.

EXAMPLE





Flow heading with default margins above/below

Flow heading with decreased margins above/below

RELATED LINKS

Flow headings on page 634

Per-layout vertical spacing options on page 605

Moving individual staves/systems vertically on page 608

Changing the margins above/below tacets on page 625

Changing the default music frame margins

You can change the default margins in all music frames in each layout independently. For example, you might want more padding at the top of music frames in part layouts containing lots of notes above the staff.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- 2. In the Layouts list, select the layouts whose music frame margins you want to change. By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, Shift-clicking adjacent layouts, and Ctrl/Cmd -clicking individual layouts.
- 3. In the category list, click Page Setup.
- **4.** In the **Music Frame Margins** section, change the values for the following options, individually or together:
 - Top
 - Bottom
- 5. Click Apply, then Close.

RESULT

The margins within all music frames in the selected layouts are changed.

- **Top** sets the gap between the top edges of music frames and the top staff line of the highest staff in the frame.
- **Bottom** sets the gap between the bottom edges of music frames and the bottom staff line of the lowest staff in the frame.

For example, when the bottom music frame margin is set to **0**, the bottom staff line of the lowest staff in the frame aligns with the bottom edge of the music frame.

NOTE

Notes and notations above the highest staff and below the lowest staff extend into music frame margins.

RELATED LINKS

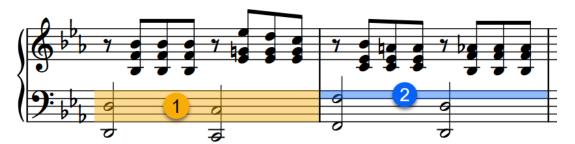
Changing page margins on page 585 Changing the default staff/system spacing on page 587 Hiding/Showing used chord diagrams grids on page 880

Staff size

Staff size refers to the distance between the top and bottom lines of staves, and can be expressed as a point size or in another supported unit of measurement, such as millimeters. For individual staves, you can use a scale size of the default staff size in the layout. The most appropriate staff size depends on the intended purpose of the layout.

For example, full orchestral scores that are quite dense need a much smaller staff size than individual parts, which require large enough notes so that performers can read them easily. Staves can overlap and the music can become illegible if the staff size is too large in dense scores.

In Dorico Elements, you can set the staff size using the rastral size and the space size, depending on which measurement is more appropriate for the selected layouts.



- 1 Rastral size is the size of the full staff, measured from the bottom line to the top line.
- **2** Space size is the distance between two staff lines.

When changing the staff size of each layout in **Layout Options**, we recommend that you use one of the preset rastral sizes, as these are based on traditional and generally accepted staff sizes that are all widely used in music engraving.

NOTE

The size of staves can affect the size of system objects.

RELATED LINKS

System objects on page 1303 Changing your preferred unit of measurement on page 50 Changing the default staff size on page 587 Staff spacing on page 604

Changing the staff size from system/frame breaks

You can change the staff size of all staves from the rhythmic position of system/frame breaks onwards in layouts. For example, you can have smaller staves only on pages with more staves, and larger staves on other pages with fewer staves.

NOTE

If the size of system object font styles is set to **Staff-relative**, the staff size of the top staff in each instrument family group affects the size of system objects if they are shown above that bracketed group. Font styles that are set to **Absolute** are unaffected by staff size.

PREREQUISITE

- You have inserted system/frame breaks at the positions from which you want to change the staff size.
- Signposts are shown for system/frame breaks.
- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- Graphic Editing is selected in the Engrave toolbox.

PROCEDURE

- 1. In Engrave mode, select the system/frame break signposts from which you want to change the staff size.
- 2. In the Properties panel, activate **Space size** in the **Format** group.
- **3.** Change the value in the value field.

RESULT

The staff size of all staves in the layout is changed until the next change in staff size or the end of the flow, whichever comes first.

By default, the next flow uses the default staff size in the layout.

RELATED LINKS

Properties panel on page 646
Engrave toolbox on page 490
Inserting system breaks on page 617
Inserting frame breaks on page 621
Hiding/Showing system break signposts on page 619
Hiding/Showing frame break signposts on page 622

Changing the staff size for individual players

You can change the size of all staves belonging to individual players throughout each flow in the current layout only, independently other players' staves. For example, piano accompaniment parts often include the solo instrument on a smaller staff.

You can change the size of staves to a set scale size, expressed as a percentage of the normal staff size in the layout, or set a custom scale.

TIP

If you want to change the staff size to represent an alternative version of a passage, you can instead add an ossia staff, which you can show for specific regions.

PREREQUISITE

If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.

PROCEDURE

1. Select an item on the staff whose size you want to change. You can do this in Write mode and Engrave mode.

NOTE

You can only change the size of a single staff at a time.

- Choose Edit > Notations > Staff Size > [Staff size]. You can also choose this option from the context menu.
- **3.** Optional: If you chose **Custom Staff Size**, set the staff size in the **Custom Staff Size** dialog that opens.

RESULT

The size of all staves held by the selected player are changed throughout the whole flow in the current layout only.

This also works in combination with the other ways of changing the staff size, such as changing the size of all staves in the layout or changing the size of staves from specific system/frame breaks.

NOTE

If the size of system object font styles is set to **Staff-relative**, the staff size of the top staff in each instrument family group affects the size of system objects if they are shown above that bracketed group. Font styles that are set to **Absolute** are unaffected by staff size.



A piano part with smaller staff above

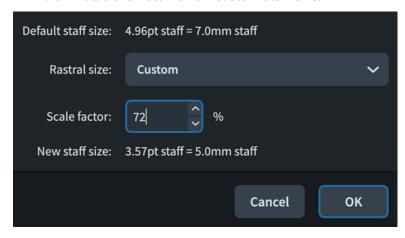
RELATED LINKS

Engrave toolbox on page 490 System objects on page 1303

Custom Staff Size dialog

The **Custom Staff Size** dialog allows you to change the size of individual staves by a custom scale factor.

• You can open the **Custom Staff Size** dialog by selecting an item on a staff and choosing **Edit** > **Notations** > **Staff Size** > **Custom Staff Size**.



The **Custom Staff Size** dialog contains the following options:

Default staff size

Displays the default size of staves in the current layout. This size is set on the **Page Setup** page in **Layout Options**.

The default staff size is expressed as both a point size and in your preferred unit of measurement.

Rastral size

Allows you to select the rastral size on which you want to base your custom staff size.

Scale factor

Sets the custom staff size, expressed as a percentage of the selected rastral size.

New staff size

Displays the new custom staff size for the selected staff as a result of the changes you have made in the dialog.

The new staff size is expressed as both a point size and in your preferred unit of measurement.

Staff spacing

The vertical positioning of staves and systems within frames is known as staff spacing. Staff spacing calculations consider the height of staves and the necessary gaps between staves and systems.

You can change staff spacing in your project at different levels:

- Change the default staff spacing in each layout in **Layout Options**.
- Change the staff spacing between individual staves.

NOTE

 We recommend adjusting the default staff spacing values and/or changing the staff size in layouts before moving individual staves, as in most cases Dorico Elements produces suitable results without the need to move individual staves.

- We recommend that you add extra pages and finish laying out your pages before moving individual staves. Individual staff spacing changes are automatically deleted if the frame in which they occur changes.
- Moving individual staves/systems vertically does not affect the casting off. If you want to show more/fewer systems in a frame, you can change the casting off by, for example, using frame breaks or setting a fixed number of systems per frame.

RELATED LINKS

Changing the default staff/system spacing on page 587
Staff size on page 601
Staves on page 1300
Frame fullness indicators on page 493
Hiding/Showing empty staves on page 590
Enabling/Disabling text collision avoidance on page 1334
Note spacing on page 494
Margins on page 598
Casting off on page 612
Frame breaks on page 620

Per-layout vertical spacing options

Dorico Elements provides multiple options that you can use to control the default vertical spacing and justification of staves and systems in each layout.

 You can access per-layout vertical spacing options by opening the Layout Options dialog and clicking Vertical Spacing in the category list.

The **Vertical Spacing** page contains the following sections and options:

Ideal Gaps

Contains multiple scenarios that allow you to set the gap you want Dorico Elements to allow between staves and systems in the corresponding context, including the default scaling of these gaps in galley view, as Dorico Elements does not automatically avoid collisions between staves and items in galley view. The options are accompanied by diagrams to help you visualize the contexts to which each option applies.

We recommend setting the ideal gaps to the minimum value acceptable to you because Dorico Elements never reduces the gap between staves to less than your set values. Setting smaller values gives Dorico Elements greater flexibility when determining staff spacing, particularly in very full frames, such as reducing the space between staves with no dynamics to allow more space between staves with dynamics. Similarly, we recommend setting vertical spacing options after you have finished inputting notes and items, as this allows you to consider the entire project when setting these options.

Depending on the context, the options are affected by automatic vertical justification in different ways:

- Staff to staff, Staff group to staff, Staff to staff group, Staff group to staff group, Inter-system gap, and Timecode staff to staff
 - These gaps do not apply in frames that are automatically justified.
- Braced staff to braced staff, Braced staff to unbraced staff, and Ossia staff to staff
 These gaps always apply, including in frames that are automatically justified, because braced and ossia staves are never justified. This includes extra staves.

NOTE

- Divisi staves are vertically justified when they use the Staff to staff gap. When they use the
 Braced staff to braced staff gap, the staves in each divisi section use only the gap set for
 braced staves and are not vertically justified.
- If the staves in a layout are very close together, just decreasing the staff size might be sufficient to produce good results.
- When calculating the number of systems that can fit in each frame in a layout, Dorico Elements considers the height of staves, the minimum gaps between staves, the maximum distances between very high/low notes and staves, and other items that require vertical space, such as pedal lines and tempo marks. However, this calculation happens before horizontal spacing is finalized, which can result in either more or fewer systems being allocated to frames than ideally fit. In such circumstances, you can use fixed casting off settings and system/frame breaks to change which systems appear in frames.

Minimum Gaps

Contains options for the minimum gaps you want Dorico Elements to allow for items in addition to the staff spacing gaps.

- Automatically resolve collisions between adjacent staves and systems: When activated,
 Dorico Elements automatically allows extra space between staves and systems to avoid
 collisions. When deactivated, Dorico Elements only uses your set gaps for vertical spacing,
 which produces evenly-spaced staves and systems but with the possibility of collisions
 between items.
- **Minimum inter-staff gap with content**: Allows you to set the extra space you want to allow between staves when items are present.
- **Minimum inter-system gap with content**: Allows you to set the extra space you want to allow between systems when items are present.

NOTE

Minimum gaps do not affect casting off. For example, increasing the **Minimum inter-system gap with content** value changes the space above/below systems on a page but does not push systems to later pages. Instead, you can change the ideal gaps.

Vertical Justification

Contains options that allow you to control the frame fullness thresholds above which you want staves and/or systems to justify vertically automatically.

- Justify distance between staves and systems when frame is at least [n]% full: When frames are filled above this threshold, the staves and systems they contain are all automatically vertically justified, meaning they are evenly distributed to fill the height of the frame. Frames filled below this threshold are not automatically justified; instead, staves follow your ideal gap settings. This can leave gaps between the bottom staff/system and the bottom of the frame.
- Justify distance only between systems when frame is at least [n]% full: When frames are filled above this threshold, only the distance between systems in the frame is justified. Staves follow your per-layout ideal gap settings. This helps keep a clear distance between systems on very full pages.
- **Justify staves when frame with single system is above this threshold**: When activated, all the staves in a single system taller than the set threshold are vertically justified, which distributes them evenly to fill the height of the frame.

Staff Visibility

Contains options allowing you to control when and which empty staves are hidden in the layout.

- **Hide empty staves**: Allows you to control when empty staves are hidden. For example, it is a common practice to show all staves in the first system, even if some are empty, but this is not always required.
- Allow individual staves of multi-staff instruments to be hidden: Allows you to control whether individual empty staves belonging to multi-staff instruments can be hidden independently or all multi-staff instrument staves must always be shown.
- Players excluded from Hide Empty Staves: Allows you to identify specific players whose staves you always want to show, even if their staff is empty on systems where you have hidden empty staves.

RELATED LINKS

Layout Options dialog on page 728 Casting off on page 612 Margins on page 598 Staff size on page 601 Brackets and braces on page 845

Ossia staves on page 1301

Tablature on page 1308

Per-layout note spacing options on page 495

Hiding/Showing staves from system/frame breaks on page 590

Making selections into frames on page 621

Changing the vertical position of markers on page 1202

Changing the vertical position of timecodes on page 1207

Changing the staff spacing in galley view

You can change the vertical space between staves in galley view in each layout independently, expressed as a percentage of the set ideal gaps. Increasing the gaps between staves in layouts with very high/low notes can be useful because Dorico Elements does not perform automatic collision avoidance in galley view.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- **2.** In the **Layouts** list, select the layouts in which you want to change the staff spacing in galley view.

By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.

- **3.** In the category list, click **Vertical Spacing**.
- 4. In the Ideal Gaps section, change the value for In galley view, expand ideal staff gaps to.
- 5. Click **Apply**, then **Close**.

RELATED LINKS

Instrument filters on page 433
Switching to galley/page view on page 49
Switching between layouts on page 42

Moving individual staves/systems vertically

You can change the spacing of individual staves, including ossia staves, by changing the vertical position of individual staves and systems independently of your project-wide settings.

IMPORTANT

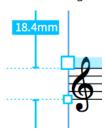
We recommend that you finish casting off before moving individual staves, as individual staff spacing changes are automatically deleted if the frame in which they occur changes.

NOTE

Moving individual staves/systems vertically does not affect the casting off. If you want to show more/fewer systems in a frame, you can change the casting off by, for example, using frame breaks or setting a fixed number of systems per frame.

When **Staff Spacing ∑** is activated in the Engrave toolbox, the following are shown:

- System spacing handles: Large square handles on the top left corner of the top staff in each system. System spacing handles control the vertical position of whole systems.
- Staff spacing handles: Small square staff handles on the bottom left corner of each staff. Staff spacing handles control the vertical position of individual staves.
- Gap measurements: Lines and highlighted numbers indicating the distances between staves and systems, shown using your preferred unit of measurement.
- Music frame margin highlights: Translucent highlights at the top/bottom of music frames indicating the extent of music frame margins.



System spacing handle, staff spacing handle, and gap measurement in Engrave mode when **Staff Spacing** is activated

PREREQUISITE

Staff Spacing is selected in the Engrave toolbox.

PROCEDURE

- **1.** In Engrave mode, select one of the following on each staff/system you want to move vertically:
 - Staff spacing handle



System spacing handle



NOTE

- You can switch between having a staff or system spacing handle selected by pressing
 Tab
- When using the mouse, you can only move one staff/system at a time.
- **2.** Move the selected staves/systems in any of the following ways:
 - To move them a standard amount upwards or downwards, press Alt/Opt plus the corresponding arrow key. For example, press Alt/Opt-Up Arrow to move handles upwards.
 - To move them a large amount, press **Ctrl/Cmd** plus the standard key command; for example, **Ctrl/Cmd-Alt/Opt-Up Arrow**.
 - To move them a moderate amount, press **Shift** plus the standard key command; for example, **Shift-Alt/Opt-Up Arrow**.
 - To move them a small amount, press **Ctrl/Cmd Shift** plus the standard key command; for example, **Ctrl/Cmd-Shift-Alt/Opt-Up Arrow**.
 - Click and drag a single staff/system spacing handle upwards/downwards.

RESULT

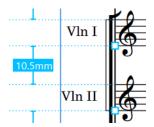
The vertical position of the selected staves/systems is changed. The color of the handles changes to indicate that you have moved them. When you move system handles, both the square handle and the highlighted strip at the top of the system change color.

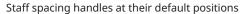
NOTE

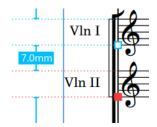
- When **Staff Spacing** is activated, you cannot select or edit anything other than staff/ system spacing handles. To resume normal selection and editing, click **Graphic Editing** in the Engrave toolbox or return to Write mode.
- You can also click the gap measurement numbers and change the value using any of the supported units of measurement, which are points, millimeters, centimeters, and inches.

You can change your preferred unit of measurement to be used throughout Dorico Elements on the **General** page in **Preferences**.

EXAMPLE







The second staff has been moved upwards

AFTER COMPLETING THIS TASK

You can copy manual changes you have made to the staff spacing on individual pages to other pages in the layout.

RELATED LINKS

Engrave toolbox on page 490

Frame fullness indicators on page 493

Per-layout vertical spacing options on page 605

Margins on page 598

Casting off on page 612

Making selections into frames on page 621

Enabling/Disabling text collision avoidance on page 1334

Changing your preferred unit of measurement on page 50

Removing individual changes to staff spacing

You can remove changes you have made to the staff/system spacing and reset staff/system spacing handles to their original default positions.

PREREQUISITE

Staff Spacing is selected in the Engrave toolbox.

PROCEDURE

- **1.** In Engrave mode, select the staff/system handles you want to reset to their original positions.
- 2. Press Backspace or Delete.

RESULT

The selected staff/system handles are reset to their original positions.

TIP

You can also reset all staff spacing changes within selected systems, frames, or all staff spacing changes in the layout by choosing one of the options in the **Engrave** > **Staff Spacing** menu.

Moving multiple systems simultaneously

You can move multiple systems at the same time so that the gaps between each system remain equal. This is also known as "concertina dragging".

IMPORTANT

We recommend that you add extra pages and finish laying out your pages before moving individual staves. Individual staff spacing changes are automatically deleted if the frame in which they occur changes.

NOTE

- You can only move multiple systems closer together, you cannot use this method to move them further apart.
- You cannot follow these steps for staff spacing handles on tacets.
- Moving individual staves/systems vertically does not affect the casting off. If you want to show more/fewer systems in a frame, you can change the casting off by, for example, using frame breaks or setting a fixed number of systems per frame.

PREREQUISITE

Staff Spacing T is selected in the Engrave toolbox.

PROCEDURE

1. In Engrave mode, select the system handle on the highest systems you want to move.



NOTE

When using the mouse, you can only move systems below a single system at a time.

- **2.** Move the selected systems in any of the following ways:
 - To move them downwards a standard amount, press Alt/Opt-J.
 - To move them downwards a large amount, press **Ctrl/Cmd-Alt/Opt-J**.
 - Alt/Opt -click and drag the system handle downwards.

RESULT

All systems below the selected system, until the bottom of the music frame, are moved closer together. The gaps between each system remain equal.

RELATED LINKS

Engrave toolbox on page 490
Per-layout vertical spacing options on page 605
Casting off on page 612
Frame breaks on page 620
Fixing the number of systems per frame on page 613

Copying staff spacing changes to other pages

You can copy manual staff spacing changes you have made on individual pages to other pages in the layout.

NOTE

In order to copy staff spacing changes, destination pages must have the same number of staves per system and the same number of systems per frame as the source page.

PROCEDURE

- 1. In the music area, select an item on the page whose staff spacing you want to copy.
- Choose Engrave > Staff Spacing > Copy Staff Spacing to open the Copy Staff Spacing dialog.
- **3.** Optional: Change the page whose staff spacing you want to copy by changing the value for **From page**.
 - By default, the page on which you selected an item is set in the value field.
- **4.** Change the first page to which you want to copy staff spacing by changing the value for **To** page start.

- **5.** Change the last page in the range to which you want to copy staff spacing by changing the value for **To page end**.
- **6.** Click **OK** to save your changes and close the dialog.

Copy Staff Spacing dialog

The **Copy Staff Spacing** dialog allows you to choose pages whose individual staff spacing changes you want to copy and the pages to which you want to copy them.

 You can open the Copy Staff Spacing dialog in Engrave mode by choosing Engrave > Staff Spacing > Copy Staff Spacing.

TIP

You can assign a key command for opening the **Copy Staff Spacing** dialog on the **Key Commands** page in **Preferences**.

The **Copy Staff Spacing** dialog contains the following options:

From page

Allows you to change the page whose staff spacing you want to copy by specifying the page number. If you have an item selected when you open the dialog, that page is set in the value field automatically.

To page start

Allows you to set the first page in the layout to which staff spacing changes are copied.

To page end

Allows you to set the last page in the layout to which staff spacing changes are copied.

For example, if you wanted to copy staff spacing changes you made on the first page to the next three pages, meaning pages two, three, and four, but not to page five and onwards, you would set **From page** to **1**, **To page start** to **2**, and **To page end** to **4**.

Previews show the displayed page number beside each value field, so that if you have changed the displayed page number of pages within the layout you can still identify the page to which you are copying staff spacing changes.

RELATED LINKS

Key Commands page in the Preferences dialog on page 58

Casting off

"Casting off" is the term used to encompass fixing the layout of pages of music, such as setting the number of systems per page.

When calculating how much music can fit in each system and on each page, Dorico Elements considers multiple aspects of the layout, including note spacing and vertical spacing settings. You can change these settings to change the default casting off in each layout.

In Dorico Elements, you can set fixed numbers of bars per system and systems per music frame throughout each layout independently.

You can control the casting off at a more granular level by moving bars to other systems, inserting system/frame breaks, making selections into systems/frames, and locking/resetting the casting off in the current layout.

RELATED LINKS

Per-layout note spacing options on page 495
Per-layout vertical spacing options on page 605
Inserting system breaks on page 617
Inserting frame breaks on page 621
Splitting multi-bar rests on page 1259
Hiding/Showing blank staves after final flows on page 592
Margins on page 598

Fixing the number of bars per system

You can define a fixed number of bars you want included in each system in each layout independently; for example, if you want four bars per system in a lead sheet.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- **2.** In the **Layouts** list, select the layouts in which you want to fix the number of bars per system.

By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, **Shift** -clicking adjacent layouts, and **Ctrl/Cmd** -clicking individual layouts.

- 3. In the category list, click **Staves and Systems**.
- 4. In the Casting Off section, activate Fixed number of bars per system.
- **5.** Change the value in the value field.
- 6. Click Apply, then Close.

RESULT

The number of bars automatically contained in each system in the selected layouts is changed. If any of the layouts contain two-bar or four-bar repeat regions, Dorico Elements automatically adjusts casting off to ensure phrases are not split across systems.

RELATED LINKS

Per-layout note spacing options on page 495
Bar repeats on page 1224
Inserting system breaks on page 617
Inserting frame breaks on page 621
Making selections into systems on page 618
Changing the horizontal justification of final systems on page 597

Fixing the number of systems per frame

You can define a fixed number of systems you want included in each music frame in each layout independently. Because the default page templates have a single music frame per page, fixing the number of systems per frame usually fixes the number of systems per page.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- **2.** In the **Layouts** list, select the layouts in which you want to fix the number of systems per frame.

By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, **Shift** -clicking adjacent layouts, and **Ctrl/Cmd** -clicking individual layouts.

- **3.** In the category list, click **Staves and Systems**.
- **4.** In the **Casting Off** section, activate **Fixed number of systems per frame**.
- **5.** Change the value in the value field.
- 6. Activate/Deactivate Scale number of systems by frame height.
- 7. Click Apply, then Close.

RESULT

The number of systems automatically contained in each music frame in the selected layouts is changed.

If you activated **Scale number of systems by frame height**, the number of systems contained in each frame is adjusted according to the size of the music frame. For example, pages with smaller frames, such as the first page, contain fewer systems than your casting off setting.

RELATED LINKS

Per-layout vertical spacing options on page 605
Making selections into frames on page 621
Hiding/Showing blank staves after final flows on page 592

Moving bars to other systems

You can move bars to the next or previous system; for example, if you want specific bars to appear in the same system.

PREREQUISITE

Graphic Editing Is selected in the Engrave toolbox.

PROCEDURE

- 1. In Engrave mode, select an item in the bar you want to move to another system.

 For example, select an item in the earliest bar you want to move to the next system, or select an item in the last bar you want to move to the previous system.
- **2.** Move bars to another system in one of the following ways:
 - To move all bars between the start of the current system and the selection to the
 previous system, press, or click Move to Previous System in the Move Bars
 Between Systems section of the Formatting panel.
 - To move all bars between the selection and the end of their current system to the next system, press . or click **Move to Next System** 1 in the **Move Bars Between Systems** section of the Formatting panel.

RESULT

The selected bars are moved to the previous or next system. System breaks are inserted at the start and end of each new system.

NOTE

- System breaks inserted at the start of systems have Wait for next system break activated
 in the Format group of the Properties panel by default. Because this property tells Dorico
 Elements to include all music in the system until the next system break or the end of the
 flow, if you later delete subsequent system breaks, this can create very full, tightly spaced
 systems.
- You can change how many systems are locked as a consequence of moving bars to other systems in Preferences > Note Input and Editing > Note Input > Breaks.

RELATED LINKS

Formatting panel on page 491 Engrave toolbox on page 490 System breaks on page 617 Frame breaks on page 620 Properties panel on page 646 Preferences dialog on page 57

Locking layouts

You can lock the current casting off throughout individual layouts.

PREREQUISITE

- The left zone is shown.
- **Graphic Editing [7]** is selected in the Engrave toolbox.

PROCEDURE

- 1. In Engrave mode, open the layout whose casting off you want to lock.
- 2. In the Formatting panel, click **Lock Layout** in the **Lock Layout** section.

RESULT

System and frame breaks are inserted at the start of every system as required to lock the current casting off in the layout open in the music area.

NOTE

- The system and frame breaks have Wait for next system break and Wait for next frame
 break activated in the Format group of the Properties panel by default. Because this
 property tells Dorico Elements to include all music in the system until the next system break,
 frame break, or the end of the flow, if you later delete subsequent system or frame breaks,
 this can create very full, tightly spaced systems.
- You can assign a key command for Lock Layout on the Key Commands page in Preferences.

RELATED LINKS

Formatting panel on page 491
Engrave toolbox on page 490

Key Commands page in the Preferences dialog on page 58

Resetting casting off

You can delete all system and frame breaks in individual layouts and return the layouts to their default casting off and spacing settings.

PREREQUISITE

- The left zone is shown.
- **Graphic Editing I** is selected in the Engrave toolbox.

PROCEDURE

- 1. In Engrave mode, open the layout whose casting off you want to reset.
- 2. In the Formatting panel, click **Reset Layout** 1 in the **Lock Layout** section.

RESULT

All system and frame breaks in the layout open in the music area are deleted. The layout returns to following its default casting off and spacing settings.

NOTE

- The system and frame breaks have Wait for next system break and Wait for next frame
 break activated in the Format group of the Properties panel by default. Because this
 property tells Dorico Elements to include all music in the system until the next system break,
 frame break, or the end of the flow, if you later delete subsequent system or frame breaks,
 this can create very full, tightly spaced systems.
- You can assign a key command for Reset Layout on the Key Commands page in Preferences.

Allowing/Disallowing breaks within bars

You can choose whether or not to allow Dorico Elements to insert system/frame breaks within bars. For example, you might disallow breaks within bars when formatting lead sheets that only require breaks at barlines.

PROCEDURE

- 1. Press Ctrl/Cmd-, to open Preferences.
- 2. In the category list, click Note Input and Editing.
- 3. In the Note Input section, activate/deactivate Snap system and frame breaks to barlines when creating in the Breaks subsection.
- 4. Click Apply, then Close.

RESULT

System/Frame breaks are disallowed within bars when the option is activated, and allowed when it is deactivated.

When breaks are disallowed within bars, inserted breaks snap to the barline before the earliest selected item. When making systems/frames from selections, the first break snaps to the barline before the earliest selected item, while the second break snaps to the barline after the last selected item.

RELATED LINKS

Frame breaks on page 620

Preferences dialog on page 57

System breaks

System breaks occur when musical material reaches the right page margin and must continue on a new system, usually below the previous system on the same page or on a new page. Dorico Elements automatically arranges music across systems so that notes are correctly spaced and legible, but you can also control system breaks manually.

System breaks that you have inserted manually are indicated by signposts, which you can hide/show at any time. They are also layout-specific, meaning each layout can have system breaks at different rhythmic positions.



System break signpost, selected

NOTE

- By default, system/frame breaks snap to the barline before the earliest selected item. You can change whether breaks are allowed at rhythmic positions within bars.
- System breaks at the start of systems that were created using Make into System have Wait
 for next system break activated in the Format group of the Properties panel by default.
 When this property is activated, Dorico Elements creates a system containing all material
 between that system break and the next system break or the end of the flow, whichever
 comes first.

If you later delete subsequent system breaks, this creates very full, tightly spaced systems. For example, if you delete all subsequent system breaks, all music until the end of the flow is forced into a single system.

• You can also control the content of systems by fixing the number of bars per system in each layout.

RELATED LINKS

Note spacing on page 494
Fixing the number of bars per system on page 613
Locking layouts on page 615
Properties panel on page 646
Signposts on page 438

Inserting system breaks

You can insert system breaks at any rhythmic position; for example, so that musical phrases fit in systems for readability.

PREREQUISITE

- You have allowed/disallowed breaks within bars.
- **Graphic Editing I** is selected in the Engrave toolbox.
- If you want to insert system breaks in the middle of multi-bar rests, you have either hidden multi-bar rests in the layout or split multi-bar rests at the required positions.

PROCEDURE

- **1.** In Engrave mode, select a note or item at the rhythmic position you want to appear at the start of the next system.
- 2. Insert a system break in any of the following ways:
 - Press Shift-S.
 - In the Formatting panel, click **Create System Break II** in the **Format Systems** section.

RESULT

A system break is inserted at the rhythmic position of the earliest selected item. If breaks are disallowed within bars, it snaps to the preceding barline. All notations after the system break are moved to the next system.

NOTE

If you insert a system break in the middle of a phrase in a two-bar or four-bar repeat region, Dorico Elements does not automatically move the system break to before/after the phrase, causing it to be split across the system break.

RELATED LINKS

Engrave toolbox on page 490

Formatting panel on page 491

Allowing/Disallowing breaks within bars on page 616

Hiding/Showing multi-bar rests on page 1258

Splitting multi-bar rests on page 1259

Hiding/Showing staves from system/frame breaks on page 590

Hiding/Showing staff labels at system/frame breaks on page 1290

Changing the staff size from system/frame breaks on page 602

Making selections into systems

You can force all musical material between two selected rhythmic positions into a single system; for example, if you want specific bars to appear in the same system.

PREREQUISITE

- You have allowed/disallowed breaks within bars.
- The left zone is shown.
- **Graphic Editing 3** is selected in the Engrave toolbox.

PROCEDURE

1. In Engrave mode, select an item at the rhythmic position that you want to be the start of the system.

NOTE

We recommend that you select noteheads or barlines. Selecting other items, such as slurs, can cause system breaks to be inserted earlier/later than you might have intended.

- **2. Ctrl/Cmd** -click one of the following:
 - A notehead that you want to be at the end of the system
 - An item that you want to be at the start of the next system

3. In the Format Systems section of the Formatting panel, click Make into System 4.

RESULT

A fixed system is created by inserting system breaks at the start/end of your selection. The system contains all musical material between the two selected items.

If breaks are disallowed within bars, the first break snaps to the barline before the earliest selected item, while the second break snaps to the barline after the last selected item.

If breaks are allowed within bars, the content of the system depends on your selections.

- If you selected items, such as barlines or slurs, the start of your first selected item is positioned at the start of the system, and the end of your last selected item is positioned at the start of the next system.
- If you selected noteheads, the last selected notehead is also included in the system, rather than being positioned at the start of the next system.
- If you selected ties, all musical material between the first and last notes tie chains is included in the system, regardless of where in the tie chains you made selections.

NOTE

The system break inserted at the start of the selection has **Wait for next system break** activated in the **Format** group of the Properties panel by default. Because this property tells Dorico Elements to include all music in the system until the next system break or the end of the flow, if you later delete subsequent system breaks, this can create very full, tightly spaced systems.

Deactivating **Wait for next system break** allows Dorico Elements to cast off subsequent music as normal.

Hiding/Showing system break signposts

You can hide/show system break signposts at any time.

PROCEDURE

• Choose View > Signposts > System Breaks.

RELATED LINKS

Signposts on page 438

Hiding non-printing elements on page 425

Selecting/Deselecting notes and items individually on page 411

Deleting system breaks

You can delete system breaks after you have inserted them.

PREREQUISITE

System break signposts are shown.

PROCEDURE

- 1. Select the system break signposts of the system breaks you want to delete.
- 2. Press Backspace or Delete.

RELATED LINKS

Resetting casting off on page 616

Frame breaks

Frame breaks occur when musical material reaches the right page margin at the bottom of a frame and must continue on a new system in the next frame in the music frame chain, which is usually on the next page. Dorico Elements automatically arranges music in frames so that systems are correctly spaced and legible, but you can also control frame breaks manually; for example, to insert page turns at specific positions in part layouts.

Frame breaks that you have inserted manually are indicated by signposts, which you can hide/ show at any time. They are also layout-specific, meaning each layout can have frame breaks at different rhythmic positions.



Frame break signpost, selected

NOTE

- By default, system/frame breaks snap to the barline before the earliest selected item. You can change whether breaks are allowed at rhythmic positions within bars.
- Frame breaks at the start of frames that were created using Make into Frame have Wait for next frame break activated in the Format group of the Properties panel by default. When this property is activated, Dorico Elements creates a frame containing all material between that frame break and the next frame break.
 - If you later delete subsequent frame breaks, this creates very full frames with tightly spaced, or overlapping, systems. For example, if you delete all subsequent frame breaks, all music until the end of the flow is forced into a single frame.
- You can also control the content of music frames by fixing the number of systems per music frame in each layout.

RELATED LINKS

Staff spacing on page 604
Fixing the number of systems per frame on page 613
Locking layouts on page 615
Frames on page 636
Music frame chains on page 645
Properties panel on page 646
Signposts on page 438

Inserting frame breaks

You can insert frame breaks at any rhythmic position; for example, to create page turns at appropriate places in the current layout.

PREREQUISITE

- You have allowed/disallowed breaks within bars.
- **Graphic Editing 3** is selected in the Engrave toolbox.
- If you want to insert frame breaks in the middle of multi-bar rests, you have either hidden multi-bar rests in the layout or split multi-bar rests at the required positions.

PROCEDURE

- **1.** In Engrave mode, select a note or item at the rhythmic position you want to appear at the start of the next frame.
- **2.** Insert a frame break in any of the following ways:
 - Press Shift-F.
 - In the Formatting panel, click **Create Frame Break** \blacksquare in the **Format Music Frames** section.

RESULT

A frame break is inserted at the rhythmic position of the earliest selected item. If breaks are disallowed within bars, it snaps to the preceding barline. All notations after the frame break are moved to the next music frame.

NOTE

If you insert a frame break in the middle of a phrase in a two-bar or four-bar repeat region, Dorico Elements does not automatically move the frame break to before/after the phrase, causing it to be split across the frame break.

RELATED LINKS

Engrave toolbox on page 490

Formatting panel on page 491

Allowing/Disallowing breaks within bars on page 616

Hiding/Showing multi-bar rests on page 1258

Splitting multi-bar rests on page 1259

Hiding/Showing staves from system/frame breaks on page 590

Hiding/Showing staff labels at system/frame breaks on page 1290

Changing the staff size from system/frame breaks on page 602

Making selections into frames

You can force all musical material between two selected rhythmic positions into a single frame; for example, if you want specific bars to appear on the same page.

PREREQUISITE

- You have allowed/disallowed breaks within bars.
- The left zone is shown.

•

PROCEDURE

1. In Engrave mode, select an item at the rhythmic position that you want to be the start of the frame.

NOTE

We recommend that you select noteheads or barlines. Selecting other items, such as slurs, can cause frame breaks to be inserted earlier/later than you might have intended.

- 2. **Ctrl/Cmd** -click one of the following:
 - A notehead that you want to be at the end of the frame
 - An item that you want to be at the start of the next frame
- 3. In the Format Music Frames section of the Formatting panel, click Make into Frame 2.

RESULT

A fixed frame is created by inserting frame breaks at the start/end of your selection. The frame contains all musical material between the two selected items.

If breaks are disallowed within bars, the first break snaps to the barline before the earliest selected item, while the second break snaps to the barline after the last selected item.

If breaks are allowed within bars, the content of the frame depends on your selections.

- If you selected items, such as barlines or slurs, the beginning your first selected item is positioned at the start of the frame, and the end of your last selected item is positioned at the start of the next frame.
- If you selected noteheads, the last selected notehead is also included in the frame, rather than being positioned at the start of the next frame.
- If you selected ties, all musical material between the first and last notes tie chains is included in the frame, regardless of where in the tie chains you made selections.

NOTE

The frame break inserted at the start of the selection has **Wait for next frame break** activated in the **Format** group of the Properties panel by default. Because this property tells Dorico Elements to include all music in the frame until the next frame break, if you later delete subsequent frame breaks, this can create very full frames with tightly spaced, or overlapping, systems.

Deactivating **Wait for next frame break** allows Dorico Elements to cast off subsequent music as normal.

Hiding/Showing frame break signposts

You can hide/show frame break signposts at any time.

PROCEDURE

• Choose View > Signposts > Frame Breaks.

RELATED LINKS

Signposts on page 438

Hiding non-printing elements on page 425

Selecting/Deselecting notes and items individually on page 411

Deleting frame breaks

You can delete frame breaks after you have inserted them.

PREREQUISITE

Frame break signposts are shown.

PROCEDURE

- 1. Select the frame break signposts of the frame breaks you want to delete.
- Press Backspace or Delete.

RELATED LINKS

Resetting casting off on page 616

Tacets

Tacet is the indication used to show that a player does not play anything in an entire flow, which might be a movement in a symphony or cue in a film score. In Dorico Elements, you can generate tacets automatically.

Dorico Elements shows tacets for flows in part layouts when the following conditions are met:

- You have removed the player from the flows in which they do not play.
- The flows are assigned to the part layout.
- The flows are assigned to the page template frame chain in the part layout.
- You have chosen to show tacets in the part layout.



2. Andante

Tacet

3. Menuetto



An extract of a part layout where the player is tacet in the second flow

In Engrave mode, tacets behave like systems, meaning they have their own staff spacing handle when **Staff Spacing** is activated. This allows you to move individual tacets and their flow headings upwards/downwards. You can also insert system and frame breaks at the start of tacets.

NOTE

We do not recommend that you use **Copy Staff Spacing** and **Lock Frame** on pages where tacets are the first or last system in frames. Because tacets do not contain any bars, Dorico Elements cannot insert system or frame breaks at the ends of tacets in order to lock the frame contents.

You can change the text shown in tacets and the margin above/below them in each layout independently.

You can further customize the project-wide appearance and design of tacets by editing the **Tacet** paragraph style in the **Paragraph Styles** dialog.

RELATED LINKS

Assigning players to flows on page 169
Assigning flows to layouts on page 173
Allowing/Disallowing multiple flows on the same page on page 593
Staff spacing on page 604
Flow headings on page 634
Paragraph Styles dialog on page 739

Hiding/Showing tacets

You can hide/show tacets in each layout independently; for example, if you want to show empty bars or multi-bar rests in some layouts to allow those players to add in notes on those staves later.

PREREQUISITE

- You have removed the player from the flows in which they do not play.
- The flows are assigned to the part layout.
- The flows are assigned to the page template frame chain in the part layout.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- 2. In the Layouts list, select the layouts in which you want to hide/show tacets.
 By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, Shift-clicking adjacent layouts, and Ctrl/Cmd -clicking individual layouts.
- 3. In the category list, click **Players**.
- **4.** In the **Tacets** section, activate/deactivate **Show tacet for flows where no players are assigned**.
- **5.** Click **Apply**, then **Close**.

RESULT

Tacets are shown in the selected layouts when **Show tacet for flows where no players are assigned** is activated and the prerequisite criteria are also met.

When it is deactivated, any flows to which the player is not assigned do not appear in the layout. When the player is assigned to those flows, all bars in the flow are shown in the part, split into empty bars and multi-bar rests as appropriate for the flow.

RELATED LINKS

Assigning players to flows on page 169 Assigning flows to layouts on page 173 Multi-bar rests on page 1257

Editing tacet text

You can change the text shown in tacets in each layout independently.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- 2. In the Layouts list, select the layouts whose tacet text you want to edit.
 By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, Shift -clicking adjacent layouts, and Ctrl/Cmd -clicking individual layouts.
- **3.** In the category list, click **Players**.
- 4. In the **Tacets** section, enter the text you want in the **Tacet text** field.
- 5. Click Apply, then Close.

RESULT

The text shown in all tacets in the selected layouts is changed.

Changing the margins above/below tacets

You can change the margins both above/below tacets in each layout independently; for example, if you want smaller gaps between flow headings and tacets in some layouts to facilitate page turns better.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- 2. In the **Layouts** list, select the layouts in which you want to change the margins above/below tacets.
 - By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, **Shift** -clicking adjacent layouts, and **Ctrl/Cmd** -clicking individual layouts.
- **3.** In the category list, click **Players**.
- 4. In the **Tacets** section, change the values for the following options, individually or together:
 - Margin above tacet
 - Margin below tacet
- 5. Click Apply, then Close.

RESULT

Changing the value for **Margin above tacet** increases/decreases the minimum gap between tacets and whatever precedes them.

Changing the value for **Margin below tacet** increases/decreases the minimum gap between tacets and whatever follows them.

RELATED LINKS
Margins on page 598
Per-layout vertical spacing options on page 605
Paragraph Styles dialog on page 739

Condensing

Condensing is the process of showing the music for multiple players on fewer staves than normal, usually by allowing multiple instruments of the same type to share a staff, such as Flutes 1-2 or Horns 1-4.

In Dorico Elements, you cannot enable automatic condensing as it is only available in Dorico Pro. However, if you import or open a project that contains layouts with condensing enabled, those staves remain condensed.

NOTE

- You cannot select anything on condensed staves.
- Condensing is never enabled in galley view, so you can switch to galley view to see all staves separately. This does not disable condensing in the current layout.
- Having condensing enabled in any layout in a project can cause Dorico Elements to operate more slowly, due to the large number of calculations involved.

RELATED LINKS

Staff labels on condensed staves on page 1298 Switching to galley/page view on page 49 Local vs. global properties on page 647 Divisi on page 1307

Part formatting propagation

The propagation of part formatting involves copying the layout options and system formatting that determine the layouts of pages in specific part layouts and applying them to other part layouts. This can save time when formatting similar parts.

System formatting includes the positions of system and frame breaks, but also note spacing changes that affect the horizontal space that notes require.

In Dorico Elements, you can copy layout options and system formatting both together and independently of each other from a selected source layout to other destination layouts. For example, for source layouts whose formatting relies primarily on their **Casting Off** settings in **Layout Options**, it is likely that copying only their layout options is sufficient to produce the required formatting in the destination layouts without adding system/frame breaks on every system.

You can also copy the layout-specific property settings from the layout currently open in the music area to all other layouts in which those items appear.

NOTE

- Part formatting propagation is only available for part layouts. You cannot propagate part formatting from/to full score or custom score layouts.
- We do not recommend using layouts with multiple music frame chains as either source or destination layouts as you can get unexpected results.

RELATED LINKS

Casting off on page 612

Copying part formatting to other layouts

You can copy all the formatting from one part layout to other part layouts; for example, to save time if multiple part layouts in your project require similar formatting. You can include layout options, such as page size and margins, and other page formatting, such as system and frame breaks.

NOTE

- Part formatting propagation is only available for part layouts. You cannot propagate part formatting from/to full score or custom score layouts.
- We do not recommend using layouts with multiple music frame chains as either source or destination layouts as you can get unexpected results.

PROCEDURE

- **1.** In Setup mode, in the **Layouts** panel, select the part layout whose part formatting you want to copy.
- 2. In the action bar, click **Layout Settings** and choose **Propagate Part Formatting** to open the **Propagate Part Formatting** dialog.

TIP

You can also right-click layouts and choose this option from the context menu.

- **3.** In the **Copy formatting from** list, select the part layout whose part formatting you want to copy.
 - By default, the layout whose card you used to open the dialog is selected.
- **4.** In the **Propagate formatting to** list, select the part layouts to which you want to copy part formatting.
 - You can use the selection options in the action bar, click and drag across multiple layouts, **Shift** -click adjacent layouts, and **Ctrl/Cmd** -click individual layouts.
- 5. Activate/Deactivate Include layout options.
- 6. Activate/Deactivate Include system formatting.
- 7. Click **OK** to copy part formatting to the selected layouts and close the dialog.

RESULT

Part formatting from the selected source layout is copied to the selected destination layouts.

- If you activated **Include layout options**, layout options are copied from the source layout to the destination layouts.
- If you activated Include system formatting, Dorico Elements copies the distribution of bars in systems, systems on pages, and note spacing changes from the source layout to the destination layouts.

TIP

If the formatting of the source layout relies primarily on its Casting Off settings in Layout
 Options, it is likely that only activating Include layout options is sufficient to produce very

similar formatting in the destination layouts without adding system/frame breaks on every system.

• You can assign a key command for **Propagate Part Formatting** on the **Key Commands** page in **Preferences**. You can use this key command in any mode.

RELATED LINKS

Layouts panel (Setup mode) on page 115 Layout Options dialog on page 728 Key Commands page in the Preferences dialog on page 58

Propagate Part Formatting dialog

The **Propagate Part Formatting** dialog allows you to copy the page formatting and layout options from a source layout to destination layouts.

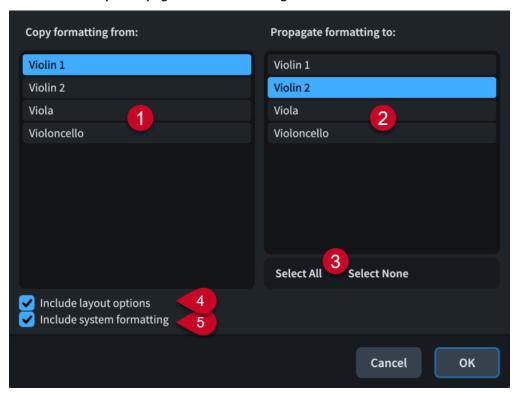
You can open the **Propagate Part Formatting** dialog in Setup mode in any of the following ways:

• In the **Layouts** panel, select a part layout, then click **Layout Settings** in the action bar and choose **Propagate Part Formatting**. This automatically selects that layout as the source layout in the **Copy formatting from** list.

TIP

You can also right-click layouts and choose this option from the context menu.

• Choose Setup > Propagate Part Formatting.



The **Propagate Part Formatting** dialog contains the following sections and options:

1 Copy formatting from

Contains a list of all the part layouts in the project. You can only select a single part layout as the source layout.

2 Propagate formatting to

Contains a list of all the part layouts in the project. You can select multiple part layouts as destination layouts.

3 Selection options

Allow you to select/deselect all the part layouts in the **Propagate formatting to** list.

4 Include layout options

Allows you to copy layout options relating to part formatting from the source layout to the destination layouts. These options include page size, page margins, the default page template set, space size, vertical spacing, note spacing, casting off, multi-bar rest settings, and staff labels.

5 Include system formatting

Allows you to copy the distribution of bars in systems, systems on pages, and note spacing changes from the source layout to the destination layouts. Dorico Elements achieves this by copying system breaks, frame breaks, and note spacing changes, inputting additional system and frame breaks as required, and deleting any existing system breaks, frame breaks, and note spacing changes in the destination layouts.

Copying property settings to other layouts/frame chains

Local properties are layout- and frame chain-specific, meaning that by default, changing local properties for an item in one layout does not affect the same item in other layouts or other frame chains. You can copy the properties set on notes and items to all other layouts and frame chains in which they appear; for example, to show gradual dynamics with the same style in part layouts after changing their style in the full score layout.

PREREQUISITE

If you are in Engrave mode, **Graphic Editing** 3 is selected in the Engrave toolbox.

PROCEDURE

1. Select the notes or items whose properties you want to copy to other layouts. You can do this in Write mode and Engrave mode.

NOTE

Only the properties that are available in the current mode are copied.

2. Choose Edit > Propagate Properties.

RESULT

All properties set on the selected notes/items that are available in the current mode are copied to all layouts and frame chains in which those notes/items appear. For example, if you selected slurs in Write mode, their staff-relative placement and design settings are copied. If you selected them in Engrave mode, their slur end and control point positions are also copied.

TIP

If you know in advance that you want your changes to affect all layouts and frame chains, you can change the property scope before changing property settings.

RELATED LINKS

Engrave toolbox on page 490 Large selections on page 410 Local vs. global properties on page 647 Changing the property scope on page 648 Resetting the appearance of items on page 424 Resetting the position of items on page 425

Page templates

Page templates in Dorico Elements allow you to achieve consistent page formatting by applying the same arrangements of frames to multiple pages and in different layouts.

NOTE

You can set the page size, margins, page orientation, and staff size for each layout in **Layout Options**.

All pages in your scores and parts inherit their default formatting from page templates.

Dorico Elements provides different types of page templates so that there is appropriate page formatting for first pages independently of subsequent pages, as the first page typically includes additional information, such as the title, composer, and copyright. Dorico Elements uses tokens to display this additional information.

Page templates are contained in page template sets. By default, Dorico Elements provides separate page template sets for full score and part layouts. Page template sets are automatically applied to every layout that you create.

NOTE

- In Dorico Elements, you cannot edit page templates or create new ones; this is only available in Dorico Pro.
- Changing individual pages in layouts is considered a page template override in Dorico
 Elements. This includes, for example, editing the title or running header in Write mode.
 Pages with page template overrides are not automatically deleted, even if they are empty
 because the layout became shorter.

If you want to change the information shown at the tops of pages, that is, the title and running header text that you cannot select, we recommend that you do so in the **Project Info** dialog to avoid page template overrides.

RELATED LINKS

Types of page templates on page 631 Applying page template sets to layouts on page 586 Flow headings on page 634 Page formatting on page 583 Front matter on page 978

Page template sets

In Dorico Elements, page templates are provided as parts of page template sets. Page template sets group page templates and flow headings together, so there is suitable page formatting available for all possible situations in your project.

New projects contain the following page template sets by default:

- **Default Full Score**: Used for full score and custom score layouts by default.
- Default Part: Used for part layouts by default.

The default page template sets contain page templates for first (**First**) and subsequent (**Default**) pages.

Page template sets also contain flow headings that allow you to show flow titles above the start of each flow automatically, including when they start on the same page as a previous flow. The default page template sets each contain a single flow heading.

The default page template sets are applied automatically to the appropriate layouts in each new project. You can apply different page template sets to each layout independently.

NOTE

In Dorico Elements, you cannot edit page template sets or create new ones; this is only available in Dorico Pro.

RELATED LINKS

Applying page template sets to layouts on page 586 Flow headings on page 634

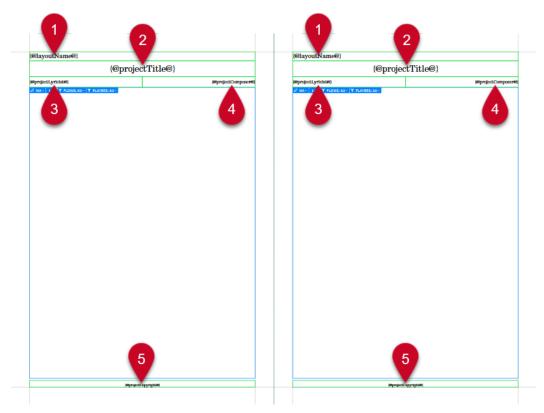
Types of page templates

Page template sets contain different types of page templates, which are used in different circumstances. For example, **First** page templates are usually used for the first page of music in a layout.

In Dorico Elements, there are the following types of page templates:

First

A page template that is usually used for the first page of music in a layout. It contains a single large music frame and multiple text frames to display information, such as the project title and composer.



First page template open in the page template editor

The **First** page template contains the following tokens in text frames:

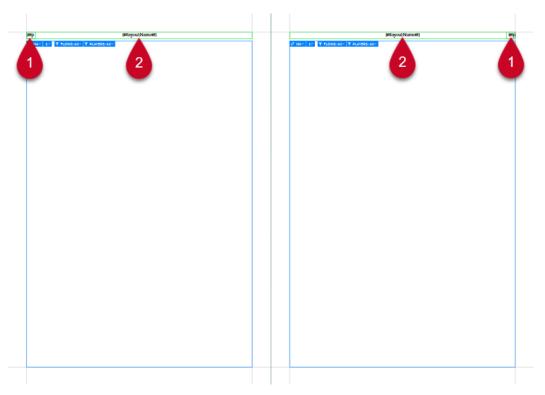
- 1 Layout name (Default Part page template set only)
- 2 Project title
- 3 Project lyricist
- 4 Project composer
- 5 Project copyright

TIP

You can edit the formatting of the paragraph styles used for tokens on page templates in the **Paragraph Styles** dialog. For example, layout names on **First** page templates use the **Layout name** paragraph style by default.

Default

A page template that is usually used for the second page of music onwards. It contains a single large music frame and text frames to show the running header and page number.



Default page template open in the page template editor

The **Default** page template contains the following tokens in text frames:

- 1 Page number
- **2 Default Full Score** page template set: **Flow title** (optionally **Project title** for projects created from the Hub with **Project will use multiple flows** deactivated)

Default Part page template set: Layout name

TIP

You can edit the formatting of the paragraph styles used for tokens on page templates in the **Paragraph Styles** dialog. For example, flow titles and layout names on **Default** page templates use the **Header** paragraph style by default.

RELATED LINKS

Tokens on page 638

Project Info dialog on page 74

Changing flow titles on page 184

Changing when the First page template is used on page 594

Hiding/Showing borders on layout names on page 982

Paragraph Styles dialog on page 739

Flow headings on page 634

Hub on page 68

Removing page template overrides

You can remove overrides that you have made to individual pages and return them to following the page template format.

Page template overrides include editing the title or running header on individual pages, rather than by changing the contents of fields in the **Project Info** dialog.

Removing overrides from empty pages deletes them from the layout.

PROCEDURE

- 1. In Engrave mode, open the layout whose page template overrides you want to remove.
- **2.** Optional: If you want to remove overrides from individual pages, select items on those pages.
- 3. Remove page template overrides in one of the following ways:
 - To remove overrides from selected pages only, choose Engrave > Remove Page
 Override(s).
 - To remove overrides from all pages, choose Engrave > Remove All Page Overrides.

RESULT

Any overrides you made to the page template format are removed from either the selected pages only or from all pages in the layout currently open in the music area. Empty pages that are considered overrides are deleted.

If you removed overrides from selected pages only, any other pages with overrides in the layout are unaffected.

RELATED LINKS

Hiding/Showing zones on page 43 Switching between layouts on page 42 Project Info dialog on page 74

Flow headings

Flow headings allow you to show the titles of flows immediately above their first system automatically. They function like templates, in much the same way as page templates, allowing the same flow heading formatting to be applied to multiple flows in different layouts.

Flow headings exist as part of page template sets. By default, Dorico Elements provides one flow heading in each page template set, which contains tokens to display the flow number and flow title; in a new project, this appears as "1. Flow 1". This is used automatically for all flow headings.

By default, flow headings use the **Flow Title** paragraph style, which you can edit in the **Paragraph Styles** dialog.

You can change the tokens included in flow headings; for example, if you want to remove flow numbers and only show flow titles.



A flow heading above the third flow in a part layout

Any changes you make in the **Edit Flow Heading** dialog are automatically reflected on the pages that use those flow headings. For example, if you delete a token, that token is removed from all flow headings in all layouts that use the same page template set, so long as the pages on which the flow headings appear do not have page template overrides.

Flow headings are automatically inserted inside music frames above the first system of the flow to which they apply, meaning they do not have a fixed vertical position on the page like other frames and follow the music if it moves. They also occupy vertical space within music frames. You can change the margins for the space above and below flow headings.

NOTE

Changing individual flow headings in layouts is considered a page template override in Dorico Elements. This includes, for example, deleting a token from a flow heading on one page, rather than in the **Edit Flow Heading** dialog. Pages with page template overrides no longer get updated if you edit the flow heading and are not automatically deleted, even if they are empty because the layout became shorter.

RELATED LINKS

Tacets on page 623

Hiding/Showing flow headings on page 595

Hiding/Showing information above flow headings on page 596

Removing page template overrides on page 633

Margins on page 598

Frames on page 636

Tokens on page 638

Paragraph Styles dialog on page 739

Adding titles on page 978

Customizing flow headings

You can change the tokens included in flow headings; for example, if you want to remove flow numbers and only show flow titles. This affects all flow headings in all layouts that use the same page template set; for example, customizing the flow heading in a part layout updates flow headings in all other part layouts.

PROCEDURE

- **1.** In Engrave mode, open a layout that uses the page template set containing the flow heading you want to customize.
- 2. Choose **Engrave** > **Edit Flow Heading** to open the **Edit Flow Heading** dialog.
- **3.** Change the tokens included in the flow heading.
- **4.** Click **OK** to save your changes and close the dialog.

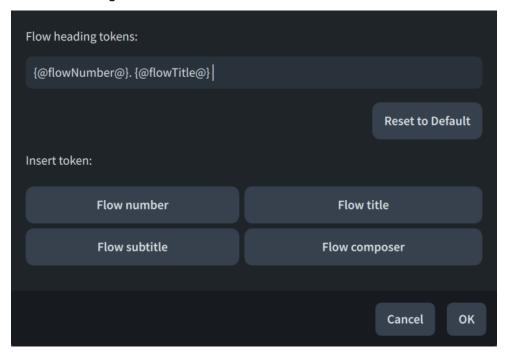
RELATED LINKS

Switching between layouts on page 42
Applying page template sets to layouts on page 586
Frames on page 636
Paragraph Styles dialog on page 739
Project Info dialog on page 74
Tokens on page 638

Edit Flow Heading dialog

The **Edit Flow Heading** dialog allows you to change the tokens included in flow headings; for example, if you want to remove flow numbers and only show flow titles. This affects all flow headings in all layouts that use the same page template set.

You can open the Edit Flow Heading dialog in Engrave mode by choosing Engrave > Edit
 Flow Heading.



The **Edit Flow Heading** dialog contains the following options:

Flow heading tokens

Displays the tokens included in the flow heading. You can enter text directly into this field, and click tokens to add them automatically.

Reset to Default

Resets the tokens in the flow heading.

Insert token

Allows you to add tokens to the flow heading.

RELATED LINKS

Engrave mode on page 489

Removing page template overrides on page 633

Project Info dialog on page 74

Tokens on page 638

Export File Names dialog on page 572

Frames

Dorico uses boxes called frames to position music, additional text, and graphics inside the margins of pages. In Dorico Elements, you cannot input or edit frames, but frames on page templates control the formatting of pages in your project.

In Dorico Elements, there are the following types of frames:

Music frames

Music frames display the music of selected players and flows or blank staves.



A music frame displaying the start of a piano piece

Text frames

Text frames display text, which you can enter directly or by using tokens.



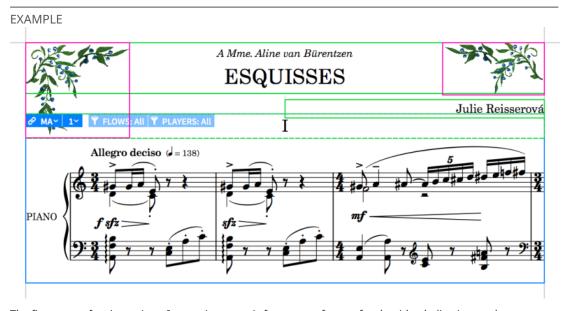
A text frame displaying a project title, "Sechs Lieder"

Graphics frames

Graphics frames display the images that you load into them, which can be in a variety of formats.



A graphics frame with image loaded



The first page of a piano piece. It contains a music frame, text frames for the title, dedication, and composer, a flow heading frame inside the top of the music frame, and graphics frames in the top corners.

RELATED LINKS
Frame breaks on page 620
Tokens on page 638
Page templates on page 630
Flow headings on page 634

Changing page margins on page 585

Tokens

Tokens are codes that you can use as substitutes for information stored in your project, such as titles, composers, and the time and date. This can reduce the risk of mistakes or outdated information appearing in your project. Tokens are also known as "wildcards" or "text codes".

For example, if you use a token for the title of your project, you can change the project title in the **Project Info** dialog as often as you want, and the project title in every layout in your project is updated automatically.

Tokens can refer to information in the **Project Info** dialog, including for the whole project or each flow individually. Tokens can also refer to the current time and date or the time and date the project was last saved.

NOTE

- You can only use tokens in text frames. You cannot use tokens in text items. Full text frame
 functionality is only available in Dorico Pro, but we have included the available tokens for
 your reference.
- Flow tokens refer to the nearest flow below the top edge of their text frame and on the same page. When the top edge of a text frame containing a flow token is in line with or above the top staff line of the first staff in a system, it then refers to that flow.
 - You can specify the flow number to which you want flow tokens to refer, such as **{@flow2title@}**. This always shows the specified flow, regardless of the token's position.
 - You can see the flow number of each flow in the **Flows** panel in Setup mode.
- You can access all the available tokens from the context menu when the cursor is inside a text frame. In the context menu, tokens are organized into submenus.

The following tokens are available in Dorico Elements:

General tokens

Description	Token
Project file name	{@projectfilename@}
Path to the project's save location, including the project file name	{@projectfilepath@}
Total duration of the project in minutes and seconds, using smart quotes	{@projectDuration@}
Total duration of the project in minutes and seconds, using straight quotes	{@projectDurationStraightQuotes@}
Total duration of the project in minutes and seconds, using primes	{@projectDurationPrimes@}

Player tokens

Description	Token
Player list	{@playerlist@}
Player names	{@playernames@}

Layout tokens

Description	Token
Layout name	{@layoutname@}
Layout number, as set in the Layouts panel in Setup mode	{@layoutnumber@}
Layout transposition	{@layouttransposition@}
NOTE	
Uses your instrument language setting.	

Staff label tokens

Staff label	Token
Full staff labels of the players in the current layout	{@staffLabelsFull@}
Abbreviated staff labels of the players in the current layout	{@staffLabelsShort@}

NOTE

- You can use staff label tokens as an alternative way to name part layouts, instead of using the default {@layoutName@} token shown at the top left of the first page in part layouts.
- Staff label tokens might not exactly match the appearance of staff labels shown before initial barlines; however, staff label tokens respect your per-layout options for how transpositions appear in staff labels.

Music symbol tokens

Music symbol	Token
Flat accidental: b	{@flat@}

Music symbol	Token
Sharp accidental: #	{@sharp@}
Natural accidental:	{@natural@}
Treble clef (G clef)	{@gClef@}
Bass clef (F clef)	{@fClef@}
Alto clef (C clef)	{@cClef@}
Fermata above	{@U+E4C0@}

TIP

- This list is not comprehensive, as you can enter the code point for any SMuFL symbol within a token. You can find the necessary code points in the SMuFL specification online.
- Music symbol tokens in text frames automatically use the **Music text** character style, which is set to Bravura Text by default.
- You can include music symbol tokens in fields in the **Project Info** dialog. For example, if you enter **Symphony in B{@flat@} major** into the **Title** field, the title displayed in text frames using the corresponding title token is Symphony in Bb major.
- You can also enter music symbols in text items and text frames using the **Insert Music Text** dialog.

Project/Flow information tokens

Field in the Project Info dialog	Token for Project page	Token for Flow pages
Title	{@projecttitle@}	{@flowtitle@}
Subtitle	{@projectsubtitle@}	{@flowsubtitle@}
Dedication	{@projectdedication@}	{@flowdedication@}
Composer	{@projectcomposer@}	{@flowcomposer@}
Arranger	{@projectarranger@}	{@flowarranger@}
Lyricist	{@projectlyricist@}	{@flowlyricist@}
Artist	{@projectartist@}	{@flowartist@}
Copyist	{@projectcopyist@}	{@flowcopyist@}
Publisher	{@projectpublisher@}	{@flowpublisher@}

Field in the Project Info dialog	Token for Project page	Token for Flow pages
Editor	{@projecteditor@}	{@floweditor@}
Copyright	{@projectcopyright@}	{@flowcopyright@}
Work number	{@projectworknumber@}	{@flowworknumber@}
Composer dates	{@projectcomposerdates@}	{@flowcomposerdates@}
Composition year	{@projectcompositionyear@}	{@flowcompositionyear@}
Other information	{@projectotherinfo@}	{@flowotherinfo@}

Flow tokens

Per-flow token function	Token
Flow number of the current flow, according to its position in the project	{@flownumber@}
Flow number of the current flow, according to its position in the current layout	{@flowInLayoutNumber@}
Flow number of the current flow shown in lower case Roman numerals, such as iii or xvi	{@flowNumberRomanLower@}
Flow number of the current flow shown in upper case Roman numerals, such as III or XVI	{@flowNumberRomanUpper@}
Duration of the current flow in minutes and seconds, using smart quotes	{@flowDuration@}
Duration of the current flow in minutes and seconds, using straight quotes	{@flowDurationStraightQuotes@}
Duration of the current flow in minutes and seconds, using primes	{@flowDurationPrimes@}
Duration of the specified flow "n" in minutes and seconds, such as {@flow3Duration@}	{@flownDuration@}, {@flownDurationStraightQuotes@} , or {@flownDurationPrimes@}

Page number tokens

Page number token function	Token
Page number	{@page@}
Total number of pages in the layout	{@pageCount@}
Number of this page within the current flow, counting from 1 for the first page of the flow and including pages with no displayed page number	{@flowPage@}
Total number of pages in the current flow	{@flowPageCount@}
The displayed page number on which the specified flow "n" begins, such as {@flow3FirstPage@}	{@flownFirstPage@}

NOTE

{@flowPage@} and **{@flowPageCount@}** tokens only consider the flow that is active at the beginning of the first system of the music frame closest to the top left corner of the page on which the tokens are used.

Time/Date tokens: project last saved

Time/Date description	Time/Date example	Token
Standard date and time string (locale dependent)	Sun Dec 31 11:10:12 2017	{@projectdate@}
Four-digit year	2017	{@projectdateyear@}
Two-digit year	17	{@projectdateyearshort@}
Full month name (locale dependent)	October	{@projectdatemonth@}
Short month name (locale dependent)	Oct	{@projectdatemonthshort@}
Month as a decimal number, range 1-12	10	{@projectdatemonthnum@}
Full weekday name (locale dependent)	Friday	{@projectdateday@}
Abbreviated weekday name (locale dependent)	Fri	{@projectdatedayshort@}

Time/Date description	Time/Date example	Token
Day of month as decimal number, range 1-31	24	{@projectdatedaynum@}
ISO 8601 date	2017-12-31	{@projectdateymd@}
Month day, year	December 31, 2017	{@projectdatemdy@}
Day month year	31 December 2017	{@projectdatedmy@}
Time representation (locale dependent)	11:10:12	{@projectdatetime@}
Hours:minutes, hour in 24- hour clock range	23:10	{@projectdatetimeHHMM@}
Hours:minutes:seconds, hour in 24-hour clock range	13:02:24	{@projectdatetimeHHMMSS@}
Hour in 24-hour clock range	23	{@projectdatetimehour24@}
Hour in 12-hour clock range	11	{@projectdatetimehour12@}
Minute as decimal number, range 00-59	10	{@projectdatetimeminute@}
Second as decimal number, range 00-59	44	{@projectdatetimesecond@}

Time/Date tokens: current time and date

Time/Date description	Time/Date example	Token
Standard date and time string (locale dependent)	Sun Dec 31 11:10:12 2017	{@date@}
Four-digit year	2017	{@dateyear@}
Two-digit year	17	{@dateyearshort@}
Full month name (locale dependent)	October	{@datemonth@}
Short month name (locale dependent)	Oct	{@datemonthshort@}
Month as a decimal number, range 1-12	10	{@datemonthnum@}

Time/Date description	Time/Date example	Token
Full weekday name (locale dependent)	Friday	{@dateday@}
Abbreviated weekday name (locale dependent)	Fri	{@datedayshort@}
Day of month as decimal number, range 1-31	24	{@datedaynum@}
ISO 8601 date	2017-12-31	{@dateymd@}
Month day, year	December 31, 2017	{@datemdy@}
Day month year	31 December 2017	{@datedmy@}
Time representation (locale dependent)	11:10:12	{@datetime@}
Hours:minutes, hour in 24- hour clock range	23:10	{@datetimeHHMM@}
Hours:minutes:seconds, hour in 24-hour clock range	13:02:24	{@datetimeHHMMSS@}
Hour in 24-hour clock range	23	{@datetimehour24@}
Hour in 12-hour clock range	11	{@datetimehour12@}
Minute as decimal number, range 00-59	10	{@datetimeminute@}
Second as decimal number, range 00-59	44	{@datetimesecond@}

RELATED LINKS

Project Info dialog on page 74 Player, layout, and instrument names on page 176 Flow names and flow titles on page 183

Renumbering layouts on page 175

Reordering flows on page 169

Instrument transpositions in staff labels on page 1292

Changing the language for instrument names on page 56

Editing layout transposition text on page 981

Exporting text on page 101

Paragraph Styles dialog on page 739

Music frame chains

A music frame chain is a collection of music frames that show the same selection of music in a set order, often in sequence. Music frame chains can include any number of frames, including only a single music frame.

The default page templates contain a single frame chain that is set to display all flows and all players in the layout. Therefore, Dorico Elements automatically creates enough pages and frames to display all flows in all the layouts that use those page templates.

NOTE

In Dorico Elements, you cannot create new frame chains or change the flows and players assigned to frame chains; this is only available in Dorico Pro.

RELATED LINKS

Types of page templates on page 631

Properties

Properties are settings that apply to individual notes and items and allow you to edit them, such as by changing their appearance or position. You can access properties in the Properties panel.

Properties can affect items only in the current layout and frame chain, known as "local properties", or in all layouts and frame chains, known as "global properties".

Many properties also have equivalent default settings available that control the appearance or position of all instances of the corresponding type of note or notation. You can access the available default settings in **Notation Options**.

RELATED LINKS

Notation Options dialog on page 730

Properties panel

The Properties panel provides options that allow you to edit individual notes and notations, such as by changing their appearance or position. It is located in the lower zone at the bottom of the window in Write mode and Engrave mode.

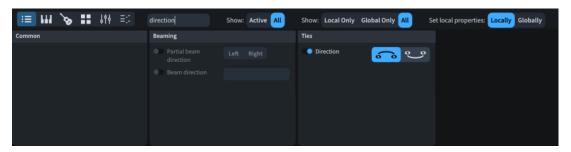
• You can show the Properties panel by showing the lower zone, then clicking **Properties** in the lower zone toolbar.

The Properties panel contains a group of properties for each notation item. When you select a note or item in the music area, the Properties panel displays the groups and options that you might require to edit the selected note or item. If there are more available groups than can fit in the panel simultaneously, you can scroll to the right/left along the displayed groups.

All the properties that are available in the Properties panel in Write mode are also available in Engrave mode, but additional properties in Engrave mode allow you to edit items in more detail.

NOTE

- If you select multiple different types of notation items, only the groups that they have in common are displayed. For example, if you select a slur, the **Common** and **Slurs** groups are displayed in the Properties panel. However, if you select a slur and a note, only the **Common** group is displayed.
- If the property scope is set to **Locally**, changing local properties only affects the current layout and frame chain. You can set the property scope to **Globally** if you want subsequent changes to local properties to affect all layouts and frame chains. You can also copy property changes to other layouts and frame chains later.
- In Write mode, you can only change the properties of complete notes and items. For example, you can only change the line style of whole pedal lines, even if they extend across multiple systems. In Engrave mode, you can change individual parts of notes and items separately; for example, the curvature direction of a single tie within a tie chain.
- You can activate properties by clicking their activation switch or property name.



Properties panel in Write mode, filtered by a search term

The Properties panel toolbar contains the following options:

Search

Allows you to filter properties according to your entry.

Show (active status)

Allows you to filter properties according to their activated status.

- Active: Shows only activated properties.
- All: Shows all properties.

Show (property scope)

Allows you to filter properties according to their property scope.

- Local Only: Shows only local properties.
- Global Only: Shows only global properties.
- All: Shows all properties.

Set local properties

Allows you to change the scope of subsequent local properties you change.

- Locally: Local properties only take effect locally.
- Globally: Local properties take effect globally.

RELATED LINKS

Hiding/Showing zones on page 43

Copying property settings to other layouts/frame chains on page 629

Changing your preferred unit of measurement on page 50

Selecting handles on items on page 503

Resetting the appearance of items on page 424

Resetting the position of items on page 425

Local vs. global properties

Properties can affect items either in the current layout and frame chain only or in all layouts and frame chains. This allows you to have the same items appear differently in different layouts, such as if you want to show gradual dynamics as hairpins in part layouts but as "cresc." text in full score layouts.

Local properties

Local properties are layout- and frame chain-specific. By default, changing local properties for an item in one layout does not affect the same item in other layouts or other frame chains. This is particularly useful for local properties that control the graphical position of items, as usually this needs to be different in the part layout compared to the full score.

You can force local properties to apply globally by changing the property scope in the Properties panel to **Globally** before changing their setting. Local properties that have been set globally appear with a bolder font in the Properties panel than local properties that have been set locally. You can also show only local properties in the Properties panel by using the property scope filter.

NOTE

Changing local properties with the property scope set to **Globally** overrides any local settings for those properties for the selected notes or items in other layouts.

Global properties

Global properties affect items in all layouts and frame chains, including new layouts you subsequently create. They appear with a bolder font in the Properties panel than local properties. You can also show only global properties in the Properties panel by using the property scope filter.

RELATED LINKS
Layouts on page 170
Music frame chains on page 645
Copying property settings to other layouts/frame chains on page 629

Changing the property scope

You can change the property scope of local properties; for example, if you want the subsequent properties you change to affect all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.

PROCEDURE

- In the Properties panel, choose one of the following options for **Set local properties**:
 - Locally
 - Globally

RESULT

The property scope is changed. All subsequent local properties you change take effect only in the current layout and frame chain if you chose **Locally**, or in all layouts and frame chains if you chose **Globally**.

NOTE

- The property scope includes local properties that control the graphical position of items.
 Because it is common for items to require different graphical positions in different layouts, we recommend that you change the property scope to **Globally** only when required.
- This only applies to subsequent properties you change. If you want to change the property scope of existing properties, you can copy property settings to other layouts and frame chains.
- You can change the default property scope for all future projects on the **Note Input and Editing** page in **Preferences**.

RELATED LINKS

Copying property settings to other layouts/frame chains on page 629 Preferences dialog on page 57

Changing values in numeric value fields

You can change the values in numeric value fields in multiple different ways, such as doubling or halving the existing values. In Dorico Elements, value fields are most commonly used in the Properties panel and in options dialogs.

Numeric value fields have up/down buttons. They are also known as "spin boxes".



A numeric value field in the Properties panel

PREREQUISITE

For value fields that are only accessible when their corresponding property/option is activated, you have activated their property/option.

PROCEDURE

- Change the value in numeric value fields in any of the following ways:
 - Enter a number directly.
 - To increase/decrease the value by 1/8 space, click the up/down buttons.
 - To increase/decrease the value by 1/32 space, Ctrl/Cmd Shift -click the up/down buttons.
 - To increase/decrease the value by 1/2 space, **Shift** -click the up/down buttons.
 - To increase/decrease the value by 1 space, **Ctrl/Cmd**-click the up/down buttons.
 - To increase the current value by a specific amount, enter += followed by the amount into the spin box. For example, enter +=2 to increase the current value by two.
 - To decrease the current value by a specific amount, enter -= followed by the amount into the spin box. For example, enter -= **3.5** to decrease the current value by three and a half.
 - To multiply the current value by a specific amount, enter * followed by the amount into the spin box. For example, enter *3 to triple the current value.
 - To divide the current value by a specific amount, enter / followed by the amount into the spin box. For example, enter /2 to halve the current value.

NOTE

You must replace the existing value with your calculation entry.

RELATED LINKS

Options dialogs in Dorico Elements on page 26 Changing your preferred unit of measurement on page 50

Key Editor

The Key Editor is a MIDI editor that comprises multiple components. It allows you to edit notes and other playback items, including note velocity, MIDI CC, and tempo. You can access the Key Editor in the Key Editor panel in the lower zone, which you can show alongside layouts in Write mode and the track overview in Play mode.

The Key Editor contains the following editors, which you can show in different combinations:

- Piano roll editor
- Percussion editor
- Playing Techniques editor
- Velocity editor
- Dynamics editor
- MIDI Pitch Bend editor
- MIDI CC editor
- Tempo editor

The Key Editor also provides different tools and controls, according to the requirements of each editor.

RELATED LINKS

Piano roll editor on page 661
Percussion editor on page 663
Playing Techniques editor on page 673
Velocity editor on page 674
Dynamics editor on page 677
MIDI Pitch Bend editor on page 683
MIDI CC editor on page 684
Tempo editor on page 689

Key Editor panel

The Key Editor panel allows you to view and edit notes, either in a continuous piano roll for pitched instruments or in the percussion editor for unpitched instruments. It is located in the lower zone at the bottom of the window in Write mode and Play mode.

• You can show the Key Editor panel by showing the lower zone, then clicking **Key Editor** in the lower zone toolbar.

In Write mode, you can show the Key Editor panel alongside layouts in the music area. In Play mode, you can show the Key Editor panel alongside the track overview.

By default, the Key Editor displays the instrument on whose staff you have selected an item. However, you can also select the instruments you want to show in the Key Editor manually.



1 Key Editor panel toolbar

Contains tools that allow you to select and edit notes and items in the Key Editor.

2 Key Editor ruler

Displays bar numbers and shows beat divisions that match the current rhythmic grid resolution.

3 Playhead

Shows the current rhythmic position in playback.

4 Header

Displays the name of each editor and can contain further options, according to the editor.

5 Primary editor

Contains either the piano roll editor, percussion editor, or Tempo editor, depending on your most recent selection and whether the Key Editor is locked.

6 Playing Techniques editor

Displays where playing techniques are in use for the corresponding instrument or voice. Only available when a single instrument/voice is shown in the Key Editor.

7 Additional editors

You can add/close multiple additional editors below the piano roll/percussion editor, such as the Velocity and MIDI CC editors. You can save configurations of editors for use in other projects.

8 Add Editor

Allows you to add additional editors to the Key Editor.

9 Presets

Allows you to save, apply, and delete Key Editor configurations.

10 Zoom controls

Allow you to change the zoom manually, such as making notes wider and/or taller.

11 Scroll bars

Allow you to scroll vertically and horizontally in the Key Editor.

RELATED LINKS

Hiding/Showing zones on page 43 Track overview on page 506

Changing the Key Editor rhythmic grid resolution on page 658 Played vs. notated note durations on page 671 Key Editor configurations on page 698 Voices on page 1416

Key Editor panel toolbar

The Key Editor panel toolbar contains tools that allow you to select and edit notes and items in the Key Editor. It is located at the top of the Key Editor panel in the lower zone.

Select



Allows you to select items in the Key Editor, such as notes in the piano roll editor or velocity bars in the Velocity editor, including by clicking and dragging marquee selections.

You can also select **Select** by pressing **Shift-Alt/Opt-1**.

Draw



Allows you to input notes in the piano roll and percussion editors. The end positions and minimum durations of notes follow the current Key Editor rhythmic grid resolution.

You can also select **Draw** by pressing **Shift-Alt/Opt-2**.

Drumstick



Allows you to set a different rhythmic duration for each unpitched percussion instrument independently, and input sequences of notes with the corresponding duration by clicking and dragging in the percussion editor.

Also allows you to delete notes by clicking them.

Only available in the percussion editor.

You can also select **Drumstick** by pressing **Shift-Alt/Opt-3** when the percussion editor is shown.

Line



Allows you to draw straight lines between two points. Not available in the piano roll editor or percussion editor.

Transform



Allows you to make Transform selections and use Transform controls on the selected range. Only available in the Velocity and MIDI CC editors.

Sync Region



Copies data from the primary track to secondary tracks. Only available in the Dynamics and MIDI CC editors, and when multiple instruments are shown in the Key Editor.

Delete



Deletes the selected items.

You can also delete selected items by pressing **Backspace or Delete**.

Played Durations



Allows you to change when notes start/end in playback without affecting their notated durations. Displays the played durations of notes as a rectangle, above a thinner line that shows their notated duration.

Notated Durations



Allows you to change the rhythmic duration of notes, which affects the position and notation of those notes. Displays the full, notated durations of notes as rectangles.

Lock Played Durations



Allows you to control how changing notated durations impacts on played durations. Only available when **Notated Durations** \square is selected.

- When Lock Played Durations is activated, played durations retain their original positions/durations, regardless of the new notated positions/durations of the corresponding notes.
- When **Lock Played Durations** is deactivated, played durations move with their corresponding notes and retain their start/end offsets relative to them.

Rhythmic Grid



Allows you to change the rhythmic grid resolution for the Key Editor. The Key Editor rhythmic grid resolution affects the minimum duration of the notes you input, the number of grid lines, and certain aspects of inputting and editing, such as the amount by which you can drag notes to the right/left. The button updates to show the current rhythmic grid resolution.

Playing Techniques



Hides/Shows the Playing Techniques editor.

Voice selector



Allows you to select the voice whose notes you want to appear highlighted in the piano roll and into which you want to input notes. Automatically updates according to your current selection.

When multiple instruments are shown in the Key Editor, only voices belonging to the primary instrument are available.

Resize Lower Zone



Allows you to change the height of the lower zone.

TIP

- You can right-click and hold in the Key Editor to access tools in the quick tool selector.
- You can also select tools by pressing Shift-Alt/Opt-1 to Shift-Alt/Opt-6. The tool selected
 by each key command depends on the tools currently available in the Key Editor panel
 toolbar, counted from left to right.

RELATED LINKS

Piano roll editor on page 661
Percussion editor on page 663
Playing Techniques editor on page 673
Velocity editor on page 674
Dynamics editor on page 677
MIDI CC editor on page 684
Transform tool on page 696

Showing instruments in the Key Editor

You can show specific instruments in the Key Editor, change the primary instrument, and lock the Key Editor to keep those instruments in view. For example, if you want to draw MIDI points for all string instruments in your project simultaneously.

By default, the Key Editor is unlocked and follows the current selection in either the music area or track overview.

For example, if your most recent selection was a Flute note or the Flute track, that Flute is shown in the piano roll editor. If your most recent selection was a tempo mark or the Tempo track, the Tempo editor is shown in the Key Editor, provided you had not already added the Tempo editor manually.

PREREQUISITE

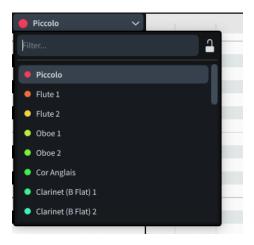
- The lower zone is shown.
- **Key Editor** is selected in the lower zone toolbar.
- Your most recently selected item belonged to an instrument, so that either the piano roll or percussion editor is shown in the Key Editor.

NOTE

You cannot add editors to the Key Editor when the Tempo editor is the primary editor.

PROCEDURE

1. In the piano roll/percussion editor header, click the instrument menu, then select the instrument you want to show as the primary instrument.

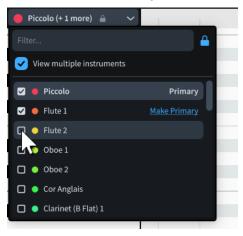


- 2. To lock the Key Editor and keep the selected instrument in view, click **Lock Key Editor** .
- To show multiple instruments in the Key Editor simultaneously, activate View multiple instruments.

NOTE

You can only show multiple pitched instruments in the Key Editor. You cannot show multiple unpitched percussion instruments, or unpitched percussion instruments in addition to pitched instruments.

4. Activate each instrument you want to show in the Key Editor.



5. Optional: Click **Make Primary** beside the instrument you want to designate as the new primary instrument.

RESULT

The Key Editor shows the selected instruments. If you locked the Key Editor, including if you optionally selected multiple instruments, it no longer follows your most recent selection.

TIP

You can assign key commands for the following commands on the **Key Commands** page in **Preferences**:

• Lock Key Editor to Selection automatically shows in the Key Editor the instruments on whose staves you have selected notes/items in the music area, and locks the Key Editor to that selection.

Toggle Key Editor Locked View locks/unlocks the Key Editor.

AFTER COMPLETING THIS TASK

- You can view, input, and edit notes, dynamic points, and MIDI points for all the instruments shown in the Key Editor.
- You can copy dynamic and MIDI points from the primary instrument to secondary instruments.

RELATED LINKS

Hiding/Showing zones on page 43

Piano roll editor on page 661

Percussion editor on page 663

Enabling independent voice playback on page 530

Copying dynamic points to other instruments on page 682

Copying MIDI points to other instruments on page 688

Changing the height of the Key Editor

You can change the height of the whole Key Editor and each editor within it. For example, you can make the piano roll editor taller when inputting notes, and make the Velocity editor taller when changing note velocity.

PREREQUISITE

- The lower zone is shown.
- **Key Editor** sis selected in the lower zone toolbar.

PROCEDURE

- Do one of the following:
 - To change the height of the whole Key Editor, click and drag **Resize Lower Zone** or the top edge of the lower zone upwards/downwards.
 - To change the height of individual editors, click and drag their splitters ————— upwards/downwards. When the mouse pointer is in the correct position, it appears as a split arrow.

TIP

You can assign a key command for **Cycle Lower Zone Size** on the **Key Commands** page in **Preferences**, which makes the lower zone fill 25%, 50%, then 75% of the project window.

RELATED LINKS

Hiding/Showing zones on page 43

Key Commands page in the Preferences dialog on page 58

Opening multiple project windows on page 48

Zooming in/out of the Key Editor

You can change the zoom level in the Key Editor; for example, you can zoom in vertically and horizontally to make notes appear taller and wider in the piano roll editor. This does not affect the height of the Key Editor.

PREREQUISITE

- The lower zone is shown.
- Key Editor si is selected in the lower zone toolbar.

PROCEDURE

- **1.** Zoom in horizontally in any of the following ways:
 - Press H.
 - Click **Zoom In =** at the bottom of the Key Editor.
 - Click in the Key Editor ruler and drag upwards.
 - **Ctrl/Cmd**-scroll upwards in the Key Editor ruler.
- 2. Zoom out horizontally in any of the following ways:
 - Press G.
 - Click Zoom Out = at the bottom of the Key Editor.
 - Click in the Key Editor ruler and drag downwards.
 - Ctrl/Cmd -scroll downwards in the Key Editor ruler.
- **3.** Zoom in vertically in any of the following ways:
 - Press Ctrl/Cmd-Shift-H.
 - Click Zoom In on the right of the Key Editor.
 - **Ctrl/Cmd**-scroll upwards in the area to the left of the piano roll/percussion editor.
- **4.** Zoom out vertically in any of the following ways:
 - Press Ctrl/Cmd-Shift-G.
 - Click **Zoom Out** on the right of the Key Editor.
 - **Ctrl/Cmd** -scroll downwards in the keyboard to the left of the piano roll.

RELATED LINKS

Hiding/Showing zones on page 43 Zooming in/out of tracks on page 522 Zooming in/out of the music area on page 431

Scrolling in the Key Editor

You can scroll in any direction in the Key Editor; for example, to view higher/lower notes in the piano roll editor, or MIDI points in later bars in the MIDI CC editor.

PREREQUISITE

- The lower zone is shown.
- **Key Editor** is selected in the lower zone toolbar.

PROCEDURE

- In the Key Editor, scroll in any of the following ways:
 - Click and drag the sliders on the right and bottom edges of the Key Editor.
 - Swipe in any direction on a touchpad.
 - To scroll vertically when using a mouse wheel, scroll upwards/downwards.
 - To scroll horizontally when using a mouse wheel, Shift-scroll upwards/downwards.

Changing the Key Editor rhythmic grid resolution

You can change the rhythmic grid resolution used for the Key Editor, independently of the rhythmic grid used outside of the Key Editor. The Key Editor rhythmic grid resolution affects the minimum duration of the notes you input, the number of grid lines, and certain aspects of inputting and editing, such as the amount by which you can drag notes to the right/left.

PREREQUISITE

- The lower zone is shown.
- **Key Editor** is selected in the lower zone toolbar.
- If you want to use key commands, your most recent selection must have been in the Key Editor panel.

PROCEDURE

- Change the Key Editor rhythmic grid resolution in any of the following ways:
 - In the Key Editor panel toolbar, click Rhythmic Grid and choose the resolution you want.
 - To decrease the rhythmic grid resolution, press Alt/Opt-].
 - To increase the rhythmic grid resolution, press Alt/Opt-[.

RELATED LINKS

Hiding/Showing zones on page 43 Rhythmic grid on page 212 Notes in the Key Editor on page 661

Adding/Closing editors in the Key Editor

You can add/close all types of editors in the Key Editor, excluding the piano roll and percussion editors. You can also change the editor type shown in an existing editor.

PREREQUISITE

- The lower zone is shown.
- **Key Editor** is selected in the lower zone toolbar.
- Your most recently selected item belonged to an instrument, so that either the piano roll or percussion editor is shown in the Key Editor.

NOTE

You cannot add editors to the Key Editor when the Tempo editor is the primary editor.

PROCEDURE

- Change the editors shown in the Key Editor in one of the following ways:
 - To add a new editor, click **Add Editor !** at the bottom left of the Key Editor.
 - To change the editor type shown in an existing editor, click the menu in its header and select an editor from the menu.
 - To close editors, click **Close Editor** x in their headers.

AFTER COMPLETING THIS TASK

You can save Key Editor configurations for use in other projects.

RELATED LINKS

Hiding/Showing zones on page 43 Key Editor configurations on page 698

Selecting items in the Key Editor

You can select notes and items, such as MIDI or dynamic points, in the Key Editor in the same ways.

PREREQUISITE

- The lower zone is shown.
- **Key Editor** is selected in the lower zone toolbar.
- You have selected the instruments that you want to show in the Key Editor.
- You have added the editors whose points you want to select.

- 1. Select the **Select** tool in any of the following ways:
 - Press Shift-Alt/Opt-1.
 - In the Key Editor panel toolbar, click **Select \rightarrow**.
 - In the Key Editor, right-click and hold to show the quick tool selector, move the mouse pointer to **Select**, then release the mouse.
- **2.** Select notes or items in any of the following ways:
 - Click a single note or point.
 - Ctrl/Cmd -click or Shift -click multiple notes or points.
 - In one editor, click and drag across an area where you want to select everything.

 A blue rectangle indicates which notes or points will be selected when you release the mouse. We recommend that you click in one corner of the area you want to select and drag diagonally across to the other corner.

Copying and pasting points in the Key Editor

You can copy and paste points in the Key Editor, including to other editors and repeating them directly after themselves in the same editor. For example, if you want to copy a pattern of MIDI points between different MIDI controllers.

NOTE

These steps describe copying/pasting points within/between editors belonging to the same instrument. However, you can also copy/paste dynamic and MIDI points between instruments.

PREREQUISITE

- The lower zone is shown.
- **Key Editor** is selected in the lower zone toolbar.
- **Select** is selected in the Key Editor panel toolbar.
- You have selected the instruments that you want to show in the Key Editor.
- You have added the editors whose points you want to copy/paste.

PROCEDURE

- 1. In one of the open editors, select the points you want to copy.
- 2. Copy the selected points in any of the following ways:
 - Press Ctrl/Cmd-C.
 - Choose **Edit** > **Copy**.
- **3.** Move the playhead to the position to which you want to paste the selected points.
- **4.** Select the header of the editor into which you want to paste the selected points.
- **5.** Paste the selected points in any of the following ways:
 - Press Ctrl/Cmd-V.
 - Choose Edit > Paste.

RESULT

The selected points are copied to the selected position and editor, without deleting them from their original positions. They apply to all instruments shown in the Key Editor.

NOTE

- All the points of gradual dynamics and combined/force dynamics input in Write mode are copied, even if you only selected a single point.
- You can also repeat points immediately after themselves by selecting them, then pressing **R**. In each repetition, the earliest selected point replaces the last selected point.
- You can also copy points by selecting them, then **Alt/Opt**-dragging them to the position where you want to paste them.

RELATED LINKS

Showing instruments in the Key Editor on page 654
Moving the playhead on page 523
Copying dynamic points to other instruments on page 682
Copying MIDI points to other instruments on page 688

Deleting points in the Key Editor

You can delete selected points from multiple editors simultaneously.

PREREQUISITE

- The lower zone is shown.
- **Key Editor** is selected in the lower zone toolbar.
- **Select** is selected in the Key Editor panel toolbar.
- You have selected the instruments that you want to show in the Key Editor.
- You have added the editors whose points you want to delete.

PROCEDURE

1. In any of the open editors, select the points you want to delete.

TIP

You can select points in multiple editors simultaneously.

- 2. Delete the selected points in any of the following ways:
 - Press Backspace or Delete.
 - In the Key Editor panel toolbar, click **Delete 1**.

RESULT

The selected points are deleted.

Deleting dynamic points that overrode dynamics input in Write mode reverts those dynamics to their default points. Deleting the points of dynamics input in Write mode also deletes the corresponding dynamics.

Deleting tempo points also deletes their corresponding tempo marks or tempo mark signposts from layouts.

RELATED LINKS

Tempo marks on page 1313 Dynamics on page 903

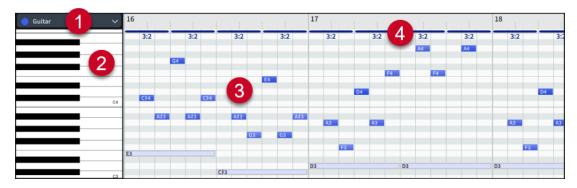
Notes in the Key Editor

In the Key Editor, notes appear as colored rectangles in either the piano roll editor for pitched instruments, or the percussion editor for unpitched percussion instruments and percussion kits.

Piano roll editor

The piano roll editor displays MIDI notes for pitched instruments in a continuous sequence. It is located in the Key Editor in the lower zone.

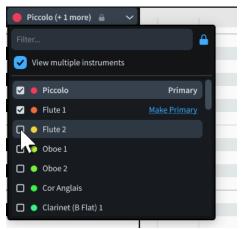
• You can show the piano roll editor by showing a pitched instrument in the Key Editor.



The piano roll editor comprises the following:

1 Instrument menu

Allows you to select the instruments you want to show in the piano roll editor, and to change the primary instrument when multiple instruments are shown.



2 Piano keyboard

Provides a reference for pitches.

3 Piano roll

Displays the notes belonging to the instruments shown in the Key Editor. The horizontal position of notes indicates their rhythm, and their width indicates their duration. The vertical position of notes indicates their pitch. When notes are sufficiently tall and wide, pitches are also displayed inside each note.

Instruments are automatically assigned a color according to their player order in the current layout, so that you can tell them apart more easily. This color is used consistently for the corresponding instrument, including in the Mixer and Key Editor.

When multiple instruments are shown, notes belonging to the primary instrument appear solid and bold in the piano roll editor, while notes belonging to secondary instruments appear with gray outlines and pastel colors.

4 Tuplets

Bars and ratios at the top of the piano roll editor indicate tuplets in the active voice.

You can input and edit notes in the piano roll editor, including moving and transposing them. This also updates their notation in all applicable layouts.

RELATED LINKS

Key Editor panel on page 650 Showing instruments in the Key Editor on page 654 Played vs. notated note durations on page 671 Enabling independent voice playback on page 530

Track Inspector on page 507

Mixer on page 700

Tuplets on page 1386

Voices on page 1416

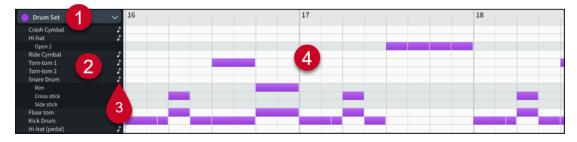
Changing the middle C numbering convention on page 50

MIDI trigger regions on page 559

Percussion editor

The percussion editor displays MIDI notes for unpitched percussion instruments in a continuous sequence. It is located in the Key Editor in the lower zone.

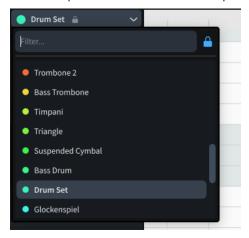
• You can show the percussion editor by showing an unpitched percussion instrument or percussion kit in the Key Editor.



The percussion editor comprises the following:

1 Instrument menu

Allows you to select the instrument you want to show in the percussion editor. You can only show one percussion kit or individual percussion instrument at a time.



2 Percussion instrument names and playing techniques

In the percussion editor, each unpitched percussion instrument has its own row, including when they are in a percussion kit. Alternative playing techniques are listed beneath the corresponding unpitched percussion instrument.

3 Percussion Rhythmic Grid

Allows you to set a different default note duration for each unpitched percussion instrument independently. Only available when the **Drumstick** tool is selected.

4 Percussion editor

Displays the notes belonging to the instruments shown in the Key Editor. The vertical position of notes indicates their instrument and playing technique, where applicable. The horizontal position of notes indicates their rhythm, and their width indicates their duration.

Instruments are automatically assigned a color according to their player order in the current layout, so that you can tell them apart more easily. This color is used consistently for the corresponding instrument, including in the Mixer and Key Editor. Percussion kits are assigned a single color for the whole kit.

RELATED LINKS

Key Editor panel on page 650

Showing instruments in the Key Editor on page 654

Percussion maps on page 763

Played vs. notated note durations on page 671

Track Inspector on page 507

Mixer on page 700

Playing techniques for unpitched percussion instruments on page 1398

MIDI trigger regions on page 559

Inputting notes in the Key Editor

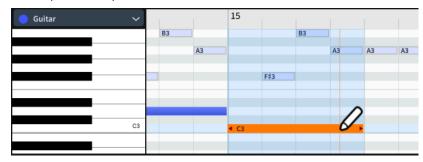
You can input notes in the Key Editor, in either the piano roll editor for pitched instruments, or in the percussion editor for unpitched percussion instruments and percussion kits. Notes you input in the Key Editor also appear in all applicable layouts.

PREREQUISITE

- The lower zone is shown.
- **Key Editor** is selected in the lower zone toolbar.
- You have selected the instruments that you want to show in the Key Editor.
- If you want to input notes into a specific voice for an instrument, you have created that voice in Write mode and input at least one note into it.
- You have chosen the appropriate rhythmic grid resolution.

- **1.** Optional: If you want to input notes into a specific voice, select it from the voice selector in the Key Editor panel toolbar.
- 2. Select the **Draw** tool in any of the following ways:
 - Press Shift-Alt/Opt-2.
 - In the Key Editor panel toolbar, click Draw .
 - In the Key Editor, right-click and hold to show the quick tool selector, move the mouse pointer to **Draw**, then release the mouse.
- 3. Click **Rhythmic Grid** and choose the default note duration you want.
- **4.** Input notes in any of the following ways:
 - To input single notes with the default note duration, click in the piano roll/percussion editor at each rhythmic position where you want to input a note.
 - To input notes with any duration, click and drag horizontally in the piano roll/percussion editor at the required pitch position and for the required duration.

As you drag, highlights help you to reference durations against the ruler, pitches against the piano keyboard in the piano roll editor, and notes against instruments/playing techniques in the percussion editor.



RESULT

For pitched instruments, notes are input at the pitches indicated by the piano keyboard on the left of the piano roll, and into the active voice indicated by the voice selector in the Key Editor panel toolbar.

For unpitched percussion instruments and kits, notes are input into the instrument in the corresponding row of the percussion editor.

When you click once, notes are input with the default note duration, set by the Key Editor rhythmic grid resolution. When you click and drag, their duration is determined by the width of your drag.

AFTER COMPLETING THIS TASK

You can change both the notated and played durations of notes.

RELATED LINKS

Hiding/Showing zones on page 43

Key Editor panel on page 650

Showing instruments in the Key Editor on page 654

Changing the Key Editor rhythmic grid resolution on page 658

Changing the middle C numbering convention on page 50

Changing the voice of existing notes on page 453

Enabling independent voice playback on page 530

Inputting notes using the Drumstick tool

The **Drumstick** tool allows you to input notes with a different rhythmic duration for each unpitched percussion instrument independently.

PREREQUISITE

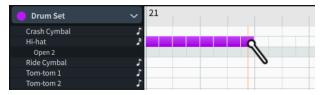
- The lower zone is shown.
- **Key Editor** is selected in the lower zone toolbar.
- You have selected the unpitched percussion instrument or percussion kit that you want to show in the Key Editor.

- 1. Select the **Drumstick** tool in any of the following ways:
 - Press Shift-Alt/Opt-3.
 - In the Key Editor panel toolbar, click **Drumstick \screen**.

- In the Key Editor, right-click and hold to show the quick tool selector, move the mouse pointer to **Drumstick**, then release the mouse.
- **2.** In the percussion editor header, click **Percussion Rhythmic Grid** for each instrument and choose its required note duration.

For example, you might set quarter notes for the kick drum, and eighth notes for the hi-hat.

- **3.** Input notes in any of the following ways:
 - To input single notes, click in the percussion editor at each rhythmic position where you want to input a note.
 - To input multiple notes, click and drag horizontally in the percussion editor.



RESULT

Notes are input with the note duration set for the corresponding instrument, either a single note per click, or to fill the region in which you clicked and dragged.

TIP

When **Drumstick** is selected, you can also delete notes by clicking them.

Moving notes in the Key Editor

You can move notes rhythmically in the Key Editor. This also affects how the selected notes are notated in all applicable layouts.

PREREQUISITE

- The lower zone is shown.
- **Key Editor** is selected in the lower zone toolbar.
- You have selected the instruments that you want to show in the Key Editor.
- You have chosen the appropriate rhythmic grid resolution.

- 1. In the Key Editor panel toolbar, click **Notated Durations** to show notated note durations.
- 2. Activate/Deactivate Lock Played Durations 👞
- 3. In the piano roll/percussion editor, select the notes you want to move rhythmically.
- **4.** Move the selected notes in any of the following ways:
 - To move them to the right, press Alt/Opt-Right Arrow.
 - To move them to the left, press Alt/Opt-Left Arrow.
 - Click and drag them to the right/left.

As you drag, highlights help you to reference durations against the ruler, pitches against the piano keyboard in the piano roll editor, and notes against instruments/playing techniques in the percussion editor.

RESULT

The selected notes are moved to new rhythmic positions. If you selected multiple notes, they are moved together as a block.

If you activated **Lock Played Durations** , played durations are not moved; they retain their original positions.

Key commands move notes according to the current rhythmic grid resolution. Clicking and dragging moves notes according to the current Key Editor rhythmic grid resolution.

RELATED LINKS

Played vs. notated note durations on page 671 Rhythmic grid on page 212 Changing the Key Editor rhythmic grid resolution on page 658 Selecting items in the Key Editor on page 659 Requantizing notes on page 261

Lengthening/Shortening notes in the Key Editor

You can change the notated duration of notes in the Key Editor. This also affects how the selected notes are notated in all applicable layouts.

PREREQUISITE

- The lower zone is shown.
- **Key Editor** sis selected in the lower zone toolbar.
- You have selected the instruments that you want to show in the Key Editor.
- You have chosen the appropriate rhythmic grid resolution.

- 1. In the Key Editor panel toolbar, click **Notated Durations** 1 to show notated note durations.
- 2. Activate/Deactivate Lock Played Durations ...
- **3.** In the piano roll/percussion editor, select the notes you want to lengthen/shorten.
- **4.** Lengthen/Shorten the selected notes in any of the following ways:
 - To lengthen notes by the current rhythmic grid resolution, press Shift-Alt/Opt-Right Arrow.
 - To shorten notes by the current rhythmic grid resolution, press Shift-Alt/Opt-Left Arrow.
 - To double the length of notes, press Ctrl/Cmd-Shift-Alt/Opt-Right Arrow.
 - To halve the length of notes, press Ctrl/Cmd-Shift-Alt/Opt-Left Arrow.
 - Click and drag the right end of one of the selected notes to the length you want.

As you drag, highlights help you to reference durations against the ruler, pitches against the piano keyboard in the piano roll editor, and notes against instruments/playing techniques in the percussion editor.

RESULT

The selected notes are lengthened/shortened.

If you activated **Lock Played Durations** , played durations are not lengthened/shortened; they retain their original positions/durations.

Key commands lengthen/shorten notes according to the current rhythmic grid resolution. Clicking and dragging lengthens/shortens notes according to the current Key Editor rhythmic grid resolution.

RELATED LINKS

Hiding/Showing zones on page 43

Selecting items in the Key Editor on page 659

Played vs. notated note durations on page 671

Rhythmic grid on page 212

Changing the Key Editor rhythmic grid resolution on page 658

Enabling independent voice playback on page 530

Requantizing notes on page 261

Transposing notes in the piano roll editor

You can transpose notes in the piano roll editor by moving them vertically to other pitch positions. This also affects how the selected notes are notated in all applicable layouts.

PREREQUISITE

- The lower zone is shown.
- **Key Editor** is selected in the lower zone toolbar.
- You have selected the instruments that you want to show in the Key Editor.

- **1.** In the piano roll editor, select the notes you want to transpose.
- **2.** Transpose the notes in any of the following ways:
 - To move notes up one staff position, such as from C to D, press Alt/Opt-Up Arrow.
 - To move notes down one staff position, such as from D to C, press Alt/Opt-Down Arrow.
 - To transpose notes up a single octave division, such as a half-step (semitone) in 12-EDO or a quarter tone in 24-EDO, press **Shift-Alt/Opt-Up Arrow**.
 - To transpose notes down a single octave division, such as a half-step (semitone) in 12-EDO or a quarter tone in 24-EDO, press **Shift-Alt/Opt-Down Arrow**.
 - To transpose notes up an octave, press Ctrl/Cmd-Alt/Opt-Up Arrow.
 - To transpose notes down an octave, press Ctrl/Cmd-Alt/Opt-Down Arrow.
 - Click and drag them upwards/downwards.

As you drag, highlights help you to reference durations against the ruler, and pitches against the piano keyboard.

RESULT

The selected notes are transposed according to their new pitch positions in the piano roll editor.

RELATED LINKS

Selecting items in the Key Editor on page 659 Equal Division of the Octave (EDO) on page 1009 Enabling independent voice playback on page 530 Transposing tools on page 454

Moving percussion notes between instruments/playing techniques

You can move notes to other instruments and playing techniques in the percussion editor; for example, if you want hi-hat notes to be played on a cymbal instead. This also affects how the selected notes are notated in all applicable layouts.

PREREQUISITE

- The lower zone is shown.
- **Key Editor** is selected in the lower zone toolbar.
- You have selected the unpitched percussion instrument or percussion kit that you want to show in the Key Editor.

PROCEDURE

- **1.** In the percussion editor, select the notes you want to move to other instruments/playing techniques.
- 2. Move the notes in any of the following ways:
 - To move notes to the instrument above, press **Alt/Opt-Up Arrow**.
 - To move notes to the instrument below, press **Alt/Opt-Down Arrow**.
 - To cycle notes upwards through the playing techniques of their current instrument, press Shift-Alt/Opt-Up Arrow.
 - To cycle notes downwards through the playing techniques of their current instrument, press Shift-Alt/Opt-Down Arrow.
 - Click and drag them upwards/downwards.

TIP

As you drag, highlights help you to reference durations against the ruler, and notes against instruments/playing techniques.

RESULT

The selected notes are moved to the instrument/playing technique in the corresponding row in the percussion editor.

RELATED LINKS

Percussion editor on page 663

Playing techniques for unpitched percussion instruments on page 1398

Copying and pasting notes in the Key Editor

You can copy and paste notes in the piano roll and percussion editors, including to other pitched instruments and voices, and repeating them directly after themselves.

PREREQUISITE

- The lower zone is shown.
- **Key Editor** is selected in the lower zone toolbar.
- **Select** is selected in the Key Editor panel toolbar.
- You have selected the instruments that you want to show in the Key Editor.

PROCEDURE

- 1. In the piano roll/percussion editor, select the notes you want to copy.
- **2.** Copy the selected notes in any of the following ways:
 - Press Ctrl/Cmd-C.
 - Choose **Edit** > **Copy**.
- 3. Move the playhead to the position to which you want to paste the selected notes.
- **4.** Optional: If you want to paste notes to another instrument, make that instrument the primary instrument.
- **5.** Optional: If you want to paste notes into another voice, select that voice from the voice selector in the Key Editor toolbar.
- **6.** Paste the selected notes in any of the following ways:
 - Press Ctrl/Cmd-V.
 - Choose Edit > Paste.

RESULT

The selected notes are copied to the selected position, instrument, and voice, without deleting them from their original positions. By default, any MIDI CC points in the copied range are also pasted.

TIP

- You can also repeat notes immediately after themselves by selecting them, then pressing **R**.
- You can also copy notes by selecting them, then **Alt/Opt** -dragging them to the position where you want to paste them.

RELATED LINKS

Key Editor panel toolbar on page 652

Showing instruments in the Key Editor on page 654

Selecting items in the Key Editor on page 659

Moving the playhead on page 523

Disabling automatic copying of MIDI data when pasting on page 448

Copying dynamic points to other instruments on page 682

Copying MIDI points to other instruments on page 688

Deleting notes in the Key Editor

You can delete notes in the Key Editor. This also removes notes from all applicable layouts.

PREREQUISITE

- The lower zone is shown.
- **Key Editor** is selected in the lower zone toolbar.
- You have selected the instruments that you want to show in the Key Editor.

PROCEDURE

- 1. Optional: If **Select** is selected in the Key Editor panel toolbar, select the notes you want to delete in the piano roll/percussion editor.
- 2. Delete notes in any of the following ways:
 - Press Backspace or Delete.
 - In the Key Editor panel toolbar, click **Delete .**
 - In the Key Editor panel toolbar, click **Drumstick**, then click each note you want to delete in the percussion editor.

Played vs. notated note durations

In the Key Editor, you can show notes with their played duration or notated duration.

Played duration

When **Played Durations** is selected in the Key Editor panel toolbar, notes in the piano roll/percussion editor are each shown with two components:

- A filled, light-colored rectangle showing the played duration of the note.
- A thin, darker rod showing the notated duration of the note.

This allows you to change the played, sounding duration of notes. For example, notes with staccato articulations are played for less time than their notated duration, whereas notes under slurs are played for longer than their notated duration.

Notated duration

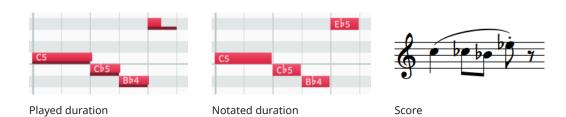
When **Notated Durations** is selected in the Key Editor panel toolbar, notes in the piano roll/percussion editor appear as single rectangles whose width corresponds to the notated duration of the note. This allows you to change the duration of notes.

You can control how changing notated durations impacts on played durations:

- When Lock Played Durations is activated, played durations retain their original positions and durations, regardless of the new notated positions/durations of the corresponding notes.
- When **Lock Played Durations** is deactivated, played durations move with their corresponding notes and retain their start/end offsets relative to them.

EXAMPLE

The following examples all contain the same musical phrase, shown in different ways.



You can choose to display played or notated note durations in the piano roll editor by default in all future projects on the **General** page in **Preferences**.

RELATED LINKS

Key Editor panel toolbar on page 652 Changing the duration of notes on page 255 Lengthening/Shortening notes in the Key Editor on page 667 Requantizing notes on page 261 Slurs in playback on page 1285 Articulations in playback on page 792 Preferences dialog on page 57

Changing the played duration of notes

You can change the played duration of notes individually, both at the start and end of notes. For example, you can make notes sound for longer, or start sounding later.

PREREQUISITE

- The lower zone is shown.
- **Key Editor** is selected in the lower zone toolbar.
- You have selected the instruments that you want to show in the Key Editor.
- You have applied a playback template to the project that includes sounds for the instruments in your project.

PROCEDURE

- 1. In the Key Editor panel toolbar, click **Played Durations** of to show played note durations.
- **2.** In the piano roll/percussion editor, select the notes whose played duration you want to change.
- **3.** Click and drag the start or end of one of the notes to the right/left. When the mouse pointer is in the correct position, it appears as a split arrow.



RESULT

The played duration of the selected notes is changed.

You can assign key commands for increasing/decreasing playback start/end offsets in **Preferences** > **Key Commands** > **Note Editing**. You can use these commands when **Played Durations** is selected in the Key Editor panel toolbar.

RELATED LINKS

Selecting items in the Key Editor on page 659 Applying/Resetting playback templates on page 549 Key Commands page in the Preferences dialog on page 58

Resetting playback overrides

You can remove all changes made to how individual notes play back; for example, if you previously changed the played duration of notes and want to revert them to their default start position, length, and velocity.

Removing playback overrides also removes any offsets to the start and end position of notes imported from MIDI files with preserved note positions.

NOTE

Any note velocities that are set on notes are reflected in playback, including from imported MIDI files or MIDI recording. If you want dynamics you input in Write mode to be reflected in playback instead, you must remove playback overrides.

PROCEDURE

- Select the notes whose playback overrides you want to reset.
 You can do this in the music area, piano roll editor, percussion editor, or Velocity editor.
- 2. Choose Play > Reset Playback Overrides.

RESULT

All playback overrides are removed from the selected notes.

RELATED LINKS

Selecting notes/items on page 410
Music area on page 33
Piano roll editor on page 661
Percussion editor on page 663
Resetting note velocity on page 677
MIDI recording on page 258
Importing MIDI on page 84
Opening projects/files on page 71

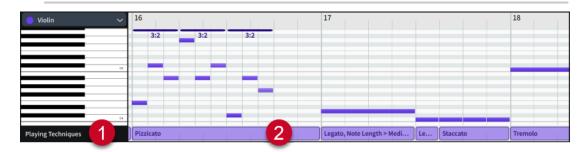
Playing Techniques editor

The Playing Techniques editor displays where playing techniques are in use for the corresponding instrument or voice; for example, as a result of inputting playing techniques, slurs, or articulations. It is located in the Key Editor in the lower zone.

• You can hide/show the Playing Techniques editor by clicking **Playing Techniques** in the Key Editor panel toolbar.

NOTE

You can only show the Playing Techniques editor when a single instrument/voice is shown in the Key Editor.



The Playing Techniques editor comprises the following:

1 Editor header

Displays the name of the editor.

2 Playing technique regions

Display the playing technique and note length condition that apply to notes in the region. You can hover your mouse pointer over playing technique regions to see the following related information:

- Any playback techniques, switches, and other effects in place, such as adjustments for articulations
- Expression map used for the region
- Channel in the VST or MIDI instrument used for the region
- VST or MIDI instrument used for the region

NOTE

You cannot change playing techniques in the Playing Techniques editor. You can only change them in Write mode.

RELATED LINKS

Key Editor panel toolbar on page 652

Showing instruments in the Key Editor on page 654

Playing techniques on page 1160

Input methods for playing techniques, pedal lines, string indicators, and harp pedal diagrams on page 358

Playback techniques on page 770

Expression maps on page 744

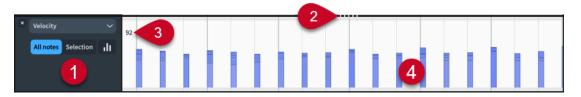
Moving percussion notes between instruments/playing techniques on page 669

Enabling independent voice playback on page 530

Velocity editor

The Velocity editor allows you to view and edit the velocity of notes belonging to the instruments/voices shown in the Key Editor. It is located in the Key Editor in the lower zone.

• You can show the Velocity editor by adding an editor to the Key Editor, then selecting **Velocity** from the editor menu.



The Velocity editor comprises the following:

1 Editor header

Contains the following options:

- **Editor menu**: Allows you to change the MIDI controller or editor type shown in the editor. MIDI controllers into which you have already input points appear in the first menu level.
- **Velocity edit scope**: Allows you to change the scope of changes you make to velocity values. Only available when **Draw**, **Line**, or **Transform** is selected in the Key Editor panel toolbar.
 - **All notes**: Allows you to edit the velocity of all notes shown in the Velocity editor.
 - **Selection**: Allows you to edit the velocity of selected notes only.
- **Histogram** II: Shows the Histogram tool in the editor.
- Value field: Displays the velocity value of the earliest selected note/velocity bar in the primary instrument. You can change the velocity value of all selected notes in the value field or click and drag velocity bars upwards/downwards in the editor. Only available when Select is selected in the Key Editor panel toolbar.

2 Splitter

Allows you to change the height of the editor by clicking and dragging. If multiple editors are open, this affects the height of the editors either side of the splitter.

3 Value read-out

Displays the value of the current mouse pointer position in the editor.

4 Velocity bars

Velocities appear as vertical bars in the Velocity editor. Every note has its own velocity bar and a velocity value. When multiple notes exist at the same rhythmic position, such as in chords, the velocities for all notes appear stacked on top of each other, ordered by their value.

Velocity bars with higher values appear with bolder colors.

You can select velocity bars directly in the Velocity editor or by selecting their corresponding notes, in either the piano roll editor, percussion editor, or music area.

TIP

- Clicking and dragging velocity bars causes a read-out to appear temporarily, showing their value.
- You can use the Histogram and Transform tools to change velocity values.

RELATED LINKS

Adding/Closing editors in the Key Editor on page 658 Showing instruments in the Key Editor on page 654 Inputting notes on page 219 Inputting notes in the Key Editor on page 664 Histogram tool on page 693 Transform tool on page 696

Changing the velocity of notes

You can change the velocity of notes individually, including for a single note in a chord, or to create a consistent increase/decrease in velocity across a range of notes.

Velocity is often used to control the dynamics of non-sustaining instruments.

PREREQUISITE

- The lower zone is shown.
- **Key Editor** is selected in the lower zone toolbar.
- You have selected the instruments that you want to show in the Key Editor.
- You have added the Velocity editor to the Key Editor.

PROCEDURE

- 1. Select one of the following tools, depending on how you want to change velocities:
 - To change the velocity of selected notes, select Select by pressing Shift-Alt/Opt-1 or clicking Select
 \(\bar{\text{N}} \) in the Key Editor panel toolbar.
 - To change the velocity using free shapes, select Draw by pressing Shift-Alt/Opt-2 or clicking Draw ✓ in the Key Editor panel toolbar.
 - To change the velocity using consistent slopes, select **Line** by clicking **Line** in the Key Editor panel toolbar.
- 2. Optional: If you selected **Select** \(\bar{\chi}\), select the notes whose velocity you want to change, such as individual notes in chords. This also selects their velocity bars.
- **3.** Optional: If you selected either the **Draw** ✓ tool or **Line** ✓ tool, choose one of the following velocity edit scopes in the Velocity editor header:
 - All notes
 - Selection
- **4.** In the Velocity editor, change the velocity in one of the following ways:
 - If you selected **Select**, click and drag the top of one of the selected velocity bars upwards/downwards.
 - If you selected **Draw Z**, click and draw any shape across the required range.
 - If you selected **Line** , click and drag a line across the required range.

RESULT

The velocity of the affected notes is changed. If you selected the **Selection** velocity edit scope, this only applies to selected velocity bars.

TIP

You can also use the Transform and Histogram tools to change velocities on a large scale in different ways.

Resetting note velocity

You can remove changes you have made to the velocity of notes and reset them to their default velocity. You can do this for all notes belonging to an instrument, all notes in a specific voice, or only selected notes.

PREREQUISITE

- The lower zone is shown.
- Key Editor si is selected in the lower zone toolbar.
- You have selected the instruments that you want to show in the Key Editor.
- You have added the Velocity editor to the Key Editor.

PROCEDURE

- 1. In the Velocity editor header, activate **Histogram** 11 to show the Histogram tool.
- 2. At the top of the Histogram tool, choose one of the following filters:
 - All notes
 - Voice
 - Selection
- 3. Click Reset.

RESULT

Any changes you have made to the velocity of notes in the selected filter are reset.

NOTE

This also resets the played duration of the selected notes.

RELATED LINKS

Histogram tool on page 693 Selecting items in the Key Editor on page 659 Resetting playback overrides on page 673

Dynamics editor

The Dynamics editor allows you to view, input, and edit dynamics for the instruments/voices shown in the Key Editor. It displays both dynamics input in Write mode and dynamic points input in the Dynamics editor. It is located in the Key Editor in the lower zone.

You can show the Dynamics editor by adding an editor to the Key Editor, then selecting
 Dynamics from the editor menu.



The Dynamics editor comprises the following:

1 Editor header

Contains the following options:

- **Editor menu**: Allows you to change the MIDI controller or editor type shown in the editor. MIDI controllers into which you have already input points appear in the first menu level.
- **Sync 2**: Copies all points in the editor from the primary instrument to secondary instruments. Only available when multiple instruments are shown in the Key Editor.
- **Convert to Constant Point** : Makes the selected points constant. Only applies to points input in the Dynamics editor.
- **Convert to Linear Point** ▼: Makes the selected points linear. Only applies to points in input in the Dynamics editor.

2 Splitter

Allows you to change the height of the editor by clicking and dragging. If multiple editors are open, this affects the height of the editors either side of the splitter.

3 Value read-out

Displays the value of the current mouse pointer position in the editor.

4 Dynamic point

An immediate change in dynamic, input either in Write mode or using the **Draw** tool in the Dynamics editor. Immediate dynamic points are constant by default.

The maximum range of dynamic levels is from 8 to -8, loudest to quietest.

- Dynamic level 3 is equivalent to the dynamic fff.
- Dynamic level 0 is equivalent to the dynamic mf.
- Dynamic level -3 is equivalent to the dynamic ppp.

NOTE

- Clicking and dragging dynamic points causes a read-out to appear temporarily, showing their dynamic level.
- Only points that are identical for all instruments shown in the Key Editor are editable.
- Dynamic points that you input in the Dynamics editor do not appear in layouts.

5 Dynamic text

Shows the dynamic level or crescendo/diminuendo symbol of dynamics input in Write mode; that is, dynamic points that correspond to notation items.

6 Dynamic region

Blue highlighted regions contain multiple points, input by clicking and dragging in a single motion in the Dynamics editor with either the **Draw** tool or **Line** tool. By default, dynamic points in regions input in the Dynamics editor are linear.

Green highlighted regions represent gradual dynamics and combined/force dynamics, such as fp and sffz, input in Write mode.

Thin blue bars at the top of the Editor represent dynamic groups.

NOTE

- Only points that are identical for all instruments shown in the Key Editor are editable.
- Dynamic regions that you input in the Dynamics editor override default playback adjustments for dynamics, such as humanization and increased dynamics for notes with accents. However, the dynamic curve setting still applies to dynamic regions.

- Default playback adjustments for dynamics, such as humanization and increased dynamics for notes with accents, still apply to notes within gradual dynamics that you input in Write mode.
- Start and end points for messa di voce regions are linked and always have the same value
- Because the points of combined/force dynamics correspond to parameters of their envelopes, they function differently than other dynamic points. Combined dynamics have three points, while force dynamics have four points.

For example, if you change the value of the second point of a force dynamic, the third point also moves because it controls the duration of the second point; they always have the same value. Similarly, you cannot move combined/force dynamic points outside their regions.

7 Dynamic value line

When multiple instruments are shown in the Key Editor, a value line is shown for each instrument, using its color.

RELATED LINKS

Adding/Closing editors in the Key Editor on page 658 Showing instruments in the Key Editor on page 654 Dynamics on page 903 Gradual dynamics on page 918 Groups of dynamics on page 930 Input methods for dynamics on page 302

Inputting dynamic points

You can input single dynamic points and dynamic regions in the Dynamics editor. Dynamic points that you input in the Dynamics editor do not appear in layouts.

PREREQUISITE

- The lower zone is shown.
- **Key Editor** is selected in the lower zone toolbar.
- You have selected the instruments that you want to show in the Key Editor.
- You have added the Dynamics editor to the Key Editor.

- 1. Select one of the following tools, depending on the type of dynamic points you want to input:
 - To input single dynamic points, or dynamic regions containing multiple dynamic points at regular intervals, select **Draw** by pressing **Shift-Alt/Opt-2** or clicking **Draw** ✓ in the Key Editor panel toolbar.
 - To input smooth dynamic regions, select Line by clicking Line

 in the Key Editor panel toolbar.
- **2.** Input dynamic points in one of the following ways:
 - To input single dynamic points, click in the Dynamics editor at each position where you want a dynamic point.
 - To input a dynamic region containing multiple dynamic points at regular intervals, click and drag in a single motion in the Dynamics editor.

• To input smooth dynamic regions, click and drag in the Dynamics editor from where you want the region to start to where you want it to end.

RESULT

Dynamic points are input for all instruments shown in the Key Editor.

- If you used the **Draw** tool, separate dynamic points are input at each position you clicked.
- If you clicked and dragged in a single motion using the **Draw** tool, dynamic points are input at 32nd note intervals in a dynamic region.
- If you used the **Line** tool, two dynamic points are input in a dynamic region, one at each end of the dragged range.

By default, dynamic points input using the **Draw** tool are constant, while dynamic points in dynamic regions are linear.

Dynamic regions appear with highlighted regions in the Dynamics editor.

Dynamic points input in the Dynamics editor affect playback, but are not shown in layouts.

NOTE

- Inputting dynamic points/events at the positions of dynamics input in Write mode overrides
 default playback adjustments for those dynamics. Single dynamic points only override the
 dynamic level. Dynamic regions also override, for example, humanization and increased
 dynamics for notes with accents. However, the dynamic curve setting still applies to dynamic
 regions.
- For sound libraries that use MIDI CC 1 to control dynamics, the MIDI CC editor for CC 1 displays values from the dynamics you input, including dynamic points, combined with humanization.

Making dynamic points constant/linear

You can make individual dynamic points input in the Dynamics editor constant or linear. By default, dynamic points you input in the Dynamics editor are linear.

NOTE

These steps do not apply to the points of dynamics input in Write mode.

PREREQUISITE

- The lower zone is shown.
- **Key Editor** is selected in the lower zone toolbar.
- **Select** is selected in the Key Editor panel toolbar.
- You have selected the instruments that you want to show in the Key Editor.
- You have added the Dynamics editor to the Key Editor.

- 1. In the Dynamics editor, select the dynamic points you want to make constant/linear.
- **2.** Do one of the following:
 - To make the selected points constant, click Convert to Constant Point in the editor header.

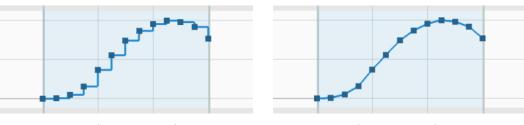
• To make the selected points linear, click **Convert to Linear Point** \(\sqrt{} \) in the editor header.

RESULT

The selected dynamic points become constant or linear.

Value lines always appear horizontal after constant points. Value lines appear angled after linear points if the next point has a different value, indicating a smooth transition between the points.

EXAMPLE



Constant points in the Dynamics editor

Linear points in the Dynamics editor

Moving dynamic points

You can move individual dynamic points, including moving them upwards and downwards to change their dynamic level. For example, if you want individual dynamics to take effect slightly earlier, or to adjust the volume of specific existing dynamics.

PREREQUISITE

- The lower zone is shown.
- **Key Editor** is selected in the lower zone toolbar.
- **Select** is selected in the Key Editor panel toolbar.
- You have selected the instruments that you want to show in the Key Editor.
- You have added the Dynamics editor to the Key Editor.

PROCEDURE

1. In the Dynamics editor, select the dynamic points you want to move.

TIP

To move dynamics input in Write mode rhythmically, you can select only their start point, including for gradual dynamics and combined/force dynamics that have multiple points.

- **2.** Move the selected dynamic points in any of the following ways:
 - Click and drag them in any direction.

NOTE

- To constrain movement either horizontally or vertically, start dragging, then press and hold **Shift**.
- You can only move dynamics input in Write mode either horizontally or vertically at a time.

- To move dynamic points to the right according to the current rhythmic grid resolution, press Ctrl/Cmd-Alt/Opt-Right Arrow.
- To move dynamic points to the left according to the current rhythmic grid resolution, press **Ctrl/Cmd-Alt/Opt-Left Arrow**.

RESULT

The selected dynamic points are moved to new positions. Moving them to the right/left affects their rhythmic positions. Moving them upwards/downwards affects their dynamic level.

Moving the end points of gradual dynamics to the right/left lengthens/shortens the corresponding gradual dynamics rhythmically. Their notated length is automatically updated in all applicable layouts.

NOTE

- Moving dynamic points for linked dynamics affects all linked dynamics.
- You cannot drag dynamics input in Write mode beyond other existing dynamic points during the same move. Releasing the mouse causes the moved dynamic points to change the value of the existing dynamic point.

RELATED LINKS

Linked dynamics on page 931 Gradual dynamics on page 918 Changing dynamic levels on page 908 Lengthening/Shortening items on page 419 Moving notes/items rhythmically on page 448

Copying dynamic points to other instruments

When multiple instruments are shown in the Key Editor, you can copy dynamic points from the primary instrument to secondary instruments. You can copy only individual points and regions, or all points belonging to the primary instrument in the selected flow.

PREREQUISITE

- The lower zone is shown.
- **Key Editor** sis selected in the lower zone toolbar.
- You have added the Dynamics editor to the Key Editor.
- Multiple instruments are shown in the Key Editor.

PROCEDURE

- 1. Optional: If you want to sync individual dynamic points or regions only, click **Sync Region** In the Key Editor panel toolbar to select **Sync Region**.
- 2. In the Dynamics editor, do one of the following:
 - To copy individual dynamic points or regions, click each dynamic point and region, or click and drag across multiple dynamic points and regions.
 - To copy all dynamic points in the current flow, click **Sync** \mathfrak{S} in the editor header.

RESULT

The corresponding dynamic points are copied from the primary instrument to secondary instruments, and become editable for all instruments shown in the Key Editor.

Existing dynamic points in the affected regions belonging to secondary instruments are overwritten.

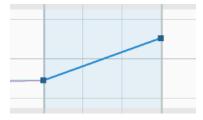
TIP

When multiple instruments are shown in the Key Editor, you can input dynamic points for all instruments directly.

EXAMPLE



Dynamic region in primary instrument only



Dynamic region copied to secondary instruments

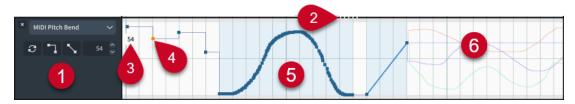
RELATED LINKS

Adding/Closing editors in the Key Editor on page 658 Showing instruments in the Key Editor on page 654 Selecting items in the Key Editor on page 659 Switching between flows in the track overview on page 507 Copying and pasting points in the Key Editor on page 660

MIDI Pitch Bend editor

The MIDI Pitch Bend editor allows you to view, input, and edit MIDI pitch bend controller data for the instruments shown in the Key Editor. It is located in the Key Editor in the lower zone.

 You can show the MIDI Pitch Bend editor by adding an editor to the Key Editor, then selecting MIDI Pitch Bend from the editor menu.



The MIDI Pitch Bend editor comprises the following:

1 Editor header

Contains the following options:

- **Editor menu**: Allows you to change the MIDI controller or editor type shown in the editor. MIDI controllers into which you have already input points appear in the first menu level.
- Sync 2: Copies all points in the editor from the primary instrument to secondary instruments. Only available when multiple instruments are shown in the Key Editor.
- **Convert to Constant Point** : Makes the selected points constant. Only applies to points in regions.

- **Convert to Linear Point** \(\script{\script{N}}\): Makes the selected points linear. Only applies to points in regions.
- **Value field**: Displays the value of the earliest selected MIDI point. You can change this value in the value field, or click and drag the point upwards/downwards in the editor. The available range for MIDI pitch bend is -100% to +100%.

2 Splitter

Allows you to change the height of the editor by clicking and dragging. If multiple editors are open, this affects the height of the editors either side of the splitter.

3 Value read-out

Displays the value of the current mouse pointer position in the editor.

4 MIDI point

A single change to the MIDI pitch, input using the **Draw** tool. Individual MIDI points are constant by default. Only points that are identical for all instruments shown in the Key Editor are editable.

5 MIDI region

A highlighted region that contains multiple points, input by clicking and dragging in a single motion with either the **Draw** tool or **Line** tool.

By default, MIDI points in regions are linear, and the last point is constant. Only points that are identical for all instruments shown in the Key Editor are editable.

6 MIDI value line

When multiple instruments are shown in the Key Editor, a value line is shown for each instrument, using its color.

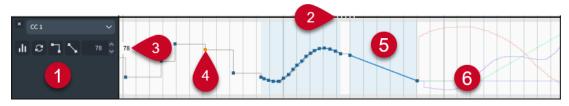
MIDI CC editor

The MIDI CC editor allows you to view, input, and edit data in any MIDI controller for the instruments shown in the Key Editor. It is located in the Key Editor in the lower zone.

• You can show the MIDI CC editor by adding an editor to the Key Editor, then selecting a MIDI controller from the editor menu.

TIP

- You can add multiple MIDI CC editors to the Key Editor simultaneously; for example, to copy MIDI points between two MIDI controllers.
- Dorico Elements displays generated values as non-editable value lines. For sound libraries that use MIDI CC 1 to control dynamics, the MIDI CC editor for CC 1 displays values from the dynamics you input, including dynamic points, combined with humanization.



The MIDI CC editor comprises the following:

1 Editor header

Contains the following options:

- **Editor menu**: Allows you to change the MIDI controller or editor type shown in the editor. MIDI controllers into which you have already input points appear in the first menu level.
- **Histogram** III: Shows the Histogram tool in the editor.
- **Sync** Copies all points in the editor from the primary instrument to secondary instruments. Only available when multiple instruments are shown in the Key Editor.
- **Convert to Constant Point** : Makes the selected points constant. Only applies to points in regions.
- **Convert to Linear Point** \(\subseteq \): Makes the selected points linear. Only applies to points in regions.
- **Value field**: Displays the value of the earliest selected MIDI point. You can change this value in the value field, or click and drag the point upwards/downwards in the editor. The available range for MIDI CC is 0 to 127.

2 Splitter

Allows you to change the height of the editor by clicking and dragging. If multiple editors are open, this affects the height of the editors either side of the splitter.

3 Value read-out

Displays the value of the current mouse pointer position in the editor.

4 MIDI point

A single change to the MIDI value, input using the **Draw** tool. Individual MIDI points are constant by default. Only points that are identical for all instruments shown in the Key Editor are editable.

5 MIDI region

A highlighted region that contains multiple points, input by clicking and dragging in a single motion with either the **Draw** tool or **Line** tool.

By default, MIDI points in regions are linear, and the last point is constant. Only points that are identical for all instruments shown in the Key Editor are editable.

6 MIDI value line

When multiple instruments are shown in the Key Editor, a value line is shown for each instrument, using its color.

TIP

- Clicking and dragging MIDI points causes a read-out to appear temporarily, showing their value.
- You can use the Histogram and Transform tools to change MIDI CC values.
- MIDI CC data is included when exporting MIDI files.

RELATED LINKS

Adding/Closing editors in the Key Editor on page 658
Showing instruments in the Key Editor on page 654
Histogram tool on page 693
Transform tool on page 696
Exporting MIDI on page 94
Dynamics in playback on page 934
Pedal lines in playback on page 1158

Inputting MIDI points

You can input MIDI CC points into any MIDI controller, including pitch bend, in the MIDI CC and MIDI Pitch Bend editors.

PREREQUISITE

- The lower zone is shown.
- **Key Editor** is selected in the lower zone toolbar.
- You have selected the instruments that you want to show in the Key Editor.
- You have added at least one MIDI CC or MIDI Pitch Bend editor to the Key Editor.

PROCEDURE

- 1. Select one of the following tools, depending on the MIDI points you want to input:
 - To input single MIDI points, or MIDI regions containing multiple points at regular intervals, select **Draw** by pressing **Shift-Alt/Opt-2** or clicking **Draw** ✓ in the Key Editor panel toolbar.
 - To input smooth MIDI regions, select **Line** by clicking **Line** in the Key Editor panel toolbar.
- 2. Input MIDI points in one of the following ways:
 - To input single MIDI points, click in the MIDI CC or MIDI Pitch Bend editor at each position where you want a MIDI point.
 - To input a MIDI region containing multiple MIDI points at regular intervals, click and drag in a single motion in the MIDI CC or MIDI Pitch Bend editor.
 - To input smooth MIDI regions, click and drag in the MIDI CC or MIDI Pitch Bend editor from where you want the region to start to where you want it to end.

TIP

The horizontal line in the middle of the MIDI Pitch Bend editor represents the unmodified pitch.

RESULT

MIDI points are input for all instruments shown in the Key Editor.

- If you used the Draw tool, separate MIDI points are input at each position you clicked.
- If you clicked and dragged in a single motion using the **Draw** tool, MIDI points are input at small intervals in a MIDI region.
- If you used the **Line** tool, two MIDI points are input in a MIDI region, one at each end of the dragged range.

By default, single MIDI points are constant, MIDI points in regions are linear, and the last MIDI point in regions is constant.

MIDI regions appear highlighted with colored backgrounds in the MIDI CC and MIDI Pitch Bend editors.

Making MIDI points constant/linear

You can make selected MIDI points in regions constant or linear after they have been input; for example, if you want some points in a region to be constant.

By default, MIDI points are constant when you input them separately, and linear when you click and drag them as a region. The last MIDI point in a region is constant.

PREREQUISITE

- The lower zone is shown.
- **Key Editor** is selected in the lower zone toolbar.
- **Select** is selected in the Key Editor panel toolbar.
- You have selected the instruments that you want to show in the Key Editor.
- You have added at least one MIDI CC or MIDI Pitch Bend editor to the Key Editor.

PROCEDURE

- 1. In the MIDI CC or Pitch Bend editor, select the MIDI points in regions you want to make constant/linear.
- 2. Do one of the following:
 - To make the selected points constant, click **Convert to Constant Point** in the editor header.
 - To make the selected points linear, click **Convert to Linear Point** in the editor header.

RESULT

The selected MIDI points become constant or linear.

Value lines always appear horizontal after constant points. Value lines appear angled after linear points if the next point has a different value, indicating a smooth transition between the points.

EXAMPLE



Constant points in the MIDI CC editor



Linear points in the MIDI CC editor

Moving MIDI points

You can move individual MIDI points in the MIDI CC and MIDI Pitch Bend editors, including moving them upwards and downwards to change their values.

PREREQUISITE

- The lower zone is shown.
- **Key Editor** is selected in the lower zone toolbar.
- **Select** is selected in the Key Editor panel toolbar.

- You have selected the instruments that you want to show in the Key Editor.
- You have added at least one MIDI CC or MIDI Pitch Bend editor to the Key Editor.

PROCEDURE

1. In the MIDI CC or Pitch Bend editor, select the MIDI points you want to move.

NOTE

You can only move MIDI points in a single editor at a time.

- **2.** Move the selected MIDI points in any of the following ways:
 - Click and drag them in any direction.
 - To move them upwards/downwards only, hold Shift while dragging them upwards/ downwards.
 - To move them to the right/left only, hold **Shift** while dragging them to the right/left.

TIP

You can also move MIDI points according to the current rhythmic grid resolution, as indicated in the status bar, by pressing **Alt/Opt-Right Arrow** / **Alt/Opt-Left Arrow** .

RELATED LINKS

Adding/Closing editors in the Key Editor on page 658 Showing instruments in the Key Editor on page 654 Selecting items in the Key Editor on page 659 Changing the rhythmic grid resolution on page 213 Status bar on page 37

Copying MIDI points to other instruments

When multiple instruments are shown in the Key Editor, you can copy MIDI points from the primary instrument to secondary instruments. You can copy only individual points and regions, or all points belonging to the primary instrument in the selected flow.

PREREQUISITE

- The lower zone is shown.
- **Key Editor** is selected in the lower zone toolbar.
- You have added at least one MIDI CC or MIDI Pitch Bend editor to the Key Editor.
- Multiple instruments are shown in the Key Editor.

PROCEDURE

- 1. Optional: If you want to sync individual MIDI points or regions only, click **Sync Region !** in the Key Editor panel toolbar to select **Sync Region**.
- 2. In the MIDI CC or MIDI Pitch Bend editor, do one of the following:
 - To copy individual MIDI points or regions, click each MIDI point and region, or click and drag across multiple MIDI points and regions.
 - To copy all MIDI points in the current flow, click **Sync** in the editor header.

RESULT

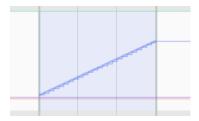
The corresponding MIDI points are copied from the primary instrument to secondary instruments, and become editable for all instruments shown in the Key Editor.

Existing MIDI points in the affected regions belonging to secondary instruments are overwritten.

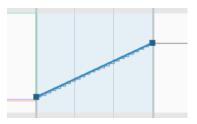
TIP

When multiple instruments are shown in the Key Editor, you can input MIDI points for all instruments directly.

EXAMPLE



MIDI region in primary instrument only



MIDI region copied to secondary instruments

RELATED LINKS

Key Editor panel toolbar on page 652
Adding/Closing editors in the Key Editor on page 658
Showing instruments in the Key Editor on page 654
Selecting items in the Key Editor on page 659
Switching between flows in the track overview on page 507
Copying and pasting points in the Key Editor on page 660

Tempo editor

The Tempo editor allows you to view, input, and edit tempo changes. It displays both tempo marks input in Write mode and tempo changes input in the Tempo editor. It is located in the Key Editor in the lower zone.

You can show the Tempo editor in any of the following ways:

- Add an editor to the Key Editor, then select **Tempo** from the editor menu.
- When the Key Editor is unlocked, select either a tempo mark or the Tempo track in Play mode.

NOTE

This shows the Tempo editor as the primary editor. To return to showing the piano roll/percussion editor and/or other editors in the Key Editor, you must select a note/item belonging to an instrument in the music area.



The Tempo editor comprises the following:

1 Editor header

Contains the following options:

- **Editor menu**: Allows you to change the MIDI controller or editor type shown in the editor. MIDI controllers into which you have already input points appear in the first menu level.
- Range max. value field: Allows you to set the maximum metronome mark value in the editor.
- **Tempo value field**: Displays the metronome mark value of the earliest selected tempo point, without decimal places. You can change this value in the value field, or click and drag the point upwards/downwards in the editor.

2 Splitter

Allows you to change the height of the editor by clicking and dragging. If multiple editors are open, this affects the height of the editors either side of the splitter.

3 Value read-out

Displays the value of the current mouse pointer position in the editor.

4 Tempo point

An immediate change in tempo, input either in Write mode or using the **Draw** tool in the Tempo editor. Absolute tempo changes comprise a single constant point.

TIP

- Clicking and dragging in the Tempo editor causes a read-out to appear temporarily, showing the metronome mark value of the mouse pointer position.
- Tempo points input in the Tempo editor appear as signposts in the music. Signposts are
 not printed by default, so if you want tempo points to appear in layouts as tempo marks,
 we recommend that you show them.
- All tempo points input in the Tempo editor are included when exporting MIDI files.

5 Tempo mark text

Shows the text of tempo marks input in Write mode; that is, tempo points that correspond to notation items.

6 Tempo region

A highlighted region with a linear point at the start and a constant point at the end, input by clicking and dragging in a single motion in the Tempo editor with the **Line** tool.

Tempo regions can also represent gradual tempo changes input in Write mode, such as *rallentando*.

RELATED LINKS

Adding/Closing editors in the Key Editor on page 658 Showing instruments in the Key Editor on page 654 Tempo track on page 517 Tempo marks on page 1313 Input methods for tempo marks on page 286 Hiding/Showing tempo marks on page 1318 Signposts on page 438

Inputting tempo changes in the Tempo editor

You can input single tempo changes and tempo regions in the Tempo editor. Tempo changes input in the Tempo editor do not appear in layouts, but instead are shown as signposts.

PREREQUISITE

- The lower zone is shown.
- **Key Editor** is selected in the lower zone toolbar.
- You have added the Tempo editor to the Key Editor.

PROCEDURE

- 1. Select one of the following tools, depending on the type of tempo change you want to input:
 - To input single absolute tempo changes, or multiple absolute tempo changes at regular intervals, select **Draw** by pressing **Shift-Alt/Opt-2** or clicking **Draw** ✓ in the Key Editor panel toolbar.
 - To input tempo regions, select Line by clicking Line in the Key Editor panel toolbar.
- 2. Input tempo changes in one of the following ways:
 - To input single absolute tempo changes, click in the Tempo editor at each position where you want a tempo change.
 - To input multiple absolute tempo changes at regular intervals, click and drag in the Tempo editor.
 - To input tempo regions, click and drag in the Tempo editor from where you want the region to start, to where you want it to end.

TIP

Clicking and dragging in the Tempo editor causes a read-out to appear temporarily, showing the metronome mark value of the mouse pointer position.

RESULT

- If you used the **Draw** tool and clicked multiple times, separate tempo changes are input at each position you clicked.
- If you clicked and dragged in a single motion using the **Draw** tool, tempo changes are input at 32nd note intervals.
- If you used the **Line** tool, two tempo changes are input in a tempo region, one at each end of the dragged range.

This affects the speed of playback, but the tempo changes are not shown in layouts. Instead, they appear as signposts.

Tempo changes input in the Tempo editor are included when exporting MIDI files.

RELATED LINKS

Key Editor panel toolbar on page 652 Adding/Closing editors in the Key Editor on page 658 Signposts on page 438

Moving tempo changes in the Tempo editor

You can move tempo changes to new rhythmic positions in the Tempo editor. This affects their rhythmic position in all applicable layouts.

PREREQUISITE

- The lower zone is shown.
- **Key Editor** is selected in the lower zone toolbar.
- **Select** is selected in the Key Editor panel toolbar.
- You have added the Tempo editor to the Key Editor.

PROCEDURE

- 1. In the Tempo editor, select the tempo changes you want to move.
- **2.** To move the selected tempo changes without changing their metronome mark value, hold **Shift** while dragging them to the right/left.

NOTE

You cannot drag tempo regions and single tempo changes input in Write mode beyond other existing tempo changes during the same move. Releasing the mouse causes the moved tempo change to change the value of the existing tempo change.

RESULT

The selected tempo changes are moved rhythmically. When you move multiple selected absolute tempo changes, they maintain their positions relative to each other. This also affects their rhythmic positions in any layouts in which they appear.

AFTER COMPLETING THIS TASK

You can also move tempo changes vertically, which changes their metronome mark value.

Changing the tempo in the Tempo editor

You can change the metronome mark value of individual tempo changes in the Tempo editor, expressed in beats per minute.

PREREQUISITE

- The lower zone is shown.
- Key Editor is selected in the lower zone toolbar.
- **Select** is selected in the Key Editor panel toolbar.
- You have added the Tempo editor to the Key Editor.

PROCEDURE

- 1. In the Tempo editor, select the tempo changes whose metronome mark values you want to change.
- To change the metronome mark values of the selected tempo changes without moving them rhythmically, hold **Shift** while dragging them upwards/downwards.
 - Clicking and dragging in the Tempo editor causes a read-out to appear temporarily, showing the metronome mark value of the mouse pointer position.

RESULT

The metronome mark values of the selected tempo changes are changed proportionally. This affects the speed of playback, and the displayed metronome mark of any tempo changes also shown in layouts.

TIP

You can also change the metronome mark value of selected tempo changes using the **Tempo** value field in the Tempo editor header.

RELATED LINKS

Selecting items in the Key Editor on page 659

Histogram tool

The Histogram tool displays velocity and MIDI CC values as a chart, with values grouped according to their frequency distribution. It allows you to change values on a large scale, including across entire tracks; for example, increasing all velocity values proportionally.

• You can show the Histogram tool in the Velocity and MIDI CC editors by clicking **Histogram** In the corresponding editor header.



1 Chart shape

Allows you to change the shape of the Histogram chart.

- **Bars** III: Values are displayed as bars.
- **Area** ✓: Values are displayed as an area.

2 Histogram filter

Allows you to filter the values shown in the Histogram tool.

- All/All notes: Shows all values for all instruments currently shown in the Key Editor.
- **Voice**: Shows only notes in the selected voice. Only available in the Velocity editor.
- **Selection**: Shows only values for selected items.

3 Histogram chart

Shows values according to the selected filter. The X axis represents numerical values, while the Y axis represents the frequency distribution of the corresponding values.

4 Histogram controls

Allow you to change the values currently in view.

5 Reset

Resets all values currently in view.

TIP

If you want to change values on a smaller scale, you can use the Transform tool.

RELATED LINKS

Velocity editor on page 674 MIDI CC editor on page 684 Transform tool on page 696 Voices on page 1416

Histogram controls

Histogram controls allow you to change velocity and MIDI CC values on a large scale, in different ways.

You can access Histogram controls when the Histogram tool is shown in the Key Editor.

Delta



Represents the center point of values. Allows you to move all displayed values to the right/left. This maintains explicit gaps between values.

Scale



Proportionally scales values. This maintains proportional relationships between values; that is, gaps between values widen when you scale multiply to the right, and narrow when you scale multiply to the left.

Spread



Spreads out values to both the right and left of the center point.

Lower Limit



Represents the lowest value. Allows you to raise low values.

Upper Limit



Represents the highest value. Allows you to lower high values.

Randomize



Allows you to randomize values by clicking on the button and dragging upwards/ downwards. The higher your mouse pointer, the wider and more extreme the randomization. Randomization uses standard distribution on an approximate bell-shape.

Changing values using the Histogram tool

You can use the Histogram tool to change velocity and MIDI CC values on a large scale, including across entire tracks; for example, increasing all velocity values proportionally.

TIP

If you want to change values on a smaller scale, you can use the Transform tool.

PREREQUISITE

- The lower zone is shown.
- **Key Editor** is selected in the lower zone toolbar.
- You have selected the instruments that you want to show in the Key Editor.
- You have added at least one Velocity or MIDI CC editor to the Key Editor.

PROCEDURE

- 1. In the header of each editor in which you want to use the Histogram tool, activate **Histogram** II to show the Histogram tool.
- 2. Optional: Choose the appropriate Histogram tool filter for each editor.
- 3. Use the available Histogram controls as required.

 For example, you can click and drag **Scale**

 to the right to increase the values currently in view proportionally.

Changing the Histogram tool filter

You can change the values shown in, and therefore affected by, the Histogram tool using the available filters. For example, if you only want the Histogram tool to affect values you have already selected.

PREREQUISITE

- The lower zone is shown.
- **Key Editor** is selected in the lower zone toolbar.
- You have added at least one Velocity or MIDI CC editor to the Key Editor.

PROCEDURE

- 1. In the header of each editor in which you want to use the Histogram tool, activate **Histogram** to show the Histogram tool.
- 2. At the top of each Histogram tool, choose one of the following filters:
 - All (MIDI CC editor) or All notes (Velocity editor)
 - Voice (Velocity editor only)
 - Selection

Changing the Histogram chart shape

You can switch between showing values in the Histogram tool as bars or as an area.

PREREQUISITE

- The lower zone is shown.
- **Key Editor** is selected in the lower zone toolbar.
- You have selected the instruments that you want to show in the Key Editor.
- You have added at least one Velocity or MIDI CC editor to the Key Editor.

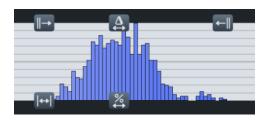
PROCEDURE

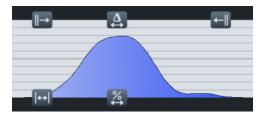
- 1. In the header of each editor in which you want to use the Histogram tool, activate **Histogram** to show the Histogram tool.
- **2.** At the top of each Histogram tool, choose one of the following chart shapes:
 - Bars III
 - Area

RESULT

The shape of the Histogram chart in each editor is changed.

EXAMPLE





Bars

Area

RELATED LINKS

Hiding/Showing zones on page 43 Adding/Closing editors in the Key Editor on page 658 Showing instruments in the Key Editor on page 654 Velocity editor on page 674 MIDI CC editor on page 684

Transform tool

The Transform tool allows you to change consecutive velocity and MIDI CC values within a selected range in a variety of ways. For example, you can increase all velocity values proportionally, but only in two specific bars.

• You can use the Transform tool in the Velocity and MIDI CC editors by clicking **Transform** in the Key Editor panel toolbar, then clicking and dragging in one of those editors to make a Transform selection.



Transform selection in the Velocity editor

TIP

If you want to change values on a larger scale, you can use the Histogram tool.

RELATED LINKS

Key Editor panel toolbar on page 652 Histogram tool on page 693 Velocity editor on page 674 MIDI CC editor on page 684

Transform controls

Transform controls allow you to change consecutive velocity and MIDI CC values within a Transform selection in different ways.

• You can access Transform controls when you have made a Transform selection in the Key Editor.

Tilt Left



Allows you to lower values according to an angled line by clicking on the button and dragging downwards. This lowers values on the left more than on the right.

Tilt Right



Allows you to lower values according to an angled line by clicking on the button and dragging downwards. This lowers values on the right more than on the left.

Delta



Represents the center point of values. Allows you to move all displayed values to upwards/downwards. This maintains explicit value gaps between bars.

Scale



Proportionally moves values upwards/downwards. This maintains proportional relationships between bars; that is, gaps between bars widen when you scale multiply upwards and narrow when you scale multiply downwards.

Randomize



Allows you to randomize values by clicking on the button and dragging upwards. The higher your mouse pointer, the wider and more extreme the randomization. Randomization uses standard distribution on an approximate bell-shape.

Changing values using the Transform tool

You can make Transform selections around consecutive velocity and MIDI CC values, then use Transform controls to change the selected values in a variety of ways; for example, increasing all values proportionally.

TIP

If you want to change values on a larger scale, you can use the Histogram tool.

PREREQUISITE

- The lower zone is shown.
- **Key Editor s** is selected in the lower zone toolbar.
- You have selected the instruments that you want to show in the Key Editor.
- You have added at least one Velocity or MIDI CC editor to the Key Editor.

PROCEDURE

- 1. In the Key Editor panel toolbar, click **Transform** to select the Transform tool.
- 2. In the editor in which you want to change values, click and drag across the required range.

RELATED LINKS

Hiding/Showing zones on page 43 Key Editor panel toolbar on page 652 Adding/Closing editors in the Key Editor on page 658 Showing instruments in the Key Editor on page 654

Key Editor configurations

Key Editor configurations allow you to open specific combinations of editors simultaneously. This can be much quicker than adding/closing the required editors manually.

For example, if you regularly switch between showing the Velocity and Dynamics editors, and several MIDI CC editors, you can save Key Editor configurations for these combinations, then apply each configuration as required.

Saving Key Editor configurations

You can save configurations of editors in the Key Editor; for example, if you regularly use the Velocity and Dynamics editors together. You can access Key Editor configurations in all projects on your computer.

PREREQUISITE

- The lower zone is shown.
- **Key Editor** is selected in the lower zone toolbar.
- You have added the editors you want to save in your Key Editor configuration.

PROCEDURE

- **1.** Save the editors currently open in the Key Editor as a Key Editor configuration in one of the following ways:
 - To save a new Key Editor configuration, click **Presets** at the bottom left of the Key Editor, then choose **Save Configuration**.
 - To replace an existing Key Editor configuration, click Presets at the bottom left of the Key Editor, choose Replace Configuration, then select the configuration you want to replace.
- **2.** If you saved a new Key Editor configuration, enter a name for the configuration in the **Configuration Name** dialog that opens.
- 3. Click **OK** to save your changes and close the dialog.

RELATED LINKS

Hiding/Showing zones on page 43 Adding/Closing editors in the Key Editor on page 658

Applying Key Editor configurations

You can apply Key Editor configurations to projects, which adds the editors saved in that configuration to the Key Editor and replaces any editors that were already open.

PREREQUISITE

- The lower zone is shown.
- **Key Editor** is selected in the lower zone toolbar.
- You have saved at least one Key Editor configuration on your computer.

PROCEDURE

- 1. At the bottom left of the Key Editor, click **Presets** =
- **2.** Select the configuration you want to apply.

Deleting Key Editor configurations

You can delete Key Editor configurations; for example, if you no longer require a specific configuration after finishing a project.

PREREQUISITE

- The lower zone is shown.
- **Key Editor** is selected in the lower zone toolbar.

PROCEDURE

- 1. At the bottom left of the Key Editor, click **Presets**
- 2. Choose Delete Configuration.
- **3.** Select the configuration you want to delete.

Mixer

The Mixer allows you to control the volume, panning, and sounds of channels in playback.

You can access the Mixer in the following places:

- In the Mixer panel in the lower zone
- In the **Mixer** window

RELATED LINKS

Mixer window on page 701 Zones and panels on page 36 Stage templates on page 713 Space templates on page 720

Mixer panel

The Mixer panel allows you to control the volume and panning of channels in playback. When the Mixer panel is sufficiently tall, it also provides access to channel strips. It is located in the lower zone at the bottom of the window in Write, Engrave, and Play modes.

• You can show the Mixer panel by showing the lower zone, then clicking **Mixer** In the lower zone toolbar.



The Mixer panel comprises the following:

1 Mixer toolbar

Contains tools that allow you to edit the mix, and to hide/show and add/remove channels.

2 Channel strips

Allow you to change the sound of the channel; for example, by loading inserts or changing its equalization.

3 Channels

Allow you to change the volume and pan position of the corresponding track or aspect of playback. There are audio and MIDI channels for each instrument/voice track, and additional channels, such as for the click and master output.

When additional channels are available beyond those currently in view, channels at the right/left edges of the Mixer appear faded.

Any changes you make in the Mixer are automatically saved and applied to the project.

TIP

In order to control the volume levels in your project, we recommend that you first input dynamics and adjust the dynamic curve to suit your project before using the track faders.

Mixer window

The **Mixer** window allows you to control the volume and panning of channels in playback. It also provides permanent access to channel strips.

You can hide/show the **Mixer** window in any of the following ways:

- Press F3.
- In the toolbar, click **Show Mixer !**!!



The **Mixer** window comprises the following:

1 Mixer toolbar

Contains tools that allow you to edit the mix, and to hide/show and add/remove channels.

2 Channel strips

Allow you to change the sound of the channel; for example, by loading inserts or changing its equalization.

3 Channels

Allow you to change the volume and pan position of the corresponding track or aspect of playback. There are audio and MIDI channels for each instrument/voice track, and additional channels, such as for the click and master output.

When additional channels are available beyond those currently in view, channels at the right/left edges of the Mixer appear faded.

Any changes you make in the Mixer are automatically saved and applied to the project.

TIP

In order to control the volume levels in your project, we recommend that you first input dynamics and adjust the dynamic curve to suit your project before using the track faders.

RELATED LINKS

Toolbar on page 29
Mixer channel strips on page 705
Muting/Soloing tracks on page 532
Playback Options for dynamics on page 934
Input methods for dynamics on page 302

Hiding/Showing the Mixer window

You can hide and show the **Mixer** window at any time; for example, if you do not want it in view when working on the music in the music area.

PROCEDURE

- Hide/Show the **Mixer** window in any of the following ways:
 - Press F3.
 - In the toolbar, click **Show Mixer** #1.
 - Choose Window > Mixer.

Mixer toolbar

The Mixer toolbar contains tools that allow you to edit the mix, and to hide/show and add/remove channels. It is located at the top of the Mixer, both in the lower zone and in the **Mixer** window.

Channel type buttons

Allow you to hide/show channels according to their type, and in any combination.

Deactivate all

Allows you to deactivate all mute and solo states by clicking the corresponding button. Indicates whether any channels have an active mute or solo state.

Add Effects Channel



Adds an FX channel.

Remove Effects Channel



Removes the FX channel furthest to the right in the Mixer.

Live Stage



Opens the Live Stage dialog.

Live Space



Opens the Live Space dialog.

Resize Lower Zone



Allows you to change the height of the lower zone. Only available in the Mixer panel.

RELATED LINKS

Live Stage dialog on page 715 Live Space dialog on page 722

Mixer channels

Mixer channels allow the sources connected to them, such as instrument tracks, to produce sound. You can access all channels in the Mixer panel and **Mixer** window, and individual channels in the Track Inspector for the corresponding track.



Each channel in the Mixer panel provides the following controls and displays:

1 Pan control

Allows you to position the sound/MIDI output of the channel on the stereo spectrum for stereo playback.

2 Fader value

Displays the current volume as a value, corresponding to the position of the fader. Allows you to enter the volume level directly.

- Audio channels use dB.
- MIDI channels use MIDI volume, from 0 to 127.

3 Fader

Allows you to control the volume level of the channel.

4 Channel meter

Indicates the output volume of the channel in real time.

5 Mute

Allows you to mute the channel. Indicates whether the channel has an active mute state.

6 Solo

Allows you to solo the channel. Indicates whether the channel has an active solo state.

7 Channel name

Displays the name of the channel.

Instrument channels display the full instrument name set for that instrument in the **Edit Instrument Names** dialog and its instrument number, if applicable.

RELATED LINKS

Track Inspector on page 507
Edit Instrument Names dialog on page 180
Instrument numbering on page 129
Renaming channels on page 710

Types of Mixer channels

There are different types of channels available in the Mixer. The channel type can affect the controls available for the corresponding channel.

Instruments

There is a channel for each instrument/voice track in your project. When instrument channels are shown, all applicable channels are included, even if they are spread across multiple plug-in instances.

There is an additional instrument channel named "DoricoBeep", which allows you to control the volume of the metronome click.

MIDI

Every VST instrument in your project has its own MIDI channel in addition to its VST channel. These MIDI channels allow you to change the MIDI volume and MIDI pan of each instrument.

Video

Allows you to control the volume of video audio.

FX

Allows you to control the volume of send effects, such as reverb. By default, the Mixer contains a single FX channel named "Reverb", which has REVerence loaded as an insert.

FX channels have green backgrounds.

TIP

For more information about REVerence, see the separate document **Plug-in Reference**.

Output

Allows you to control the master output volume. The **Output** channel is always shown and has a red background.

RELATED LINKS

Renaming channels on page 710

Adding FX channels on page 710 Loading inserts into channels on page 711

Mixer channel strips

Each channel in the Mixer has its own channel strip, which contains the channel controls. Channel strips are located at the top of the **Mixer** window permanently, and at the top of the Mixer panel when it is sufficiently tall.

Each channel strip contains the following types of controls:

Inserts



Each channel has four slots into which you can load an insert. You can select inserts from the menu.

The header allows you to expand/collapse the section for all channels.

The indicator can have one of the following states:

- **Disabled** : No inserts are loaded into the channel.
- **Enabled** : At least one insert is loaded into the channel, and inserts are enabled.
- **Bypassed** : At least one insert is loaded into the channel, and all inserts are bypassed.

The following controls are available for slots with loaded inserts:

- **Enable Insert U**: Enables/Bypasses the insert slot.
- **Edit Insert ?**: Opens the plug-in window for the loaded plug-in, which allows you to edit its settings.
- **Insert menu** Opens the plug-in menu, which allows you to select a different plug-in to load into the insert slot.

TIP

- For more information about the plug-ins included with Dorico Elements, see the separate document **Plug-in Reference**.
- You can access inserts for individual channels in the Track Inspector for the corresponding track.

EQ



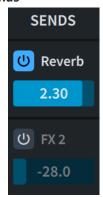
Each channel has four bands for default EQ.

The indicator allows you to enable and disable the section. The header allows you to expand/collapse the section for all channels.

The following controls are available for each EQ band:

- **Enable EQ U**: Enables/Bypasses the corresponding band.
- **Gain**: Sets the amount of attenuation/boost for the corresponding band in dB.
- **Frequency**: Sets the frequency of the corresponding band in Hz.
- **Q**: Controls the width of the band; that is, how many frequencies above/below it also affects, and by how much.

Sends



Each channel has a send slot for each FX channel.

The header allows you to expand/collapse the section for all channels.

The following controls are available for each send slot:

- Enable Send U: Enables/Bypasses the corresponding send slot.
- **Gain slider**: Sets the amount of sound sent post-fader to the corresponding FX channel.

TIP

You can use stage and space templates to set the send gain for all instruments in the project automatically.

RELATED LINKS

Loading inserts into channels on page 711 Track Inspector on page 507 Stage templates on page 713 Space templates on page 720

Hiding/Showing channels

You can hide/show channels in the Mixer according to their type; for example, you can hide MIDI channels while working on instrument channels.

PREREQUISITE

The Mixer is shown, either in the lower zone or in the Mixer window.

PROCEDURE

• In the Mixer toolbar, activate/deactivate each channel type.

RESULT

Channels are shown in the Mixer when their type button is activated, and hidden when it is deactivated.

Scrolling through channels

When many channels are shown in the Mixer, you can scroll through them in order to view channels that do not fit in the view.

PREREQUISITE

The Mixer is shown, either in the lower zone or in the Mixer window.

PROCEDURE

- In the Mixer, scroll through channels in any of the following ways:
 - Scroll upwards/downwards on a mouse wheel, or swipe upwards/downwards on a touchpad.
 - Click and drag, anywhere outside of channel faders, to the right/left.

Changing the height of channels

You can change the vertical space occupied by channels and channel strips in the Mixer; for example, to make channel strips taller when loading inserts or changing EQ settings.

PREREQUISITE

The Mixer is shown, either in the lower zone or in the Mixer window.

PROCEDURE

• In the Mixer, on the line between channel strips and channels, click and drag upwards/ downwards.

When the mouse pointer is in the correct position, it appears as a split arrow.



RELATED LINKS

Hiding/Showing zones on page 43 Mixer channels on page 703 Mixer channel strips on page 705

Changing the volume of channels

You can change and reset the volume of individual channels in the Mixer; for example, to balance instruments in an orchestral project.

PREREQUISITE

The Mixer is shown, either in the lower zone or in the Mixer window.

PROCEDURE

- In the Mixer, change the volume of channels in any of the following ways:
 - To increase their volume, drag their faders upwards.
 - To decrease their volume, drag their faders downwards.
 - Alt/Opt-click the fader value, enter a new value, then press Return.

TIP

- To set output channels to their maximum value, enter inf.
- To set output channels to their minimum value, enter **-inf** or **-oo**.
- To reset their volume to the default value, Ctrl/Cmd -click or double-click their fader values.



• To reset the volume of all channels, choose Play > Apply Default Output Level.

RESULT

The volume of the corresponding channels is changed.

TIP

You can change the default output level for all future projects on the **Play** page in **Preferences**. By default, this is set to **-6** dB to avoid clipping in projects with large ensembles.

RELATED LINKS

Preferences dialog on page 57

Panning channels

You can change the pan position of individual channels on the stereo spectrum; for example, if you want the pan positions of instruments in an orchestral project to match their positions on a real-life stage.

TIP

You can use stage templates to set pan positions for all instruments in the project automatically.

PREREQUISITE

The Mixer is shown, either in the lower zone or in the Mixer window.

PROCEDURE

- In the Mixer, change the pan position of each channel in any of the following ways:
 - In the pan control, click positions directly, or click and drag to the right/left.



Alt/Opt -click the pan value, enter a new value, then press Return.
 The available pan range is -100 to 100.

RELATED LINKS

Mixer channels on page 703 Stage templates on page 713

Adding FX channels

You can add multiple FX channels to the Mixer; for example, if you want to use a different reverb sound for each instrument family.

The Mixer can contain a maximum of eight FX channels.

PREREQUISITE

The Mixer is shown, either in the lower zone or in the Mixer window.

PROCEDURE

• In the Mixer toolbar, click Add Effects Channel 强.

RESULT

A new FX channel is added. It is positioned to the right of all existing FX channels in the Mixer.

AFTER COMPLETING THIS TASK

You can load inserts into the FX channel and change its EQ using its channel strip.

RELATED LINKS

Mixer toolbar on page 702

Types of Mixer channels on page 704

Loading inserts into channels on page 711

Changing the reverb plug-in on page 712

Removing FX channels

You can delete FX channels from the Mixer; for example, if you no longer need multiple reverb sounds.

PREREQUISITE

The Mixer is shown, either in the lower zone or in the Mixer window.

PROCEDURE

• In the Mixer toolbar, click **Remove Effects Channel S**.

RESULT

The FX channel furthest to the right in the Mixer is removed.

Renaming channels

You can rename channels and reset renamed channels to their default name. For example, to help you identify different FX channels.

PREREQUISITE

The Mixer is shown, either in the lower zone or in the Mixer window.

PROCEDURE

- **1.** In the Mixer, double-click the channel name you want to change to open the channel name text field.
- **2.** Rename the channel in any of the following ways:

- Enter a new channel name, or edit the existing name.
- To reset the channel name, delete the existing name.
- 3. Press Return.

Loading inserts into channels

You can load up to four inserts into each channel, excluding MIDI channels. For example, you can load specific EQ plug-ins instead of using the default EQ channel strips, and apply amp modeling plug-ins to clean guitar channels.

TIP

For more information about the plug-ins included with Dorico Elements, see the separate document **Plug-in Reference**.

PREREQUISITE

The Mixer is shown, either in the lower zone or in the Mixer window.

PROCEDURE

- 1. In the Mixer, click **Inserts** in any channel strip to expand all inserts sections.
- **2.** Click an insert slot and select the plug-in you want to load from the menu.



- **3.** Optional: If you want to edit settings for the new plug-in, click **Edit Insert ⊘** to open its plug-in window.
- **4.** Optional: If you loaded EQ plug-ins, deactivate the EQ channel strip in the corresponding channels.

RELATED LINKS

Mixer channel strips on page 705 Changing the sound used for the click on page 518

Enabling/Bypassing inserts

You can enable/bypass individual inserts without affecting their settings; for example, if you want to compare how a channel sounds with and without a specific insert.

PREREQUISITE

The Mixer is shown, either in the lower zone or in the **Mixer** window.

PROCEDURE

- 1. In the Mixer, click **Inserts** in any channel strip to expand all inserts sections.
- 2. In each insert slot you want to enable/bypass, do one of the following:
 - To enable/bypass individual inserts, click **Enable Insert U** in the corresponding slots.

• To enable/bypass all inserts for channels, click the **Inserts** indicator **I** in the corresponding channel strips.

RESULT

The corresponding inserts are enabled/bypassed.

- Enabled inserts appear blue.
- Bypassed inserts appear yellow.

Removing inserts

You can remove individual inserts you have loaded into channels.

PREREQUISITE

The Mixer is shown, either in the lower zone or in the Mixer window.

PROCEDURE

- 1. In the Mixer, click **Inserts** in any channel strip to expand all inserts sections.
- 2. In the slot whose insert you want to remove, click the insert menu and select from the menu.

Changing the reverb plug-in

You can change the plug-in used for reverb; for example, if you want to use a specific reverb sound. By default, the reverb plug-in REVerence is loaded into the first FX channel.

TIP

For more information about the plug-ins included with Dorico Elements, see the separate document **Plug-in Reference**.

PREREQUISITE

- The Mixer is shown, either in the lower zone or in the **Mixer** window.
- The FX channel is shown.

PROCEDURE

- 1. In the Mixer, click **Inserts** in any channel strip to expand all inserts sections.
- 2. In the FX channel strip, click the insert menu in the REVerence insert slot, and select the reverb plug-in you want to use from the menu.
- **3.** Optional: If you want to edit settings for the new plug-in, click **Edit Insert** ⊘ to open its plug-in window.

RELATED LINKS

Mixer panel on page 700
Mixer window on page 701
Mixer channel strips on page 705
Hiding/Showing channels on page 707
Changing the sound used for the click on page 518
Space templates on page 720

Stage templates

Stage templates allow you to set appropriate stage positions for all instruments in the project simultaneously, using the visual representation of a stage as seen from above to make this process easier. Stage positions determine the panning and reverb settings for instruments in playback.

When you apply stage templates to projects, Dorico Elements changes the panning and reverb settings for all channels in the Mixer simultaneously.

To match instruments in the project to stage positions defined in the stage template, Dorico Elements performs the following sequence of considerations in order of preference, first for instruments in groups, then for ungrouped instruments:

- **1.** Soloist instruments are matched with soloist stage positions for the corresponding instrument type, if defined.
- **2.** Numbered instruments are matched with numbered stage positions for the corresponding instrument type, if defined.
- **3.** Instruments are matched with unnumbered stage positions for the corresponding instrument type, if defined.
- **4.** Instruments are matched with instrument family stage positions for the corresponding instrument type, if defined.
- **5.** Instruments without a suitable stage position use the fallback position.

Where possible, Dorico Elements uses groups in stage templates for the corresponding player groups in Setup mode.

You can override the stage template applied to the current project in the **Live Stage** dialog, such as by changing the arrangement of some instruments. You can then save your overrides as a new stage template.

You can also export custom stage templates; for example, to share them with other users. Stage templates are saved as .dorico_stt files.

NOTE

- Stage templates are available in all projects you open or create on your computer. Any changes you make to stage templates affect new instruments you add to existing projects that use those stage templates.
- In combination with stage templates, you can use space templates to hear your arrangement of instruments in different spaces and with different amounts of reverb.

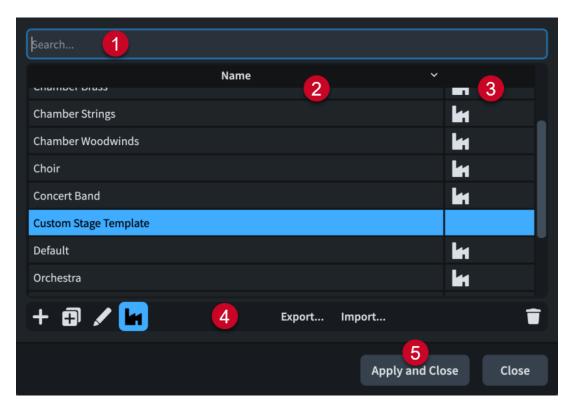
RELATED LINKS

Space templates on page 720 Playback templates on page 543 Designating players as soloists on page 125 Player groups on page 163

Apply Stage Template dialog

The **Apply Stage Template** dialog allows you to change the stage template applied to the current project and to import/export stage templates. It also allows you to access the **Edit Stage Template** dialog.

• You can open the **Apply Stage Template** dialog by choosing **Play** > **Stage Template**.



The **Apply Stage Template** dialog comprises the following:

1 Search field

Allows you to filter stage templates in the list according to your entry.

2 Name column

Contains a list of the stage templates available on your computer. You can click the column header to change the sorting order.

3 Factory column

Contains the factory symbol if the stage template in the corresponding row is a factory default stage template. You can click the column header to change the sorting order.

4 Action bar

Contains the following options:

- Add Stage Template : Opens the Edit Stage Template dialog and allows you to create a new stage template.
- **Duplicate Stage Template** : Opens the **Edit Stage Template** dialog and allows you to create a new stage template that starts as a duplicate of the selected one.
- **Edit Stage Template Z**: Opens the **Edit Stage Template** dialog and allows you to edit the existing selected stage template.

NOTE

You cannot edit factory default stage templates.

- Show Factory : Allows you to hide/show factory default stage templates in the table.
- **Export**: Opens the File Explorer/macOS Finder, where you can select the location to which you want to export the currently selected stage templates as .dorico_stt files. You can then import the .dorico_stt files into Dorico Elements on other computers and share them with other users.

- **Import**: Opens the File Explorer/macOS Finder, where you can select the .dorico_stt files that you want to import as stage templates.
- **Delete** : Deletes the selected stage templates.

NOTE

You cannot delete factory default stage templates.

5 Apply and Close

Applies the selected stage template to the project and closes the dialog.

Live Stage dialog

The **Live Stage** dialog allows you to change the arrangement of instruments in the current project, which affects their panning and reverb settings in the Mixer in real time.

• You can open the **Live Stage** dialog by clicking **Live Stage** in the Mixer toolbar.



The **Live Stage** dialog provides a visual representation of a stage, as seen from above. The back of the stage is at the top of the dialog, while the front of the stage is at the bottom of the dialog.

The horizontal axis determines pan positions, from left to right. The vertical axis determines the amount of sound sent to FX channels for reverb; typically, from low reverb at the bottom to more reverb at the top.

Each instrument in the project appears as a colored dot, representing its stage position, followed by its full instrument name. Each instrument family uses a different color.

You can click and drag instruments to new stage positions.

The action bar at the bottom of the dialog contains the following options:

Save as New Stage Template

Saves the current arrangement of instruments in the **Live Stage** dialog as a new custom stage template, allowing you to use it in future projects.

Expand



Moves instruments proportionally outwards. Applies to either only selected instruments, or all instruments when no instruments are selected.

Contract



Moves instruments proportionally inwards. Applies to either only selected instruments, or all instruments when no instruments are selected.

NOTE

Instruments do not appear in the Live Stage dialog in any of the following circumstances:

- If their expression/map settings prevent them from using space templates.
- If they use MIDI instruments for playback, rather than VST instruments.

RELATED LINKS

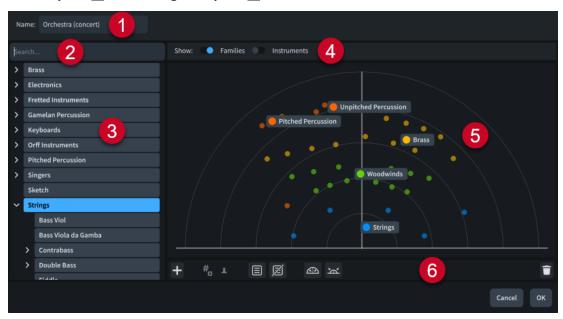
Mixer toolbar on page 702 Expression maps on page 744 Percussion maps on page 763 Playback templates on page 543 VST and MIDI panel on page 511

Edit Stage Template dialog

The **Edit Stage Template** dialog allows you to create new stage templates and edit existing ones. You can define the stage positions of instrument families, individual instruments, and soloists, independently of the instruments in the project.

You can open the **Edit Stage Template** dialog in the following ways:

- In the Live Stage dialog, click Save as New Stage Template.
- In the Apply Stage Template dialog, click Add Stage Template ♣, Duplicate Stage
 Template ♠, or Edit Stage Template ◄.



The **Edit Stage Template** dialog comprises the following:

1 Name

Allows you to set the name of the stage template that appears in the program; for example, in the **Apply Stage Template** dialog.

2 Search field

Allows you to filter instruments in the list according to your entry.

3 Instrument list

Contains all the instruments available on your computer and within your search filter, if applicable.

4 Show

Allows you to hide/show the names of instrument families and individual instruments, independently of each other. Hiding names also disables editing of the corresponding category, and their colored dots appear more transparent.

5 Stage

Provides a visual representation of a stage, as seen from above. The back of the stage is at the top of the dialog, while the front of the stage is at the bottom of the dialog.

The horizontal axis determines pan positions, from left to right. The vertical axis determines the amount of sound sent to FX channels for reverb; typically, from low reverb at the bottom to more reverb at the top.

Each instrument and instrument family appears as a colored dot, representing its stage position, followed by its full instrument name. Instrument family dots are larger than individual instrument dots.

Instrument families are color-coded, meaning instrument families and the instruments within them use the same color.

When you add multiple instruments of the same type to a stage template, Dorico Elements automatically numbers them.

Parenthesized indications for soloists and groups are automatically added to the ends of instrument names.

You can click and drag instruments to new stage positions.

6 Action bar

Contains the following options:

- Add :: Adds the instrument or instrument family currently selected in the instrument list to the center of the stage. You can also click and drag instruments from the instrument list to specific positions on the stage.
- **Un-numbered** : Includes/Excludes the selected instrument from instrument numbering. Sets the stage position for the corresponding numbered instrument when multiple instruments of the same type exist in the same project.
- **Soloist** I: Turns the selected instrument into a soloist. Sets the stage position for instruments of the corresponding type that are designated as soloists.
- **Create Group :** Creates a group containing the instruments selected on the stage.
- **Remove From Group !** Removes the selected instruments from their corresponding group.
- **Expand** Applies to either only selected instruments, or all instruments when no instruments are selected.
- **Contract** : Moves instruments proportionally inwards. Applies to either only selected instruments, or all instruments when no instruments are selected.
- Delete : Deletes the selected instruments from the stage template.

Applying/Resetting stage templates

You can change the stage template applied to the current project; for example, to use a different arrangement of instruments for panning and reverb. Re-selecting stage templates resets them to their default settings.

PROCEDURE

- 1. Choose Play > Stage Template to open the Apply Stage Template dialog.
- **2.** Select the stage template that you want to use.
- 3. Click Apply and Close.

RESULT

The stage template applied to the current project is changed. If you re-selected the stage template already in use, the stage template is reset.

TIP

You can change the default stage template used for all future projects on the **Play** page in **Preferences**.

AFTER COMPLETING THIS TASK

You can change the space template applied to the project; for example, to hear your music with the acoustic qualities of a different performance space.

RELATED LINKS

Applying/Resetting space templates on page 725 Changing the default space template on page 727 Preferences dialog on page 57

Creating stage templates

You can create new stage templates that you can apply to other projects, including specifying stage positions for soloists and instrument families.

PREREQUISITE

- You have added the instruments that you want to include in your stage template to the current project.
- You have loaded sounds for the instruments in the current project; for example, by applying a playback template.
- The Mixer is shown, either in the lower zone or in the **Mixer** window.

PROCEDURE

- 1. In the Mixer toolbar, click **Live Stage** to open the **Live Stage** dialog.
- 2. Select the instruments that you want to move to new stage positions.
- **3.** Move the selected instruments in any of the following ways:
 - Click and drag them.
 - To move them proportionally outwards, click Expand ...
 - To move them proportionally inwards, click **Contract ...**

TIP

- You can click and hold **Expand** and **Contract** to move instruments smoothly until you release the mouse pointer.
- When no instruments are selected, **Expand** and **Contract** apply to all instruments on the stage.
- 4. Click Save as New Stage Template to open the Edit Stage Template dialog.
- **5.** Enter a name for the stage template in the **Name** field.
- **6.** Optional: Edit the stage template using the available options.
 - To add an instrument to the stage template, click and drag it from the instrument list to the stage.
 - To delete instruments from the stage template, select them, then click **Delete** in the action bar.
 - To turn an instrument into a soloist, select it, then click **Soloist** I in the action bar.
 - To include/exclude instruments from instrument numbering, select them, then click **Un-numbered** # in the action bar.
 - To add instruments to a new group, select them, then click **Create Group** in the action bar.
 - To remove instruments from groups, select them, then click **Remove From Group** in the action bar.
- 7. Click **OK** to confirm your settings and close the dialog.

RESULT

Your new stage template is created. It is available to use in the current project and all projects that you create/open on your computer.

RELATED LINKS

Mixer toolbar on page 702
Applying/Resetting playback templates on page 549
Adding players on page 122
Adding instruments to players on page 131

Importing stage templates

You can import stage templates into projects; for example, if someone you are working with exported their custom stage template for you to use. Stage templates are saved as .dorico_stt files.

PROCEDURE

- 1. Choose Play > Stage Template to open the Apply Stage Template dialog.
- 2. Click **Import** to open the File Explorer/macOS Finder.
- 3. Locate and select the stage template file that you want to import.
- 4. Click Open.

RESULT

The selected stage template is imported. It becomes available in the current project and all projects you create/open on your computer.

TIP

You can also import stage templates by dragging .dorico_stt files into a Dorico Elements project window.

Exporting stage templates

You can export stage templates so you can send them to other users or use them on other computers. By default, any stage templates that you create are available in all projects on your computer.

PROCEDURE

- 1. Choose Play > Stage Template to open the Apply Stage Template dialog.
- 2. Select the stage templates that you want to export.
- 3. Click **Export** to open the File Explorer/macOS Finder.
- **4.** Specify a name and location for the stage template files.
- 5. Click Choose.

RESULT

The selected stage templates are exported and saved in the selected location as separate .dorico_stt files.

Space templates

Space templates allow you to define the panning and reverb settings of a space, such as a room or concert hall, so that you can hear how your project might sound in the corresponding space.

For example, the factory default space templates add more reverb to instruments positioned at the back of the stage to emulate how music sounds when played from a distance.

When you apply space templates to projects, Dorico Elements changes the panning and reverb settings for all channels in the Mixer simultaneously.

Space templates are available in all projects that you open or create on your computer. You can export custom space templates; for example, to share them with other users.

Space templates are saved as .dorico_spt files.

TIP

In combination with space templates, you can use stage templates to position instruments in different arrangements for playback.

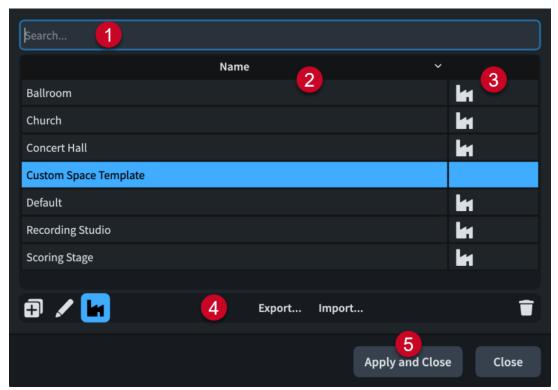
RELATED LINKS

Stage templates on page 713 Playback templates on page 543

Apply Space Template dialog

The **Apply Space Template** dialog allows you to change the space template applied to the current project and to import/export space templates. It also allows you to access the **Edit Space Template** dialog.

• You can open the **Apply Space Template** dialog by choosing **Play** > **Space Template**.



The **Apply Playback Template** dialog comprises the following:

1 Search field

Allows you to filter space templates in the list according to your entry.

2 Name column

Contains a list of the space templates available on your computer. You can click the column header to change the sorting order.

3 Factory column

Contains the factory symbol if the space template in the corresponding row is a factory default space template. You can click the column header to change the sorting order.

4 Action bar

Contains the following options:

- **Duplicate Space Template** : Opens the **Edit Space Template** dialog and allows you to create a new space template that starts as a duplicate of the selected one.
- **Edit Space Template Z**: Opens the **Edit Space Template** dialog and allows you to edit the existing selected space template.

NOTE

You cannot edit factory default space templates.

• Show Factory : Allows you to hide/show factory default space templates in the table.

- **Export**: Opens the File Explorer/macOS Finder, where you can select the location to which you want to export the currently selected space templates as .dorico_spt files. You can then import the .dorico_spt files into Dorico Elements on other computers and share them with other users.
- **Import**: Opens the File Explorer/macOS Finder, where you can select the .dorico_spt files that you want to import as space templates.
- **Delete** : Deletes the selected space templates.

NOTE

You cannot delete factory default space templates.

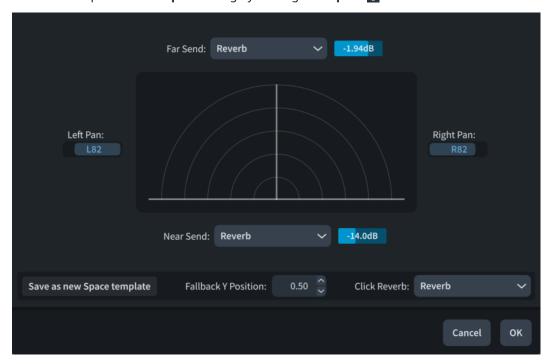
5 Apply and Close

Applies the selected space template to the project and closes the dialog.

Live Space dialog

The **Live Space** dialog allows you to change the maximum pan positions and FX send values for instruments in the current project.

• You can open the **Live Space** dialog by clicking **Live Space** in the Mixer toolbar.



The **Live Space** dialog contains the following options:

Far Send

Allows you to select the FX channel that you want to use for instruments at the back of the stage. The gain slider sets the amount of sound sent post-fader to the selected FX channel.

Near Send

Allows you to select the FX channel that you want to use for instruments at the front of the stage. The gain slider sets the amount of sound sent post-fader to the selected FX channel.

Left Pan

Sets the maximum left pan position.

Right Pan

Sets the maximum right pan position.

Save as New Space Template

Saves the current settings in the **Live Space** dialog as a new custom space template, allowing you to use it in future projects.

Fallback Y Position

Sets the default near/far position for instruments in the project that are not defined in the stage template applied to the project.

Click Reverb

Allows you to select the FX channel that you want to use for the metronome click.

NOTE

The send value for the metronome click is fixed at a low value.

RELATED LINKS

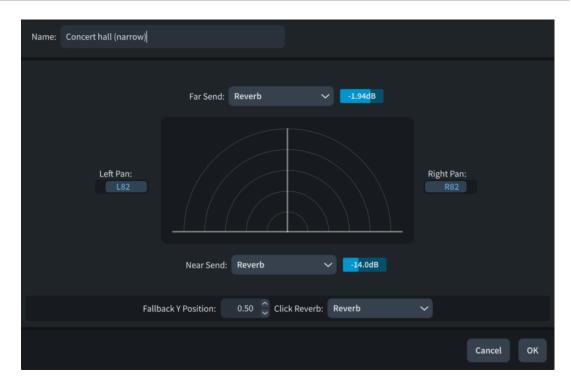
Mixer toolbar on page 702 Types of Mixer channels on page 704 Changing the reverb plug-in on page 712 Adding FX channels on page 710 Live Stage dialog on page 715

Edit Space Template dialog

The **Edit Space Template** dialog allows you to edit the settings of space templates.

You can open the **Edit Space Template** dialog in the following ways:

- In the Live Space dialog, click Save as New Space Template.



The **Edit Space Template** dialog contains the following options:

Name

Allows you to set the name of the space template that appears in the program; for example, in the **Apply Space Template** dialog.

Far Send

Allows you to select the FX channel that you want to use for instruments at the back of the stage. The gain slider sets the amount of sound sent post-fader to the selected FX channel.

Near Send

Allows you to select the FX channel that you want to use for instruments at the front of the stage. The gain slider sets the amount of sound sent post-fader to the selected FX channel.

Left Pan

Sets the maximum left pan position.

Right Pan

Sets the maximum right pan position.

Fallback Y Position

Sets the default near/far position for instruments in the project that are not defined in the stage template applied to the project.

Click Reverb

Allows you to select the FX channel that you want to use for the metronome click.

NOTE

The send value for the metronome click is fixed at a low value.

Applying/Resetting space templates

You can change the space template applied to the current project; for example, to hear your music with the acoustic qualities of a different performance space. Re-selecting space templates resets them to their default settings.

PROCEDURE

- 1. Choose Play > Space Template to open the Apply Space Template dialog.
- 2. Select the space template that you want to use.
- 3. Click Apply and Close.

RESULT

The space template applied to the current project is changed. If you re-selected the space template already in use, the space template is reset.

The panning of the corresponding Mixer channels and the amount of channel output sent to the selected FX channel are changed.

Any required inserts on FX channels are loaded, provided the plug-ins are installed on your computer.

AFTER COMPLETING THIS TASK

You can change the stage template applied to the project; for example, to try a different arrangement of instruments.

RELATED LINKS

Mixer channels on page 703
Panning channels on page 709
Applying/Resetting stage templates on page 718

Creating space templates

You can create new space templates that you can apply to other projects.

PREREQUISITE

- You have added the FX channels that you want to use for reverb, and loaded the required plug-ins into them.
- The Mixer is shown, either in the lower zone or in the Mixer window.

PROCEDURE

- 1. In the Mixer toolbar, click **Live Space** to open the **Live Space** dialog.
- **2.** From the **Far Send** menu, select the FX channel that you want to use for reverb for instruments positioned at the back of the stage.
- **3.** From the **Near Send** menu, select the FX channel that you want to use for reverb for instruments positioned at the front of the stage.
- **4.** To change the amount of sound sent to the **Far Send** and **Near Send** FX channels, click and drag the corresponding gain slider.
- **5.** To change the maximum pan positions, click and drag the **Left Pan** and **Right Pan** gain sliders.
- **6.** To change the default near/far position for instruments not defined in the stage template, change the value for **Fallback Y Position**.

- **7.** From the **Click Reverb** menu, select the FX channel that you want to use for the metronome click.
- 8. Click Save as New Space Template to open the Edit Space Template dialog.
- **9.** Enter a name for the space template in the **Name** field.
- **10.** Click **OK** to confirm your settings and close the dialog.

RESULT

Your new space template is created. It is available to use in the current project and all projects that you create/open on your computer.

RELATED LINKS

Mixer toolbar on page 702 Adding FX channels on page 710 Loading inserts into channels on page 711 Changing the reverb plug-in on page 712

Importing space templates

You can import space templates into projects; for example, if someone you are working with exported their custom space template for you to use. Space templates are saved as .dorico_spt files.

PROCEDURE

- 1. Choose Play > Space Template to open the Apply Space Template dialog.
- 2. Click **Import** to open the File Explorer/macOS Finder.
- 3. Locate and select the space template file that you want to import.
- 4. Click Open.

RESULT

The selected space template is imported. It becomes available in the current project and all projects that you create/open on your computer.

TIP

- You can also import space templates by dragging .dorico_spt files into a Dorico Elements project window.
- Space templates are automatically imported alongside playback templates that use them.

RELATED LINKS

Playback templates on page 543 Importing playback templates on page 551

Exporting space templates

You can export space templates so you can send them to other users or use them on other computers. By default, any space templates that you create are available in all projects on your computer.

PROCEDURE

1. Choose Play > Space Template to open the Apply Space Template dialog.

- **2.** Select the space templates that you want to export.
- 3. Click **Export** to open the File Explorer/macOS Finder.
- **4.** Specify a name and location for the space template files.
- 5. Click Choose.

RESULT

The selected space templates are exported and saved in the selected location as separate .dorico_spt files.

Changing the default space template

You can change the default space template used for all future projects; for example, if you want all your projects to use a different reverb sound than Dorico Elements provides by default.

PREREQUISITE

If you want to use a custom space template, you have created or imported that space template.

PROCEDURE

- 1. Press Ctrl/Cmd-, to open Preferences.
- **2.** In the category list, click **Play**.
- 3. In the **Playback Template** subsection, select a space template from the **Space template** override menu.
- 4. Click Apply, then Close.

RELATED LINKS

Preferences dialog on page 57

Library

In Dorico Elements, the library is the total compilation of visual items and options that are available in all projects on your computer. It combines factory default settings, custom items/options you have saved as default, and items/options only available in the current project.

Layout Options dialog

The **Layout Options** dialog allows you to change various aspects of each layout independently. For example, you can change the physical properties of the layout, such as page size, staff size, or margins, and how the music appears and is laid out, such as note spacing or staff labels.

Any changes you make in options dialogs apply to the current project only, unless you save your settings as default.

Options in **Layout Options** affect only the selected layouts, but apply to all flows in those layouts.

You can open **Layout Options** in any of the following ways:

- Press Ctrl/Cmd-Shift-L.
- Choose Library > Layout Options.
- In Setup mode, click **Layout Options** are in the **Layouts** panel.



The **Layout Options** dialog contains the following:

1 Search categories field

Allows you to filter categories and section titles according to your entry.

TIP

You can set the focus to the **Search categories** field by pressing **Ctrl/Cmd-L**. You can set the focus away by pressing **Tab**.

2 Category list

Contains the categories of options that you can view and change in the dialog. When you click a category in this list, any applicable section titles appear below the category in the list, and its options appear as a page in the main body of the dialog.

3 Section titles

Shows the titles of any sections on the selected category's page. You can click these section titles to navigate directly to that section of the page.

4 Section

Pages are divided into sections, which can contain multiple options. Sections that contain many options are divided into subsections. For options that have multiple possible settings, the active setting is highlighted.

5 Search pages bar

Allows you to search section titles and options on the currently selected page according to your entry and navigate through matches. The number of matches is displayed in the bar. Matches appear highlighted on the page, and the current option appears with a brighter highlight.

You can show the **Search pages** bar by pressing **Ctrl/Cmd-F**.

The bar contains the following options:

- **Search pages field**: Allows you to enter the term you want to search for. You can set the focus to the **Search pages** field by pressing **Ctrl/Cmd-F**.
- **Previous match** : Allows you to navigate to the previous match on the page. You can also navigate to the previous match by pressing **Ctrl/Cmd-Shift-G**.
- **Next match >**: Allows you to navigate to the next match on the page. You can also navigate to the next match by pressing **Ctrl/Cmd-G**.
- **Close** X: Closes the bar and removes all match highlights. You can also close the bar by pressing **Esc**.

6 Layouts list

Contains all the layouts in your project. By default, the layout currently open in the music area is selected when you open the dialog.

You can select multiple layouts in any of the following ways:

- Click one of the selection options in the action bar.
- Ctrl/Cmd -click to select multiple layouts.
- **Shift** -click to select multiple adjacent layouts.
- Click and drag across multiple layouts.

7 Action bar

Contains selection options that allow you to select layouts in the **Layouts** list according to their type.

- **Select All**: Selects all layouts, regardless of their type.
- Select All Full Score Layouts <u>a</u>: Selects all full score layouts only.
- **Select All Part Layouts ?**: Selects all part layouts only.
- Select All Custom Score Layouts
 Selects all custom score layouts only.

8 Save as Default

Saves all options currently set and applied in the dialog as the default for the selected layout type in new projects. For example, you can save new default settings for part layouts without affecting the default settings for full score layouts. Only available when a single layout is selected.

9 Reset to Saved Defaults

Resets all the options in the dialog for the selected layouts back to your saved defaults, according to their layout type.

10 Reset to Factory

Resets all the options in the dialog for the selected layouts back to the default factory settings, according to their layout type. This only affects the current project and does not delete your saved defaults, meaning future projects still start with your saved defaults.

11 Remove Saved Defaults

Deletes your previous saved defaults for the selected layout type without resetting the options in the current project. After removing your saved defaults, all layouts of the selected type in future projects start with the default factory settings.

RELATED LINKS

Layouts on page 170 Staves on page 1300 Page formatting on page 583 Condensing on page 626

Changing your preferred unit of measurement on page 50

Changing values in numeric value fields on page 649

Notation Options dialog

The **Notation Options** dialog allows you to change how music is notated by default in each flow independently. For example, there are options for beam, note, and rest grouping, voices, accidentals, and barlines.

Any changes you make in options dialogs apply to the current project only, unless you save your settings as default.

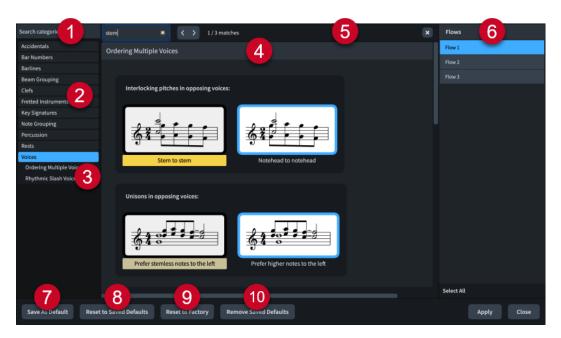
Options in **Notation Options** affect only the selected flows, but apply to all layouts in which those flows appear.

TIP

If you want to change notes and notations individually, you can use properties in the Properties panel.

You can open **Notation Options** in any of the following ways:

- Press Ctrl/Cmd-Shift-N.
- Choose Library > Notation Options.
- In Setup mode, click **Notation Options** in the **Flows** panel.



The **Notation Options** dialog contains the following:

1 Search categories field

Allows you to filter categories and section titles according to your entry.

TIP

You can set the focus to the **Search categories** field by pressing **Ctrl/Cmd-L**. You can set the focus away by pressing **Tab**.

2 Category list

Contains the categories of options that you can view and change in the dialog. When you click a category in this list, any applicable section titles appear below the category in the list, and its options appear as a page in the main body of the dialog.

3 Section titles

Shows the titles of any sections on the selected category's page. You can click these section titles to navigate directly to that section of the page.

4 Section

Pages are divided into sections, which can contain multiple options. Sections that contain many options are divided into subsections. For options that have multiple possible settings, the active setting is highlighted.

5 Search pages bar

Allows you to search section titles and options on the currently selected page according to your entry and navigate through matches. The number of matches is displayed in the bar. Matches appear highlighted on the page, and the current option appears with a brighter highlight.

You can show the **Search pages** bar by pressing **Ctrl/Cmd-F**.

The bar contains the following options:

- **Search pages field**: Allows you to enter the term you want to search for. You can set the focus to the **Search pages** field by pressing **Ctrl/Cmd-F**.
- **Previous match** : Allows you to navigate to the previous match on the page. You can also navigate to the previous match by pressing **Ctrl/Cmd-Shift-G**.

- **Next match** : Allows you to navigate to the next match on the page. You can also navigate to the next match by pressing **Ctrl/Cmd-G**.
- **Close** X: Closes the bar and removes all match highlights. You can also close the bar by pressing **Esc**.

6 Flows list

Contains all the flows in your project. By default, the flow in which you have selected an item in the music area or that is selected in the **Flows** panel in Setup mode is selected when you open the dialog.

You can select multiple flows in any of the following ways:

- Click **Select All** in the action bar to select all flows in the project.
- Ctrl/Cmd -click to select multiple flows.
- Shift -click to select multiple adjacent flows.
- Click and drag across multiple flows.

7 Save as Default

Saves all options currently set and applied in the dialog as the default for new projects. Only available when a single flow is selected.

8 Reset to Saved Defaults

Resets all the options in the dialog for the selected flows back to your saved defaults.

9 Reset to Factory

Resets all the options in the dialog for the selected flows back to the default factory settings. This only affects the current project and does not delete your saved defaults, meaning future projects still start with your saved defaults.

10 Remove Saved Defaults

Deletes your previous saved defaults without resetting the options in the current project. After removing your saved defaults, all future projects start with the default factory settings.

RELATED LINKS

Flows on page 167

Changing values in numeric value fields on page 649

Playback Options dialog

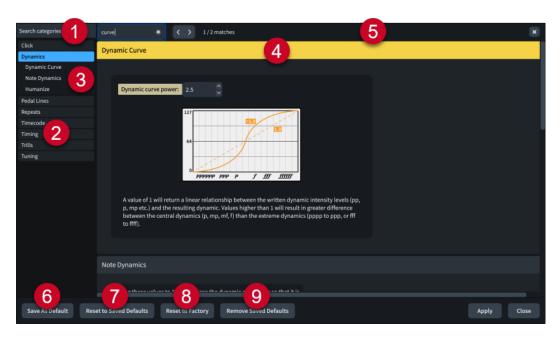
The **Playback Options** dialog allows you to change how the music you have written sounds when played back. These options affect playback regardless of expression maps and patches, such as how dynamics, pedal lines, and different notations are interpreted during playback.

For example, you can change how much louder notes on the first beat in each bar are compared to other notes in the bar, change how long each pedal retake lasts, and how much different articulations, such as staccatissimo and tenuto, affect the duration of notes.

Any changes you make in options dialogs apply to the current project only, unless you save your settings as default.

You can open **Playback Options** in any of the following ways:

- Press Ctrl/Cmd-Shift-P.
- Choose Library > Playback Options.



The **Playback Options** dialog contains the following:

1 Search categories field

Allows you to filter categories and section titles according to your entry.

TIP

You can set the focus to the **Search categories** field by pressing **Ctrl/Cmd-L**. You can set the focus away by pressing **Tab**.

2 Category list

Contains the categories of options that you can view and change in the dialog. When you click a category in this list, any applicable section titles appear below the category in the list, and its options appear as a page in the main body of the dialog.

3 Section titles

Shows the titles of any sections on the selected category's page. You can click these section titles to navigate directly to that section of the page.

4 Section

Pages are divided into sections, which can contain multiple options. Sections that contain many options are divided into subsections. For options that have multiple possible settings, the active setting is highlighted.

5 Search pages bar

Allows you to search section titles and options on the currently selected page according to your entry and navigate through matches. The number of matches is displayed in the bar. Matches appear highlighted on the page, and the current option appears with a brighter highlight.

You can show the **Search pages** bar by pressing **Ctrl/Cmd-F**.

The bar contains the following options:

- **Search pages field**: Allows you to enter the term you want to search for. You can set the focus to the **Search pages** field by pressing **Ctrl/Cmd-F**.
- **Previous match** : Allows you to navigate to the previous match on the page. You can also navigate to the previous match by pressing **Ctrl/Cmd-Shift-G**.

- **Next match** : Allows you to navigate to the next match on the page. You can also navigate to the next match by pressing **Ctrl/Cmd-G**.
- Close X: Closes the bar and removes all match highlights. You can also close the bar by pressing Esc.

6 Save as Default

Saves all options currently set and applied in the dialog as the default for new projects.

7 Reset to Saved Defaults

Resets all the options in the dialog back to your saved defaults.

8 Reset to Factory

Resets all the options in the dialog back to the default factory settings. This only affects the current project and does not delete your saved defaults, meaning future projects still start with your saved defaults.

9 Remove Saved Defaults

Deletes your previous saved defaults without resetting the options in the current project. After removing your saved defaults, all future projects start with the default factory settings.

RELATED LINKS

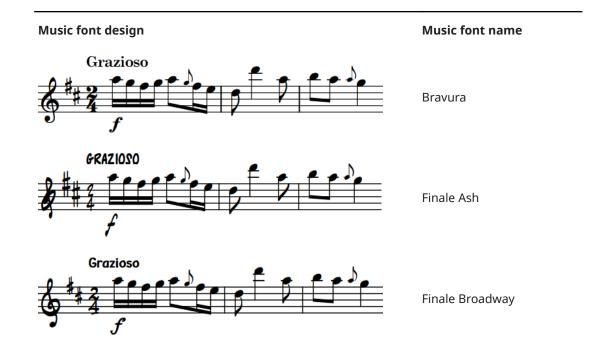
Expression maps on page 744

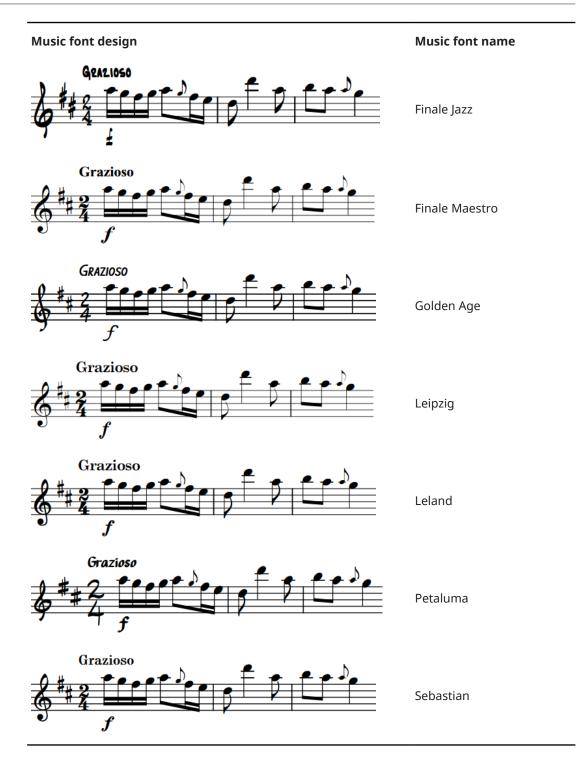
Changing values in numeric value fields on page 649

Music fonts

Music fonts control the project-wide appearance of notations, glyphs, and other items that are not text, such as clefs, dynamics, and bold tuplet numbers/ratios.

By default, Dorico Elements comes with the following SMuFL-compliant fonts:





You can change the music font used in your project in the **Music Fonts** dialog.

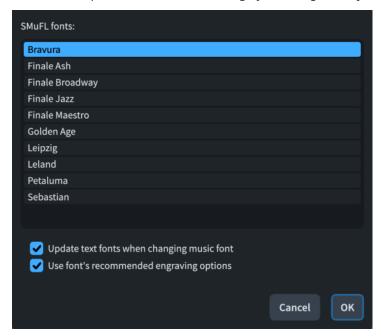
TIP

You can change the appearance of individual fonts in the **Edit Font Styles** and **Paragraph Styles** dialogs.

Music Fonts dialog

The **Music Fonts** dialog allows you to change the font used for notations and glyphs project-wide. Any font you use for notations and glyphs must be SMuFL-compliant.

• You can open the **Music Fonts** dialog by choosing **Library** > **Music Fonts**.



The **Music Fonts** dialog contains all available SMuFL fonts you have installed on your computer that have the appropriate metadata for Dorico Elements to recognize them.

The Music Fonts dialog also contains the following options:

Update text fonts when changing music fonts

Allows you to include/exclude text fonts when changing the music font. For example, deactivating this option allows you to change the appearance of notes and notations without affecting the appearance of flow titles and staff labels.

- For the Bravura music font, the equivalent text font is Academico.
- For the Petaluma music font, the equivalent text font is Petaluma Script.

Use font's recommended engraving options

Allows you to import the default settings that come with the font.

NOTE

Items marked as optional in SMuFL fonts, such as clef changes and non-bold tuplet numbers/ratios, are not affected when you change the music font.

Text formatting

Dorico Elements combines different settings for the appearance of text, meaning that you can format fonts and texts in different places depending on their function.

- Font styles are used in notations that use text but are not generic text, such as tempo marks and dynamics.
- Paragraph styles apply to individual paragraphs in text frames or all text within a single text item. They are also used for text that appears in the music but is not a notation, such as bar

numbers and staff labels. You can use paragraph styles to keep the presentation of different types of text consistent across your project.

• Character styles apply to individual letters or words, meaning you can apply different character styles to each word within the same text frame.

For example, you can change the font family used for all text notations in your project in the **Edit Font Styles** dialog and all other text in the **Paragraph Styles** dialog, where you can also make specific changes for when that font is used for titles.

If you open a project that contains fonts not installed on your computer, the **Missing Fonts** dialog opens and allows you to select replacement fonts as substitutes.

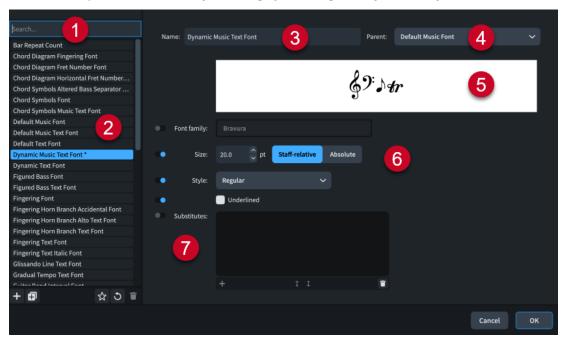
RELATED LINKS

Changing the default font family on page 743 Types of text on page 1329 Text editor options in Write mode on page 379 Missing Fonts dialog on page 72

Edit Font Styles dialog

The **Edit Font Styles** dialog allows you to edit the formatting of fonts used for items that you cannot edit using the text editor, such as changing the font size of playing techniques, dynamics, or tempo marks.

You can open the Edit Font Styles dialog by choosing Library > Font Styles.



The **Edit Font Styles** dialog contains the following sections and options:

1 Search field

Allows you to filter font styles according to your entry.

TIP

If you cannot find a particular font style, it might instead be a paragraph style.

2 Font styles list

Contains all the font styles in the project. If you have previously opened the **Edit Font Styles** dialog in the same session, your previously selected font style is remembered.

The action bar at the bottom of the list contains the following options:

- **New :** Creates a new font style with default values.
- **New from Selection** : Creates a copy of an existing font style that you can edit separately from the original. The new font style uses the original as its parent by default.
- Save as Default ☆: Saves the selected font style to your user library, allowing you to use it in multiple projects. Appears as ★ for font styles saved as default.
- **Revert to Factory** S: Removes all your changes to the selected font style, returning it to its saved settings.
- **Delete** : Deletes the selected font style.

NOTE

You cannot delete predefined font styles or any font style that is currently used in your project.

3 Name

Allows you to enter a name for new font styles or edit the name of existing font styles.

4 Parent

Allows you to choose a parent font style from which the selected font style inherits settings. Activated options override the parent style settings.

5 Font preview

Displays a preview of the selected font style using its current settings.

6 Font appearance options

Allow you to change the following parameters of the selected font style:

- **Font family**: Sets the overall font style.
- **Size**: Sets the size of the font. Allows you to choose whether the size of the font changes according to the staff size or whether it is always the set size. For example, items with staff-relative font sizes appear smaller on smaller staves.

NOTE

If the size of system object font styles is set to **Staff-relative**, the staff size of the top staff in each instrument family group affects the size of system objects if they are shown above that bracketed group. Font styles that are set to **Absolute** are unaffected by staff size.

- **Style**: Sets the style of the font, such as bold or italic.
- **Underlined**: Allows you to make the font style underlined.

7 Substitutes

Allows you to manage substitute font styles for music font styles. This can be useful when using music font styles that do not contain all glyphs in the SMuFL range.

The action bar at the bottom of the list contains the following options:

- **Move Up !**: Moves the selected substitute up the substitutes list, which changes its substitution order.

- **Move Down 1**: Moves the selected substitute down the substitutes list, which changes its substitution order.
- **Delete** : Deletes the selected substitute.

NOTE

Changes made to font styles apply project-wide, including in part layouts.

RELATED LINKS

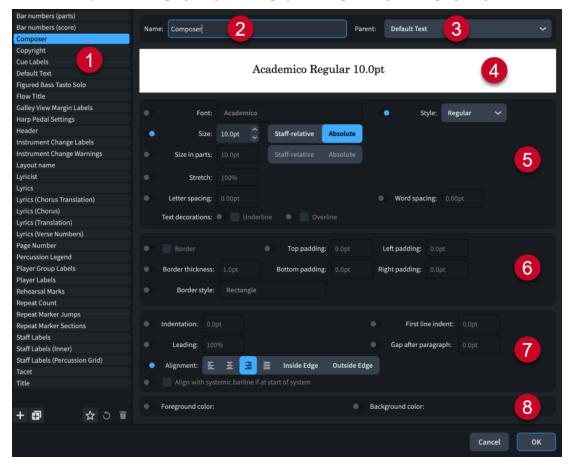
Types of text on page 1329 Staff size on page 601 System objects on page 1303 Brackets according to ensemble type on page 847

Paragraph Styles dialog

The **Paragraph Styles** dialog allows you to change existing paragraph styles for text and create new styles. You can later apply paragraph styles to individual paragraphs in text frames or all text within a single text item by choosing them in the text editor.

For example, you can customize the paragraph style for layout names and then apply your layout name paragraph style to the layout name token in every applicable text frame. This allows you to keep the presentation of different types of text consistent across your project.

You can open the Paragraph Styles dialog by choosing Library > Paragraph Styles.



The Paragraph Styles dialog contains the following sections and options:

1 Paragraph styles list

Contains all the paragraph styles in the project. If you had text items selected when you opened the dialog, the corresponding paragraph style of the first selected item is selected in the paragraph styles list by default.

TIP

If you cannot find a particular paragraph style, it might instead be a font style.

The action bar at the bottom of the list contains the following options:

- New +: Creates a new paragraph style with default values.
- **New from Selection** : Creates a copy of an existing paragraph style that you can edit separately from the original. The new paragraph style uses the original as its parent by default.
- Save as Default ☆: Saves the selected paragraph style to your user library, allowing you to use it in multiple projects. Appears as ★ for paragraph styles saved as default.
- **Revert to Factory** : Removes all your changes to the selected paragraph style, returning it to its saved settings.
- **Delete** : Deletes the selected paragraph style.

NOTE

You cannot delete predefined paragraph styles or any paragraph style that is currently used in your project.

2 Name

Allows you to enter a name for new paragraph styles or edit the name of existing paragraph styles.

3 Parent

Allows you to choose a parent paragraph style from which the selected paragraph style inherits settings. Activated options override the parent style settings.

4 Font preview

Displays a preview of the selected paragraph style using its current settings.

5 Font appearance options

Allow you to change parameters of the appearance of the paragraph style font, such as changing the font, making the font bold, changing the size of the font, and changing the letter or word spacing. You can also make the font in paragraph styles appear underlined or overlined.

6 Border options

Allow you to show borders by default on text that uses the paragraph style and to change the border settings, such as thickness, style, and padding between the border and text.

NOTE

- When Border is deactivated, text items use the default border and padding values set on the Text page in Engraving Options.
- We recommend only using paragraph style borders for text frames that contain a single paragraph. If you want to show some paragraphs with borders but other paragraphs without borders, we recommend using separate text frames.

7 Paragraph layout options

Allow you to change the layout of the paragraph style, such as changing the first line indent, line spacing, and text alignment.

8 Color options

Allow you to change the foreground and background colors of the paragraph style.

RELATED LINKS

Types of text on page 1329 Hiding/Showing borders on layout names on page 982 Staff size on page 601 System objects on page 1303

Creating paragraph styles

You can create new paragraph styles from scratch and you can duplicate existing paragraph styles and edit the settings; for example, to format text consistently in multiple text frames.

PROCEDURE

- 1. Choose Library > Paragraph Styles to open the Paragraph Styles dialog.
- 2. Create a new paragraph style in one of the following ways:
 - To create an entirely new paragraph style, click **New** in the action bar.
 - To create a copy of an existing paragraph style, select it in the paragraph styles list and click **New from Selection** in the action bar.
- 3. Enter a name for the style in the Name field.
- 4. Optional: Select one of the available styles from the Parent menu.

NOTE

If you select a parent style, your paragraph style inherits its settings automatically for all options with deactivated sliders. If your paragraph style has activated sliders, which override its parent style settings, you can deactivate them to reset those options to follow the parent style.

- **5.** Activate and change the options as required.
- 6. Optional: To make the paragraph style available in all future projects, click **Save as Default** in the paragraph styles list action bar.
- 7. Click **OK** to save your changes and close the dialog.

RESULT

The new paragraph style is created.

If you clicked **Save as Default** $\overset{\bullet}{\bowtie}$ so that it appears as $\overset{\bullet}{\bowtie}$, the paragraph style is available in all future projects on your computer.

RELATED LINKS

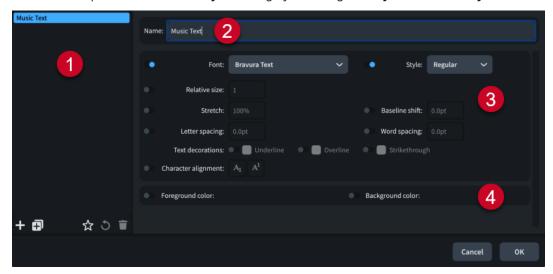
Inputting text items on page 378

Character Styles dialog

The **Character Styles** dialog allows you to change character styles and create new styles. You can later apply character styles to individual letters or words in different places in your project by choosing them in the text editor.

For example, you can create a custom character style with wide letter spacing for specific words and then apply that character style to selected words. Unlike paragraph styles, character styles do not have to apply to whole text items or paragraphs in text frames.

• You can open the Character Styles dialog by choosing Library > Character Styles.



The **Character Styles** dialog contains the following sections and options:

1 Character styles list

Contains all the character styles in the project.

The action bar at the bottom of the list contains the following options:

- **New** : Creates a new character style with default settings.
- **New from Selection** : Creates a copy of an existing character style that you can edit separately from the original.
- Save as Default ☆: Saves the selected character style to your user library, allowing you to use it in multiple projects. Appears as ★ for character styles saved as default.
- **Revert to Factory** S: Removes all your changes to the selected character style, returning it to its saved settings.
- **Delete** : Deletes the selected character style.

NOTE

You cannot delete predefined character styles or any character style that is currently used in your project.

2 Name

Allows you to enter a name for new character styles or edit the name of existing paragraph styles.

3 Character style options

Allow you to change parameters of the character style, such as changing the font, making the font bold, changing the size of the font, and changing the letter or word spacing. You

can also make the font in paragraph styles appear underlined or overlined, and change the vertical alignment of characters.

4 Color options

Allow you to change the foreground and background colors of the character style.

RELATED LINKS

Types of text on page 1329
Insert Music Text dialog on page 381

Creating character styles

You can create new character styles from scratch and you can duplicate existing character styles and edit the settings.

PROCEDURE

- 1. Choose Library > Character Styles to open the Character Styles dialog.
- 2. Create a new character style in one of the following ways:
 - To create an entirely new character style, click New + in the action bar.
 - To create a copy of an existing character style, select it in the character styles list and click **New From Selection** in the action bar.
- 3. Enter a name for the style in the Name field.
- **4.** Activate and change the options as required.

IMPORTANT

Only activated options have an effect on the text. If you deactivate options, their settings are reset.

- 5. Optional: To make the character style available in all future projects, click **Save as Default** ☆ in the character styles list action bar.
- **6.** Click **OK** to save your changes and close the dialog.

RESULT

The new character style is created.

If you clicked **Save as Default** so that it appears as , the character style is available in all future projects on your computer.

RELATED LINKS

Inputting text items on page 378

Changing the default font family

You can change the font family of the default font and paragraph styles, which affect all other font and paragraph styles in the project whose font family has not been overridden. For example, if you want all text and text-based notations, such as text playing techniques and gradual dynamics, to use your preferred font family.

PROCEDURE

- 1. Choose **Library** > **Font Styles** to open the **Edit Font Styles** dialog.
- 2. In the font styles list, select **Default Text Font**.

- 3. Select the font family you want from the **Font family** menu.
- **4.** Click **OK** to save your changes and close the dialog.
- 5. Choose Library > Paragraph Styles to open the Paragraph Styles dialog.
- **6.** In the paragraph styles list, select **Default Text**.
- **7.** Select the font family you want from the **Font** menu.
- **8.** Click **OK** to save your changes and close the dialog.

RESULT

The font family used in the selected default font and paragraph styles is changed. This also affects the font family used by all other font and paragraph styles in the project whose font family has not been overridden.

TIP

You can change the default font family used in all future projects on the **General** page in **Preferences**.

RFLATED LINKS

Edit Font Styles dialog on page 737 Paragraph Styles dialog on page 739 Preferences dialog on page 57 Text items on page 1328

Expression maps

Expression maps tell Dorico Elements how to use appropriately the patches and sounds in the VST instruments that you have loaded into your project.

Expressing a range of dynamics on instruments means changing the volume and attack of notes. Because the strength of attack changes the character of the start of sounds as well as their volume, loud sounds often require stronger attacks and quiet sounds often require softer attacks

Different patches and instruments have different approaches to changing dynamics and volume in playback. For example, some patches only change the velocity whereas others use a controller in combination with changing the velocity.

Dorico Elements also uses expression maps to specify the playback techniques that are supported by each patch in your project. For example, string instruments such as the violin have different techniques, because they can play *arco*, *pizzicato*, and *col legno*, and their bow position can be anywhere between *sul ponticello* and *sul tasto*.

In addition to expression maps for each sound library, there are the following expression maps in Dorico Elements:

CC11 Dynamics: Uses MIDI controller 11 to play dynamics.

NOTE

This only applies to instruments that can change their dynamic while notes are sounding, such as violin or flute.

- **Default**: Uses note velocity to control dynamic volume.
- Modulation Wheel Dynamics: Uses a modulation wheel to control dynamic volume.

- **Transpose down 1 octave**: Used by some instrument patches that sound an octave higher than written so that they can be played without needing a full range keyboard.
- **Transpose up 1 octave**: Allows the bottom octave of keyboards to be used for key switches instead of notes, but is also used by some bass instrument patches that sound an octave lower than written so that they can be played without needing a full range keyboard.

Dorico Elements automatically adds expression maps to projects when you apply playback templates that use those expression maps.

You can edit, create, and import/export expression maps in the **Expression Maps** dialog. Expression maps are saved as .doricolib files.

NOTE

Although Dorico Elements approaches expression maps in a different way to Cubase, Dorico Elements correctly imports many switches from expression maps you import from Cubase, such as *pizzicato*, harmonics, and flutter tongue.

RELATED LINKS

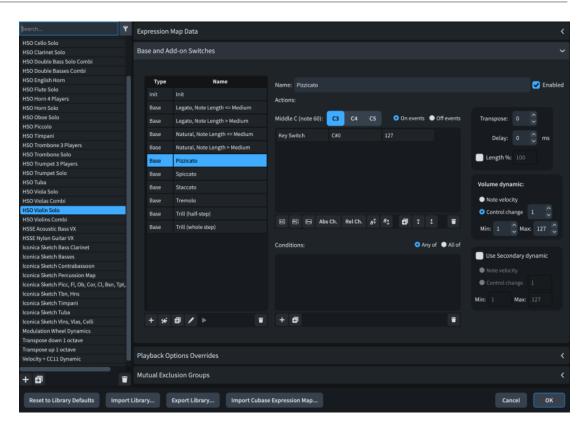
Percussion maps on page 763 Types of switches on page 757 Types of actions on page 758 Playback templates on page 543

Expression Maps dialog

The **Expression Maps** dialog allows you to create new expression maps, edit existing expression maps, and import/export expression maps. You can also import expression maps made in Cubase.

You can open the **Expression Maps** dialog in any of the following ways:

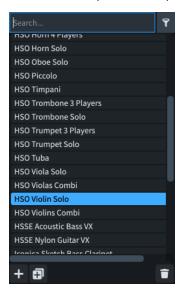
- Choose Library > Expression Maps.
- In Play mode, select a track in the track overview, then click **Edit Expression Map** in the **Routing** section of the Track Inspector.



The **Expression Maps** dialog contains the following sections and options:

Expression maps list

Contains the expression maps currently available in your project.



At the top of the list, there are the following options:

- **Search field**: Allows you to filter expression maps according to your entry.
- Show only expression maps used in this project : Allows you to filter the expression maps list so that it only includes expression maps used in the current project.

The action bar at the bottom of the list contains the following options:

Add Expression Map 4: Adds a new expression map that contains no existing settings.

- **Duplicate Expression Map** : Creates a copy of an existing expression map that you can edit separately from the original.
- **Delete Expression Map** : Deletes the selected expression maps.

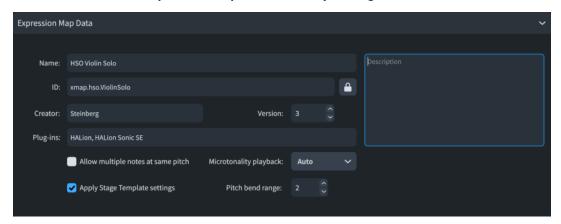
NOTE

You cannot delete factory default expression maps or any expression map that is currently used in your project.

Expression Map Data

This section allows you to specify identifying information for the selected expression map.

You can hide/show the **Expression Map Data** section by clicking the section header.



The **Expression Map Data** section contains the following options:

Name

Allows you to set the name of the expression map that appears in the program; for example, in the **Endpoint Setup** dialog.

ID

Allows you to set the unique ID of the expression map. You can enter any content in the ID field.

It can be useful to include the instrument and sound library for which you created the map, as well as your name; for example, **xmap.user.paulsmith.hso.violinpizz**.

Creator

Allows you to name the creator if you are sharing your expression map with other users.

Version

Allows you to indicate the expression map version, so you can identify the most recent one.

Plug-ins

Allows you to list the names of plug-ins to which the expression map applies, with each name separated by a comma. You can leave this field blank.

Allow multiple notes at same pitch

Allows you to set whether or not the plug-in can treat identical pitches in multiple voices belonging to the same instrument as multiple separate notes when independent voice playback is disabled.

Apply Stage Template settings

Allows you to set whether or not stage templates and space templates apply to endpoints using the expression map. We recommend deactivating this option for sounds whose recordings already have spatial and reverberation characteristics.

Microtonality playback

Allows you to select the microtonal playback method that you want to use for the expression map.

Pitch bend range

Allows you to set the pitch bend range supported by the plug-in, expressed in halfsteps. The range is typically either a whole step or an octave.

Description

Allows you to add any other information about the expression map.

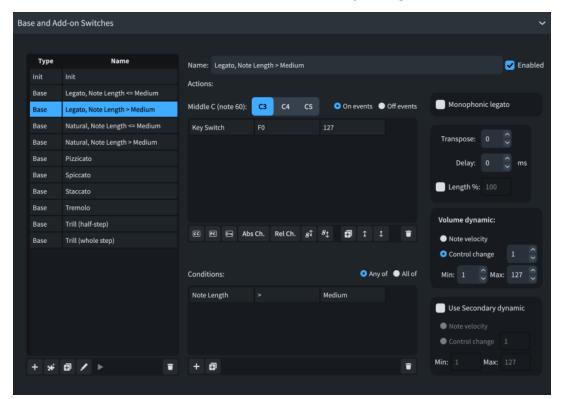
NOTE

Many fields in the **Expression Map Data** section are locked by the **Lock Info** button. You must click this button to unlock **Lock Info** in order to change the information in the fields.

Base and Add-on Switches

This section allows you to view, edit, and control the switches for playback techniques in the selected expression map.

You can hide/show the Base and Add-on Switches section by clicking the section header.



At the top of the section, there are the following options:

Name

Allows you to change the name that appears for the currently selected switch in the Switches table; for example, so that it appears the same as in your sound library.

TIP

You can still see which playback techniques are triggered by switches with custom names by hovering the mouse pointer over the corresponding row in the Switches table.

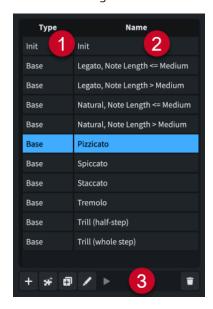
Enabled

Allows you to enable/disable the currently selected switch without removing it from the expression map.

The Base and Add-on Switches section also contains the following:

Switches table

Contains the switches in the currently selected expression map. Allows you to add new switches and edit existing ones.



The Switches table comprises the following:

- **1 Type column**: Displays the switch type. Switches can be any of the following types:
 - Base
 - Add-on
 - Init
- **Name column**: Displays the name of the switch. By default, this is the same as the playback technique or playback technique combination it triggers.

In simple cases, each switch triggers an individual playback technique, such as **Staccato** or **Accent**. However, some plug-ins have separate samples for different combinations of playback techniques. For example, **Staccato + Accent** might require a separate set of key switches to **Staccato** and **Accent** individually.

- **3 Switches table action bar:** Contains the following options:
 - Add Base Switch +: Allows you to add a new base switch to the expression map by selecting the playback techniques you want the switch to trigger in the Playback Technique Combinations dialog that opens.

- Add Technique Add-on Switch :: Allows you to add a new add-on switch to the expression map by selecting the playback techniques you want the switch to trigger in the Playback Technique Combinations dialog that opens.
- **Duplicate Technique** : Creates a copy of an existing switch that you can edit separately from the original.
- Edit Technique : Opens the Playback Technique Combinations dialog, which allows you to edit the combination of playback techniques triggered by the selected switch. You can also edit the playback techniques of existing switches by double-clicking them in the Switches table.
- Audition

 : Plays two notes using the currently selected switch and any corresponding
 actions to demonstrate their effect on playback. Only available for expression maps used
 in the project.
- **Delete Technique** : Deletes the selected switch.

Selecting a switch in the Switches table allows you to edit its controls and actions. Different options are available in the **Base and Add-on Switches** section depending on the switch type.

NOTE

- Most instruments have a "natural" playback technique, which is the most common way of playing the instrument. Dorico Elements requires every instrument to have a defined natural playback technique.
- You can only select one switch at a time in the Switches table.

Actions

Displays in a table any actions required to produce the selected playback technique. Allows you to determine how the switch that triggers each playback technique is controlled, either by adding new actions or editing existing ones.

NOTE

Depending on your plug-in, multiple types of actions can be required for each switch.



The **Actions** subsection comprises the following:

- 1 Middle C (note 60): Allows you to choose the pitch for middle C, independently of your middle C numbering convention setting. We recommend that you consult the documentation for your sound libraries to check whether each one considers middle C to be C3, C4, or C5, and change this setting accordingly.
- **2 On events/Off events**: Allows you to specify whether actions affect the start or end of notes. For example, you might want an event that resets the playback technique back to normal to apply only to the end of notes.

On events affects the start of notes. **Off events** affects the end of notes.

- **3** Actions table: Contains the following columns:
 - First column: Displays the action type. Actions can be a control change, program change, or key switch.
 - Second column: Controls the first parameter of the MIDI event. For key switches, this indicates the pitch. For control changes, this indicates the control change number. For program changes, this indicates the program number.
 - Third column: Controls the second parameter of the MIDI event. For key switches, this indicates the velocity. For control changes, this indicates the amount of control change within the range 0 to 127. Program changes do not have a second parameter.

NOTE

- You can change the values of cells in the **Actions** table by double-clicking them, or selecting them and pressing **Return**.
- You can only select one action at a time in the **Actions** table.
- 4 Actions table action bar: Contains the following options:
 - Add Control Change Action @: Adds a control change action with default settings.
 - Add Program Change Action <a>Image
 In Adds a program change action with default settings.
 - Add Key Switch Note Action **=**: Adds a key switch action with default settings.
 - Add Absolute Channel Change Action: Adds an absolute channel change action with default settings.
 - Add Relative Channel Change Action: Adds a relative channel change action with default settings.
 - **Transpose Up 1 Octave** : Raises the octave of all key switch actions for the selected switch.
 - **Transpose Down 1 Octave** : Lowers the octave of all key switch actions for the selected switch.
 - **Duplicate Action** : Creates a copy of an existing action that you can edit separately from the original.
 - **Move Action Up** : Moves the selected action up the table, which changes its order in the message sequence.
 - **Move Action Down** : Moves the selected action down the table, which changes its order in the message sequence.
 - **Delete Action** : Deletes the selected action.

Conditions

Displays in a table any conditions that determine the circumstances in which the base switch currently selected in the Switches table is used. Allows you to add new conditions and edit existing ones. Only available for **Base** switches.

For example, you can set conditions instructing the expression map to use a different legato sound with a quicker attack for short notes than for longer notes automatically.



The **Conditions** subsection comprises the following:

- **1 Any of/All of**: Allows you to set whether the switch is used when one or more conditions are met or only when all conditions are met.
- **2 Conditions table**: Contains the following columns:

First column: Displays the condition type.

Second column: Controls how the condition type in the first column relates to the note length set in the third column using operators. The following operators are available:

- ==: Equal to
- !=: Not equal to
- <: Less than</p>
- <=: Less than or equal to
- >: More than
- >=: More than or equal to

Third column: Controls the note length used by the condition. The following note length values are available:

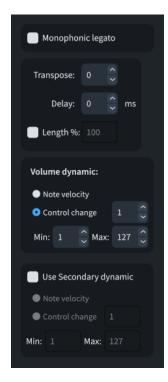
- Very short: A dotted 16th note at 120 bpm, or 0.1875 seconds
- Short: A dotted eighth note at 120 bpm, or 0.375 seconds
- Medium: A dotted quarter note at 120 bpm, or 0.75 seconds
- Long: A dotted half note at 120 bpm, or 1.5 seconds
- Very long: Any longer duration

NOTE

- You can change the values of cells in the **Conditions** table by double-clicking them, or selecting them and pressing **Return**.
- You can only select one condition at a time in the **Conditions** table.
- **3 Conditions action bar:** Contains the following options:
 - Add Technique : Adds a new technique condition with default settings.
 - **Duplicate Technique** : Creates a copy of an existing technique condition that you can edit separately from the original.
 - **Delete Technique** : Deletes the selected technique condition.

Technique controls

Contains controls that affect the base switch currently selected in the Switches table. Only available for **Base** switches.



The following technique controls are available:

Monophonic legato

Allows you to limit monophonic legato to music without chords; that is, two or more notes simultaneously. Only available for **Base** switches that include the **Legato** playback technique.

When this option is activated, Dorico Elements automatically removes the legato playback technique when chords or multiple voices are played by the same endpoint, but continues to use the default legato note length.

TIP

You can change the default legato note length in **Playback Options** > **Timing** > **Note Durations**.

Transpose

Allows you to set the MIDI transposition in half-steps (semitones).

Delay [n] milliseconds

Allows you to set a delay in milliseconds; for example, to compensate for sounds with a slow attack or rise time. Negative values cause notes to sound earlier than written, positive values cause notes to sound later than written.

Length %

Allows you to modify played note durations, which overrides the default value; for example, if you want the selected switch to produce short gaps between notes.

- For notes a quarter note or shorter in duration, the value applies to the entire note.
- For notes longer than a quarter note, the value only applies to the last quarter note of their overall duration.

Volume dynamic

Allows you to choose whether the volume dynamic for the selected switch is controlled by its **Note velocity** or a **Control change**.

NOTE

If you choose **Control change**, you must specify the controller by number. You can consult the documentation for the VST instrument and/or MIDI controller you are using to find the appropriate controller number.

Volume dynamic Min/Max

Allow you to set the minimum and maximum range for dynamics using either note velocity or MIDI CC, depending on the sound library.

Use Secondary dynamic

Allows you to define an additional volume control for sound libraries that use both note velocity and control changes for volume dynamic.

Secondary dynamic Min/Max

Allow you to set the minimum and maximum range for dynamics using either note velocity or MIDI CC, depending on the sound library.

Playback Options Overrides

Allows you to override specific playback options for the selected expression map only. Activating a playback option overrides it. The available playback options include the default duration of notes with different articulations, unmeasured tremolo notes, and the effect that beat position and articulations have on dynamics. By default, the values set match the current settings in **Playback Options**.

You can hide/show the **Playback Options Overrides** section by clicking the section header.

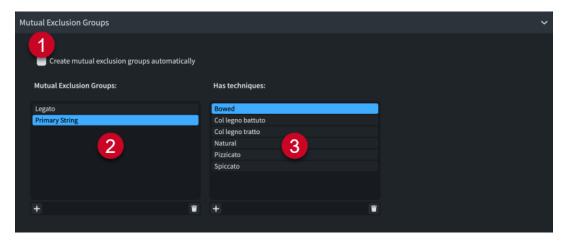
Mutual Exclusion Groups

Allows you to define playback techniques that are mutually exclusive; that is, cannot be in use concurrently. For example, players cannot play vibrato and non-vibrato at the same time. Putting playback techniques into the same exclusion group means only one can be used at a time.

You can allow Dorico Elements to define mutual exclusion groups automatically or define them yourself manually.

Mutual exclusion groups apply only to the selected expression map. This allows you to set different mutual exclusion groups in each expression map; for example, if one of your sound libraries supports a particular playback technique combination for an instrument but another sound library does not.

You can hide/show the **Mutual Exclusion Groups** section by clicking the section header.



The **Mutual Exclusion Groups** section contains the following options and columns:

1 Create mutual exclusion groups automatically: Allows Dorico Elements to define mutual exclusion groups automatically.

NOTE

Activating Auto permanently deletes any manual exclusion groups you have created.

- **Mutual Exclusion Groups** column: Allows you to add and delete mutual exclusion groups manually. The action bar at the bottom of the column contains the following options:
 - Add +: Opens a dialog that allows you to create a new mutual exclusion group and enter a name for it.
 - **Delete** : Deletes the selected mutual exclusion group.

NOTE

You can only select one mutual exclusion group at a time.

- **3 Has techniques** column: Allows you to change the playback techniques included in the selected mutual exclusion group. The action bar at the bottom of the column contains the following options:
 - Add :: Opens the Playback Technique Combinations dialog that allows you to select playback techniques to add to the selected mutual exclusion group.
 - **Delete** : Deletes the selected playback technique from the mutual exclusion group.

NOTE

You can only select one playback technique at a time.

Expression map/Library management options

At the bottom of the **Expression Maps** dialog, there are the following expression map and library management options:

Reset to Library Defaults

Allows you to revert any changes you have made to the expression maps from the Default Library.

Import Library

Opens the File Explorer/macOS Finder, where you can select the .doricolib files that you want to import as expression maps.

You can also import Dorico and Cubase expression maps by dragging and dropping them into the **Expression Maps** dialog.

Export Library

Opens the File Explorer/macOS Finder, where you can select the location to which you want to export the currently selected expression maps as a .doricolib file. You can then import the .doricolib file into other projects and share it with other users.

Import Cubase Expression Map

Opens the File Explorer/macOS Finder, where you can select the Cubase .expressionmap files you want to import as expression maps.

NOTE

Cubase expression maps that you have imported often require some editing to function correctly in Dorico Elements. However, switch data is preserved.

RELATED LINKS

Types of switches on page 757

Types of actions on page 758

Creating new expression maps on page 759

Playback techniques on page 770

Track Inspector on page 507

Assigning expression/percussion maps to endpoints on page 555

Enabling independent voice playback on page 530

Changing the middle C numbering convention on page 50

Playback Options dialog on page 732

Playback Technique Combinations dialog

The **Playback Technique Combinations** dialog allows you to create combinations of playback techniques that you want to apply simultaneously. Playback techniques are used by expression maps to assign the correct sounds to the required playing techniques in the music.

You can open the **Playback Technique Combinations** dialog in the following ways:

- In the **Expression Maps** dialog, click **Add Technique** + in the Switches table action bar.
- In the **Expression Maps** dialog, select an existing playback technique in the Switches table and click **Edit Technique** ✓ in the **Techniques** action bar. You can also double-click the playback technique.



1 Search field

Allows you to search for playback techniques, then navigate to them by selecting them from the menu.

2 Techniques list

Allows you to select playback techniques to include in a new switch or to change the playback techniques in an existing switch.

You can select multiple playback techniques to combine by **Ctrl/Cmd** -clicking each playback technique.

3 Name

Displays the name of the selected playback technique. If you select multiple playback techniques, each name is automatically separated by a + symbol.

NOTE

You cannot rename playback techniques or playback technique combinations in the **Playback Technique Combinations** dialog. You can rename the switches that include them in the **Base and Add-on Switches** section of the **Expression Maps** dialog. You can rename individual playback techniques in the **Edit Playback Techniques** dialog.

RELATED LINKS

Edit Playback Techniques dialog on page 771 Adding/Editing switches in expression maps on page 760

Types of switches

Switches are used in expression maps to trigger the required playback technique or combination of playback techniques. Dorico Elements supports multiple types of switches.

Base

A fundamental change to the playing technique or articulation, such as changing from *arco* to *pizzicato* or unmuted to muted. Base switches are mutually exclusive, meaning a new base switch replaces the previous one.

Add-on

A switch that applies in addition to the existing base switch. For example, some sound libraries allow you to use the same legato switch in addition to different base switches. Add-on switches do not remove or change base switches. Add-on switches can only trigger simple key switch notes and controller values.

Init

A switch that sends instructions when playback starts, such as ensuring a MIDI controller always starts at a set value. By default, every expression map contains an empty init switch. Init switches can only trigger simple key switch notes and controller values.

RELATED LINKS

Adding/Editing switches in expression maps on page 760
Adding/Editing mutual exclusion groups in expression maps on page 761

Types of actions

Actions are used in expression maps to determine how individual switches are controlled in order to trigger the required playback technique or combination of playback techniques. Dorico Elements supports multiple types of actions, as different sound libraries require different actions.

Control change actions

Control change actions use MIDI CC events to modulate sounds. They are particularly useful when using sound libraries whose sounds can be manipulated incrementally, such as increasing/decreasing the string vibrato intensity.

Program change actions

Program change actions use MIDI PC events to switch to different sounds. They are particularly useful when using sound libraries, such as General MIDI, that use separate programs for each playback technique or combinations of instrument sounds and effects presets.

Key switch actions

Key switch actions use MIDI note events to switch to different sounds. They are particularly useful when recording MIDI live, as you can press the specified notes on a MIDI keyboard to trigger key switch actions while simultaneously playing the notes you want to record. Usually, key switch actions are mapped to notes in the lowest octave of the MIDI keyboard as they are rarely used for note input.

Key switch actions are also known as "note events".

Absolute channel change actions

Absolute channel change actions switch to a specific, explicitly numbered channel. They are particularly useful for sound libraries that have separate plug-in instances for each individual instrument. For example, you might use an absolute channel change action to switch from "natural" on channel **1** to "pizzicato" on channel **2** in your viola section plug-in instance.

Relative channel change actions

Relative channel change actions switch to a channel numbered relative to the starting channel. They are particularly useful for sound libraries that have multiple instruments with separate playback technique channels in the same plug-in instance, as they can switch between playback techniques according to their relative channel number rather than an absolute number. For example, if you have four trumpet instruments loaded in the same plug-in instance, each with three channels for different playback techniques, and want to use the same switches for all four trumpets, you might use a relative

channel change action to switch from the "natural" original channel to "muted" on the +1 relative channel.

Relative channel numbers relate to the original channel number of the endpoint for the corresponding instrument. A **0** relative channel change switches back to the original channel.

TIP

You can add actions to individual switches in the **Expression Maps** dialog.

Creating new expression maps

You can create new expression maps from scratch, and you can duplicate existing expression maps and edit the settings; for example, when using third-party sound libraries or MIDI devices that do not provide expression maps.

PROCEDURE

- 1. Choose **Library** > **Expression Maps** to open the **Expression Maps** dialog.
- **2.** Create a new expression map in one of the following ways:
 - To create an empty expression map, click Add Expression Map

 in the expression maps list action bar.
 - To create a copy of an existing expression map, select it in the expression maps list and click **Duplicate Expression Map** in the action bar.
- 3. In the Expression Map Data section, click Lock Info (a) to unlock the fields.
- **4.** In the **Expression Map Data** section, enter information for your expression map in the relevant fields.
- **5.** Change the other available options as required.
- **6.** Optional: In the **Base and Add-on Switches** section, add any new switches you require to trigger playback techniques or combinations of playback techniques.
- **7.** In the Switches table, select a switch whose actions, conditions, and/or controls you want to edit.
- **8.** Change any settings for the selected switch as required.
 - For example, you can add actions for all switch types or, for base switches only, choose whether the volume of a selected base switch is controlled by its **Note velocity** or a **Control change**.
- 9. Optional: Repeat steps 7 and 8 for all switches whose settings you want to change.
- **10.** In the **Playback Options Overrides** section, activate each playback option you want to override for the expression map and change their values.
- **11.** In the **Mutual Exclusion Groups** section, do one of the following:
 - To use automatic exclusion groups defined by Dorico Elements, activate **Create mutual** exclusion groups automatically.
 - To create mutual exclusion groups manually, deactivate Create mutual exclusion groups automatically, then add or edit mutual exclusion groups.
- **12.** Click **OK** to save your changes and close the dialog.

RELATED LINKS

Expression Maps dialog on page 745

Playback Technique Combinations dialog on page 756
Assigning expression/percussion maps to endpoints on page 555

Adding/Editing switches in expression maps

You can create new and edit existing switches that trigger playback techniques or combinations of playback techniques in individual expression maps; for example, to add an add-on switch to an existing base switch, or to create a new base switch with note length conditions.

Playback technique combinations are useful for expression maps that require different sets of key switches for **Staccato + Accent** compared to **Staccato** and **Accent** individually, for example.

PROCEDURE

- 1. Choose **Library** > **Expression Maps** to open the **Expression Maps** dialog.
- **2.** In the expression maps list, select the expression map to which you want to add switches or whose existing switches you want to edit.
- **3.** Optional: In the Switches table in the **Base and Add-on Switches** section, add a new switch to trigger a playback technique or playback technique combination or edit an existing one in one of the following ways:
 - To add a new base switch, click Add Base Switch +.
 - To add a new add-on switch, click Add Technique Add-on Switch ...
 - To create a copy of an existing switch, select it and click **Duplicate Technique** 1.
 - To change the playing techniques triggered by an existing switch, select it and click **Edit Technique Z**.
- **4.** Optional: If you added a new base/add-on switch or edited an existing switch, select the playback techniques you want the switch to trigger in the **Playback Technique Combinations** dialog.

TIP

You can select a single playback technique or combine multiple playback techniques. To select multiple playback techniques, **Ctrl/Cmd**-click each playback technique.

- **5.** Optional: Click **OK** to add the selected playback techniques and close the **Playback Technique Combinations** dialog.
- **6.** In the Switches table, select the switch whose actions, conditions, and/or controls you want to edit.
- **7.** In the **Actions** subsection, choose the event type from one of the following options:
 - On events
 - Off events
- **8.** In the **Actions** table, add an action of the selected event type for the currently selected switch in one of the following ways:
 - Click Add Control Change Action @
 - Click Add Program Change Action .
 - Click Add Key Switch Note Action .
 - Click Add Absolute Channel Change Action.
 - Click Add Relative Channel Change Action.
 - Select an existing action and click **Duplicate Action 1**.

9. Double-click each cell whose value you want to change and change the value.

TIP

You can change the octave of all key switch actions for the selected switch by clicking **Transpose Up 1 Octave** of and **Transpose Down 1 Octave** in the action bar.

- 10. Choose one of the following pitches for Middle C (note 60):
 - C3
 - C4
 - C5

NOTE

Steps 11 to 15 only apply to base switches. For init and add-on switches, you can skip to step 16.

- 11. Optional: Repeat steps 6 to 10 for each action you require for the currently selected switch.
- **12.** In the **Conditions** table, add a condition for the currently selected base switch in one of the following ways:
 - To create a new condition, click **Add Technique** + in the action bar.
 - To create a copy of an existing condition, select it and click **Duplicate Technique** in the action bar.
- **13.** Double-click each cell whose value you want to change and select the required option from the menu.
- **14.** Optional: Repeat steps 12 and 13 for each condition you want to add to the selected base switch.
- **15.** Choose one of the following condition options:
 - To use the switch when at least one condition is met, choose **Any of**.
 - To use the switch when all conditions are met, choose **All of**.
- **16.** Change any of the other settings in the **Base and Add-on Switches** section as required. For example, choose whether the volume of the selected base switch is controlled by its **Note velocity** or a **Control change**.
- **17.** Click **OK** to save your changes and close the **Expression Maps** dialog.

RELATED LINKS

Types of switches on page 757
Expression Maps dialog on page 745
Playback techniques on page 770
Playback Technique Combinations dialog on page 756
Changing the middle C numbering convention on page 50

Adding/Editing mutual exclusion groups in expression maps

By default, Dorico Elements automatically defines mutual exclusion groups. You can create new and edit existing mutual exclusion groups in individual expression maps manually.

PROCEDURE

1. Choose **Library** > **Expression Maps** to open the **Expression Maps** dialog.

- **2.** In the expression maps list, select the expression map to which you want to add mutual exclusion groups or whose existing mutual exclusion groups you want to edit.
- **3.** In the **Mutual Exclusion Groups** section, deactivate **Create mutual exclusion groups** automatically.
- **4.** Optional: To add a new mutual exclusion group, click **Add** in the **Mutual Exclusion Groups** column action bar.
- **5.** Enter a name for the new mutual exclusion group in the dialog that opens.
- **6.** Click **OK** to add the group and close the dialog.
- **7.** In the **Mutual Exclusion Groups** column, select the mutual exclusion groups whose playback techniques you want to change.
- **8.** Change the playback techniques in the selected mutual exclusion group in any of the following ways:
 - To add new playback techniques to the mutual exclusion group, click Add + in the Has techniques column action bar to open the Playback Technique Combinations dialog, select the playback techniques you want to add, then click OK.
 - To remove playback techniques from the mutual exclusion group, select them in the **Has techniques** column, and click **Delete** in the action bar.
- **9.** Click **OK** to save your changes and close the **Expression Maps** dialog.

Importing expression maps

You can import expression maps into projects, including .expressionmap files exported from Cubase. Expression maps exported from Dorico are saved as .doricolib files.

PROCEDURE

- 1. Choose Library > Expression Maps to open the Expression Maps dialog.
- 2. Click **Import Library** to open the File Explorer/macOS Finder.
- 3. Locate and select the expression map file you want to import.
- 4. Click Open.

RESULT

The selected expression map is imported into your project. It appears in the expression maps list.

NOTE

- You can also import Dorico and Cubase expression maps by dragging and dropping them into the Expression Maps dialog.
- Although Dorico Elements approaches expression maps in a different way to Cubase, Dorico
 Elements correctly imports many switches from expression maps you import from Cubase,
 such as pizzicato, harmonics, and flutter tongue.

Exporting expression maps

You can export expression maps for use in other projects. Expression maps are saved as .doricolib files.

PROCEDURE

- 1. Choose Library > Expression Maps to open the Expression Maps dialog.
- 2. In the expression maps list, select the expression maps you want to export.
- 3. Click **Export Library** to open the File Explorer/macOS Finder.
- **4.** In the File Explorer/macOS Finder, specify a name and location for the library file.
- 5. Click Save.

RESULT

The selected expression maps are exported as a .doricolib file and saved in the selected location.

Percussion maps

Unpitched percussion instruments are played back using patches that map unpitched sounds onto different MIDI notes. The pitches required to produce different unpitched sounds vary by device, sound library, manufacturer, and so on, and have no connection to the position of percussion instruments on five-line staves.

The following list contains some examples of unpitched percussion instruments from the General MIDI percussion map.

- Bass drum: C2 (MIDI note 36, two octaves below middle C)
- Kick drum: D2 (MIDI note 38)
- Closed hi-hat: F#2 (MIDI note 42)
- Cowbell: G#3 (MIDI note 56)
- Open triangle: A5 (MIDI note 81)

Dorico Elements uses percussion maps to connect the written representation of notes and playing techniques for percussion instruments to the samples required to play those sounds back.

NOTE

A percussion map describes which unpitched percussion instruments and their playback techniques are present in a particular patch, and how to play them back. For example, it describes which MIDI note to play, and if another MIDI note is needed as a key switch to trigger particular playing techniques.

A set of percussion maps for the unpitched percussion patches that are part of the HALion Symphonic Orchestra and HALion Sonic SE factory libraries is provided with Dorico Elements. They are automatically chosen when you add percussion instruments to your project.

You can define custom percussion maps for third-party sound libraries or MIDI devices in the **Percussion Maps** dialog, in order to obtain correct playback.

RELATED LINKS

Unpitched percussion on page 1397

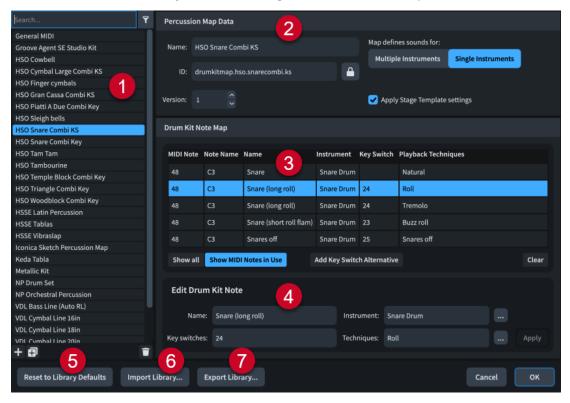
Universal Indian Drum Notation on page 1414 Changing the middle C numbering convention on page 50

Percussion Maps dialog

In the **Percussion Maps** dialog, you can define custom percussion maps for third-party sound libraries or MIDI devices in order to obtain correct playback.

You can open the **Percussion Maps** dialog in any of the following ways:

- Choose Library > Percussion Maps.
- In Play mode, select an unpitched percussion instrument track in the track overview, then click **Edit Percussion Map** in the **Routing** section of the Track Inspector.



The **Percussion Maps** dialog is divided into the following sections:

1 Percussion maps list

Contains the percussion maps currently available in your project.

At the top of the list, there are the following options:

- Search field: Allows you to filter percussion maps according to your entry.
- Show only expression maps used in this project : Allows you to filter the percussion maps list so that it only includes percussion maps used in the current project.

The action bar at the bottom of the list contains the following options:

- Add Percussion Map

 ∴ Adds a new percussion map that contains no existing settings.
- **Duplicate Percussion Map** : Creates a copy of an existing percussion map that you can edit separately from the original.
- **Delete Percussion Map** : Deletes the selected percussion maps.

NOTE

You cannot delete factory default percussion maps or any percussion map that is currently used in your project.

2 Percussion Map Data section

Allows you to specify the following identifying information for the selected percussion map:

- **Name**: Allows you to specify the displayed name for the percussion map that appears in the **Endpoint Setup** dialog.
- **ID**: Allows you to set the unique ID of the percussion map. You can enter any content in the ID field.
 - It can be useful to include the instrument and sound library for which you created the map, as well as your name; for example, **xmap.user.paulsmith.hso.cowbell**.
- **Version**: Allows you to indicate the percussion map version so you can identify the most recent one.
- Map defines sounds for: Allows you to choose one of the following options, as appropriate for the current percussion map:
 - **Multiple Instruments**: Choose this if the patch for which you are creating a map contains many different percussion instruments, such as the General MIDI drum map.
 - **Single Instruments**: Choose this if the patch for which you are creating a map contains only a single percussion instrument, perhaps with multiple playback techniques for that instrument. For example, a snare drumline patch in Virtual Drumline or another specialist sound library.
 - This can also be useful when your VST instrument has several patches that have the same playback technique mappings. For example, there are both large and small cymbal patches in HALion Symphonic Orchestra which provide natural strike and roll sounds. Creating a single individual instrument percussion map allows you to use the same mapping for these sounds for multiple patches.
- Apply Stage Template settings: Allows you to set whether or not stage templates
 and space templates apply to endpoints using the percussion map. We recommend
 deactivating this option for sounds whose recordings already have spatial and
 reverberation characteristics.

NOTE

- Many fields in the **Percussion Map Data** section are locked by the **Lock Info** button. You must click this button to unlock **Lock Info** in order to change the information in the fields.
- The **Endpoint Setup** dialog is where you set which percussion map Dorico Elements uses for each channel on your VST instrument or MIDI output device.

3 Drum Kit Note Map table

By default, the table shows the drum kit notes in use by the selected percussion map in numerical order. The table also contains the following columns, which display the corresponding available data about the selected drum kit note:

- MIDI Note: Shows the MIDI note number, such as "48".
- Note Name: Shows the pitch and octave of the note, such as "C3", according to your middle C numbering convention setting.
- **Name**: Shows the name of the technique, such as Snare "(long roll)".

- **Instrument**: Shows the unpitched percussion instrument, such as "Snare Drum".
- **Key Switch**: Shows the number of the key switch that triggers the note, such as "24".
- **Playback Techniques**: Shows the playback techniques triggered by the note, such as "Roll".

At the bottom of the table, there are the following options:

- **Show all**: Shows all MIDI notes from 0 to 127.
- **Show MIDI Notes in Use**: Only shows the MIDI notes in use by the selected percussion map.
- Add Key Switch Alternative: Duplicates the selected drum kit note.
- Clear: Deletes the selected drum kit note.

You can change the data for the currently selected drum kit note in the **Edit Drum Kit Note** subsection.

4 Edit Drum Kit Note subsection

Allows you to specify data in the following fields for the drum kit note currently selected in the **Drum Kit Note Map** table:

- Name: The displayed name for the specific combination of instrument and playback technique. You may choose to input the name used in the manufacturer's documentation for your VST instrument or MIDI output device.
- **Instrument**: Allows you to select an instrument for the drum kit note selected in the **Drum Kit Note Map** section from a list of all the unpitched percussion instruments you can create in Dorico Elements.
- **Key switches**: Allows you to specify the MIDI note number of the key you want to use as a key switch if this sound requires another MIDI note to be played to trigger this specific combination of instrument and playback techniques.

NOTE

Key switches are not compulsory.

• **Techniques**: Allows you to select playback techniques to apply to the instrument selected in the **Instrument** field from a list of the available playback techniques.

5 Reset to Library Defaults

Allows you to revert any changes you have made to the percussion maps from the Default Library.

6 Import Library

Opens the File Explorer/macOS Finder, where you can select the .doricolib files that you want to import as percussion maps.

7 Export Library

Opens the File Explorer/macOS Finder, where you can select the location to which you want to export the currently selected percussion maps as a .doricolib file. You can then import the .doricolib file into other projects and share it with other users.

RELATED LINKS

Track Inspector on page 507
Assigning expression/percussion maps to endpoints on page 555

Changing the middle C numbering convention on page 50

Creating new percussion maps

You can create new percussion maps from scratch and you can duplicate existing percussion maps and edit the settings; for example, to obtain correct playback when using third-party sound libraries or MIDI devices.

PROCEDURE

- 1. Choose Library > Percussion Maps to open the Percussion Maps dialog.
- 2. Create a new percussion map in any of the following ways:
 - To create an empty percussion map, click **Add Percussion Map !** in the action bar.
 - To create a copy of an existing percussion map, select it in the percussion maps list and click **Duplicate Percussion Map** in the action bar.
- 3. In the **Percussion Map Data** section, click **Lock Info** at to unlock the fields.
- **4.** Enter the display name you want for the percussion map in the **Name** field. This name appears in the **Endpoint Setup** dialog.
- 5. Enter any unique identification name in the **ID** field.
 - It can be useful to include the instrument and sound library for which you created the map, as well as your name, in the identification name for percussion maps; for example, **xmap.user.paulsmith.hso.cowbell**.
- **6.** Choose one of the following options for **Map defines sounds for**, as appropriate for the current percussion map:
 - Multiple Instruments
 - Single Instruments
- 7. Activate/Deactivate Apply Stage Template settings.
- 8. In the **Drum Kit Note Map** section, click **Show all** to show unmapped notes.
- 9. Select the row corresponding to the MIDI note for which you want to create a new mapping.
- **10.** In the **Edit Drum Kit Note** subsection, click beside the **Instrument** field to open a dialog containing a list of percussion instruments.
- **11.** Select the instrument that corresponds to the sound produced by the selected MIDI note.
- **12.** Click **OK**.
- **13.** In the **Edit Drum Kit Note** subsection, click beside the **Techniques** field to open the **Playback Technique Combinations** dialog.
- **14.** Select the appropriate playback techniques for the sound produced by the selected MIDI note.
 - For example, Ctrl/Cmd -click Buzz roll and Rim.
- 15. Click OK
- **16.** In the **Edit Drum Kit Note** subsection, enter the display name you want for this combination of instrument and playing technique in the **Name** field.
- **17.** Optional: If the key switch for this sound requires a MIDI note number, specify it in the **Key switches** field.
- 18. Click Apply.
- **19.** Optional: Repeat these steps for each MIDI note until you have created all the required mappings for your project.

20. Click **OK** to save your changes and close the dialog.

RESULT

The new percussion map is created.

AFTER COMPLETING THIS TASK

- You must assign percussion maps to the same endpoints as the VST instruments or MIDI devices that provide the corresponding patches.
- You can export the percussion map if you want to use it in other projects.

RELATED LINKS

Assigning expression/percussion maps to endpoints on page 555

Importing percussion maps

You can import percussion maps into projects. Percussion maps are saved as .doricolib files.

PROCEDURE

- 1. Choose Library > Percussion Maps to open the Percussion Maps dialog.
- 2. Click **Import Library** to open the File Explorer/macOS Finder.
- 3. Locate and select the percussion map file you want to import.
- 4. Click Open.

RESULT

The selected percussion map is imported into your project. It appears in the percussion maps list.

Exporting percussion maps

You can export percussion maps so you can use them in other projects. Percussion maps are saved as .doricolib files.

PROCEDURE

- 1. Choose **Library** > **Percussion Maps** to open the **Percussion Maps** dialog.
- 2. In the percussion maps list, select the percussion maps you want to export.
- 3. Click **Export Library** to open the File Explorer/macOS Finder.
- **4.** In the File Explorer/macOS Finder, specify a name and location for the library file.
- 5. Click Save.

RESULT

The selected percussion maps are exported as a .doricolib file and saved in the selected location.

Defining how combinations of articulations and single-note tremolos sound in playback

You can define specific playback behaviors for particular combinations of articulations and single-note tremolos in playing technique-specific noteheads for unpitched percussion instruments.

PROCEDURE

- 1. Open the Percussion Instrument Playing Techniques dialog in any of the following ways:
 - For an individual percussion instrument: In Setup mode, in the **Players** panel, click the instrument menu <u>···</u> in the instrument label, and choose **Edit Percussion Playing Techniques** from the menu.
 - For percussion instruments that are part of percussion kits: In Setup mode, in the Players panel, click the instrument menu in the kit instrument label, and choose Edit Percussion Kit to open the Edit Percussion Kit dialog. In the main editing area, select the instrument whose playing techniques you want to edit, then click Edit Percussion Playing Techniques.
- **2.** In the list at the top of the dialog, select the playing technique-specific notehead whose playback behaviors you want to define.
- 3. Click **Add Technique** 1 in the action bar at the bottom left of the dialog.
- **4.** Click **Choose Playing Techniques** beside the **Playback playing technique** field to open the **Playback Technique Combinations** dialog.
- 5. Select the playback techniques you want.

TIP

You can select a single playback technique or combine multiple playback techniques. To select multiple playback techniques, **Ctrl/Cmd** -click each playback technique.

- **6.** Click **OK** to add the selected playback techniques and close the **Playback Technique Combinations** dialog.
- **7.** Choose one of the following options:
 - **Replace**: Allows you to use this playing technique instead of the default playing technique defined for this combination of notehead and staff position.
 - Add: Allows you to add this playing technique on top of the default playing technique defined for this combination of notehead and staff position.
- 8. Choose any articulations and the tremolo stroke that you want from the available options.
- **9.** Click **OK** to save your changes and close the dialog.

RESULT

The behavior of the selected playing technique in playback is changed.

RELATED LINKS

Percussion Instrument Playing Techniques dialog on page 1399 Creating new playing technique-specific noteheads on page 1402 Playback Technique Combinations dialog on page 756

Playback techniques

Playback techniques link together the notations you input into your music and techniques/ articulations in sound libraries in order to produce the correct sounds in playback. They are used by expression and percussion maps to trigger the appropriate commands, such as key switches or control changes.

- You can map playback techniques as required for different sound libraries in the Expression
 Maps dialog, including creating new combinations of existing playback techniques, such as
 Legato and Tremolo, which allows them to be used simultaneously.
- You can see which playback techniques are in use at any particular rhythmic position in the Playing Techniques editor for the corresponding instrument/voice.

When you input notations, such as playing techniques, tremolos, jazz articulations, or articulations, the corresponding expression maps look for the appropriate playback techniques. For example, inputting *pizz*. playing techniques causes expression maps to use the **Pizzicato** playback technique to switch to the *pizzicato* sound for playback. If the expression map cannot locate the sound, the playback technique applied either remains the same as the previous playback technique or reverts to the natural playback technique.

In Dorico Elements, there are the following types of playback techniques:

Attribute

Only applies to a single note at the corresponding rhythmic position, such as an up bow playing technique or staccato articulation.

Direction

Applies from the corresponding rhythmic position onwards, until it is replaced by another playback technique, such as *pizzicato* followed by *arco*.

TIP

- Custom playing techniques that use playback techniques which do not already exist
 in expression maps do not play back automatically. In order for them to play back
 appropriately, you must add them to the expression maps for each instrument for which
 you want to use them. You must also assign an action for each custom playing technique
 that determines how the switch that triggers the technique is controlled.
- If you have input a playing technique but cannot hear a change in the sound, you might
 be using a combination of playback techniques that the expression map does not expect.
 For example, if you input a new playing technique without cancelling an existing playing
 technique, the expression map cannot process the two corresponding playback techniques
 together if the expression map does not have an entry for those two techniques combined.
 - To avoid playback technique clashes, you can add playback techniques that cannot be in use concurrently to the same mutual exclusion group in the corresponding expression maps. Alternatively, you can create a combination of those playback techniques in order to use them simultaneously.
- You can enable independent voice playback for individual instruments to hear different playing techniques, tremolos, jazz articulations, or articulations in different voices simultaneously.

RELATED LINKS

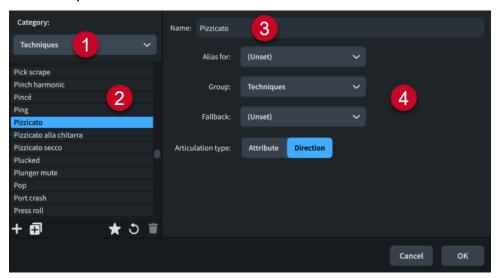
Expression maps on page 744
Enabling independent voice playback on page 530
Playing Techniques editor on page 673
Playing techniques on page 1160

Tremolos on page 1377 Jazz articulations on page 1125 Articulations on page 787

Edit Playback Techniques dialog

The **Edit Playback Techniques** dialog allows you to define new playback techniques and edit existing ones. Playback techniques are used by expression maps to assign the correct sounds to the required notations in the music, such as playing techniques, tremolos, jazz articulations, and articulations.

 You can open the Edit Playback Techniques dialog by choosing Library > Playback Techniques.



The **Edit Playback Techniques** dialog contains the following sections and options:

1 Category menu

Allows you to filter the list of playback techniques by selecting a category from the menu, such as **Techniques** or **Dynamics**.

2 Playback techniques list

Contains all the playback techniques in the project within the currently selected category. The action bar at the bottom of the list contains the following options:

- **New +**: Adds a new blank playback technique.
- **New from Selection** \blacksquare : Creates a copy of an existing playback technique that you can edit separately from the original.
- Save as Default ☆: Saves the selected playback technique to your user library, allowing you to use it in multiple projects. Appears as ★ for playback techniques saved as default.
- **Revert to Factory 5**: Removes all your changes to the selected playback technique, returning it to its saved settings.
- **Delete** : Deletes the selected playback technique.

NOTE

You cannot delete predefined playing techniques or any playing technique that is currently used in your project.

3 Name

Allows you to edit or enter the name of the playback technique. This is the name shown in lists in the **Edit Playing Techniques**, **Expression Maps**, **Playback Technique Combinations**, and **Percussion Maps** dialogs.

4 Playback options

- **Alias for**: Allows you to select another playback technique whose sound mapping you want to apply to the selected playback technique as well.
- **Group**: Sets the group in which this playback technique appears.
- **Fallback**: Allows you to specify another playback technique that can be used if the present one is not available.
- Articulation type: Sets the duration over which the playback technique takes effect.
 Attribute applies only to the note at the rhythmic position where the playing technique is found, such as a staccato articulation, while **Direction** applies to all following notes until it is replaced by another playing technique, such as *pizzicato*.

RELATED LINKS

Expression Maps dialog on page 745
Playback Technique Combinations dialog on page 756
Adding/Editing mutual exclusion groups in expression maps on page 761

Notation reference

Introduction

This notation reference contains information about the accepted conventions for presenting different notations and how to change their appearance and placement in Dorico Elements, both for individual items and by changing default settings.

It also contains instructions for inputting more complex notations, such as cross-staff glissando lines, which are described in the corresponding chapter.

Tasks in the notation reference outline the default per-layout changes you can make in **Layout Options**, such as changing the frequency of bar numbers, and the individual changes you can make to items, which often involve using properties in the Properties panel.

More detailed default options, such as precise spacing gaps between different items, are available in Dorico Pro.

You can find basic input methods for notations in the Write mode chapter.

RELATED LINKS
Write mode on page 191
Layout Options dialog on page 728
Properties panel on page 646
Notations input on page 266

Accidentals

Accidentals are shown beside notes to indicate their pitch, both when notated on a staff and written out in text. In music based in Western tonality, they usually show that the pitch of a note has been altered so that it does not conform to the prevailing key signature.

In Dorico Elements, each note has its own fixed pitch that is independent of the prevailing key signature, and accidentals are automatically hidden and shown as appropriate. For example, if you input F\(\text{s}\) and then add a D major key signature before them, they do not turn into F\(\text{s}\); they remain F\(\text{s}\) and show natural accidentals. However, if you input the D major key signature first, any Fs you then input without stating an accidental are input as F\(\text{s}\)s.



There are different conventions for accidental duration rules, such as not repeating the same accidental on subsequent notes of the same pitch in the same bar. In music that has no key signatures, some or all notes might require accidentals, depending on the notation convention in use.

You can use accidental duration rules to determine when accidentals are shown.

RELATED LINKS

Accidental duration rules on page 783 Inputting notes on page 219 Inputting accidentals on page 239

Deleting accidentals

You can delete accidentals according to their type, and you can delete all accidentals from a selection of notes with different accidentals at the same time. This changes the pitch of the selected notes.

NOTE

These steps do not apply to cautionary accidentals, such as those shown on natural notes that follow the same notes with an accidental but in a different octave. In Dorico Elements, you can hide, show, or parenthesize cautionary accidentals in each flow and on individual notes.

PROCEDURE

- 1. In Write mode, select the notes whose accidentals you want to delete.
- **2.** Delete accidentals in any of the following ways:
 - To delete naturals, press 0.
 - To delete flats, press -.

- To delete sharps, press =.
- In the Notes panel, click the accidentals you want to delete.

RESULT

The corresponding accidentals are deleted from the selected notes. This changes their pitch. For example, deleting the sharp from a G# turns it into G4.

NOTE

- Depending on the accidental duration rule applied to the flow, deleting accidentals might cause accidentals to appear on subsequent notes of the same pitch in the same bar. When you select single notes or multiple notes in the same voice at the same rhythmic position, their pitches are shown in the status bar and as depressed keys in the Keyboard panel.
- To delete accidentals from a selection of notes with different accidentals, we recommend that you revert them all to natural by pressing **0** or clicking **Natural** in the Notes panel. This is because re-inputting an accidental over a selection of notes with different accidentals adds that accidental to every note in the selection. For example, two G#s followed by two Gbs become four G#s if you re-input a sharp. If you click **Sharp** or press = twice, all accidentals are deleted.

RFLATED LINKS

Notes panel on page 196
Inputting accidentals on page 239
Changing the pitch of individual notes on page 455
Accidental duration rules on page 783
Status bar on page 37
Keyboard panel on page 202

Hiding/Showing or parenthesizing accidentals

You can hide/show individual accidentals, or show them in round or square brackets, including cautionary accidentals shown by default. For example, you can show cautionary accidentals on subsequent notes in tie chains that cross system/frame breaks by showing accidentals in round brackets. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** [7] is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

1. Select the notes whose accidentals you want to hide/show or parenthesize. You can do this in Write mode and Engrave mode.

NOTE

You can only select individual noteheads within tie chains in Engrave mode.

2. In the Properties panel, activate **Accidental** in the **Notes and Rests** group.

- **3.** Select one of the following options from the menu:
 - Hide
 - Show
 - Round brackets
 - Square brackets

RESULT

Accidentals on the selected notes are shown, hidden, or shown in round or square brackets. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

If colors for accidentals are shown, accidentals that you have shown manually appear teal.

NOTE

- Hiding accidentals does not affect the pitch of notes in playback.
- If you are hiding/showing many accidentals, we recommend that you consider changing the accidental duration rule.
- You can assign key commands for different accidental hiding, showing, and parenthesizing commands on the **Key Commands** page in **Preferences**.

AFTER COMPLETING THIS TASK

You can also hide/show or parenthesize accidentals on artificial harmonics shown using diamond noteheads, independently of the normal noteheads that indicate the stopped pitch.

RELATED LINKS

Properties panel on page 646

Changing the property scope on page 648

Engrave toolbox on page 490

Hiding/Showing or parenthesizing cautionary accidentals on page 784

Hiding/Showing or parenthesizing harmonic accidentals on page 1065

Hiding/Showing cautionary key signatures on page 1006

Changing the size of accidentals

You can change the size of accidentals individually without changing the size of the noteheads to which they apply; for example, to show editorial accidentals at a smaller size than normal accidentals. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing]** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- 1. In Engrave mode, select the accidentals whose size you want to change.
- 2. In the Properties panel, activate **Accidental scale** in the **Notes and Rests** group.
- 3. Change the value in the value field.

4. Press Return.

RESULT

The scale size of the selected accidentals is changed. For example, changing the value to 50 scales the selected accidentals to half their normal size. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

Hiding/Showing colors for accidentals

You can show cautionary accidentals and accidentals that you have shown manually in different colors, independently of each other.

Colors for accidentals are considered annotations and are not printed by default.

PROCEDURE

- Do one of the following:
 - To hide/show colors for cautionary accidentals, choose View > Note And Rest Colors > Cautionary Accidentals.
 - To hide/show colors for forced accidentals, choose View > Note And Rest Colors > Forced Accidentals.

RESULT

Colors for accidentals are hidden/shown. Cautionary accidentals appear pink, while forced accidentals appear teal.

EXAMPLE



Colors for both cautionary and forced accidentals shown

RELATED LINKS

Hiding/Showing or parenthesizing accidentals on page 776
Hiding/Showing or parenthesizing cautionary accidentals on page 784
Changing music area colors on page 53
Hiding/Showing voice colors on page 1417
Annotations on page 581

Stacking of accidentals

If multiple accidentals are required for a chord in a single voice, or for notes in multiple voices at the same rhythmic position, they are stacked to the left of the chord in columns.

For chords with multiple accidentals, accidentals are generally stacked as follows:

1. The highest accidental is inserted in the first column immediately to the left of the notes.

- **2.** The lowest accidental is added to the same column, provided that it does not collide with the first accidental.
- **3.** The remaining highest and lowest accidentals are alternated in successive columns located further left from the chord.

In Dorico Elements, additional rules help to produce a stack of accidentals that uses as few columns as possible. The following list contains some of the rules that are applied:

- Columns closer to the notes contain more accidentals than columns further from the notes.
- Accidentals on notes that are an octave apart are stacked in the same column. This also
 applies to accidentals that are a sixth or more apart, depending on the combination of
 accidentals.
- Accidentals in the same column never collide. The minimum interval between accidentals that is required to prevent collisions depends on the types of accidentals.
- Accidentals that are a second apart are arranged in adjacent columns, with the higher accidental in the right-hand column.

These rules minimize the amount of extra space that is required between successive notes or chords and ensure that accidentals appear as close as possible to the noteheads to which they apply. At the same time, they produce a contour that resembles a C-curve on the left-hand side of the chord.

Accidental stacking rules for dense chords

Dorico Elements uses special stacking calculations in dense chords with multiple accidentals to ensure legibility. Chords are considered dense when they have six or more accidentals within the span of an octave.

For dense chords, accidentals are stacked as follows:

- 1. The highest accidental is inserted in the first column to the left of the notes.
- 2. The next accidental on a note that is located at least a seventh below the highest note is stacked into the same column. This continues with the remaining notes until no more accidentals fit into the first column.
- 3. Steps 1 and 2 are repeated for the following columns until all accidentals are stacked.
- **4.** The columns are grouped, interspersed, and re-stacked. This results in a stack with alternating accidentals, reminiscent of the way accidentals are arranged in a key signature.

By default for dense chords, Dorico Elements uses a lattice arrangement of accidentals, rather than the usual zig-zag arrangement. In very dense chords, the lattice arrangement can be wider and require more columns.

Kerning of accidental columns

Dorico Elements applies kerning to accidental columns to ensure that the columns to the left of a chord occupy as little horizontal space as possible.

In typography, kerning adjusts the space between individual characters to increase legibility. In Dorico Elements, as well as in music engraving in general, kerning allows accidentals to interlock.

EXAMPLE

If a low note is followed by a high note with an accidental, the accidental can be tucked above the low note to prevent the note spacing from being distorted.

Similarly, in the case of multiple columns of accidentals on a chord, the overall width of the stack of accidentals is reduced if, for example, a flat in the second column is kerned underneath a sharp in the first column belonging to a note a third higher. This also reduces the need to distort note spacing to accommodate accidentals.

Changing the column of accidentals

You can change the column of individual accidentals; for example, so they appear closer to the stem than other accidentals in the chord. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing 7** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** In Engrave mode, select the notes or accidentals whose accidental column you want to change.
- 2. In the Properties panel, activate Accidental column in the Notes and Rests group.
- **3.** Change the value in the value field.

RESULT

The column of the selected accidentals is changed. Accidentals with lower **Accidental column** values are placed closer to noteheads, while accidentals with higher values are placed further from noteheads. If necessary, Dorico Elements automatically changes the column of other accidentals at the same rhythmic position.

If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490 Tucking index properties on page 504

Moving accidentals graphically

You can move individual accidentals graphically to the right or left; for example, to reduce the horizontal spacing required for accidentals in a single dense chord. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

NOTE

You cannot move accidentals rhythmically. If you want to change the notes to which accidentals apply, you must delete them from their original notes and input new accidentals on the new notes or change the pitch of existing notes.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing ?** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** In Engrave mode, select the accidentals you want to move. You can also select their noteheads.
- 2. In the Properties panel, activate **Accidental X offset** in the **Notes and Rests** group.
- **3.** Move the accidentals in one of the following ways:
 - To move them to the right, increase the value in the value field.
 - To move them to the left, decrease the value in the value field.

RESULT

The selected accidentals are moved graphically. If necessary, Dorico Elements automatically increases note spacing to accommodate the accidentals and avoid collisions.

If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

RELATED LINKS

Properties panel on page 646

Adjusting note spacing at individual rhythmic positions on page 496

Per-layout note spacing options on page 495

Altered unisons

Altered unisons occur when two or more notes of the same name in the same octave have different accidentals in the same chord, such as D# and Db.

In Dorico Elements, this is notated with a split stem by default. Split stems show the main body of a chord with a stem branch coming off the main stem that connects noteheads in altered unisons to the chord. This allows all notes to appear with their corresponding accidental directly beside them. A split stem is also known as a "cherry stalk" or a "tree".

You can show individual altered unisons with a single stem, meaning noteheads appear directly beside each other, and the two accidentals are shown beside each other to the left of the chord.

You can also change the default appearance of all altered unisons in each flow independently on the **Accidentals** page in **Notation Options**.

NOTE

If a chord contains notes a second interval apart and one of those notes has an altered unison, it is always shown with a split stem, regardless of your setting. This is to ensure clarity in clusters.

EXAMPLE



A single stem altered unison



A split stem altered unison

RELATED LINKS

Inputting chords on page 247 Notation Options dialog on page 730

Changing how altered unisons appear

You can change how individual altered unisons appear, including within chords containing other altered unisons, and independently of your per-flow settings. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** Is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** Select the altered unison notes whose appearance you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Split stem** in the **Notes and Rests** group.
- **3.** Activate/Deactivate the corresponding checkbox.

RESULT

The selected altered unison notes are shown with split stems when the checkbox is activated, and with single stems when the checkbox is deactivated. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

TIP

- Split stem applies to individual notes. You can have altered unisons appear differently within
 the same chord by setting their properties independently.
- You can change the default appearance of all altered unisons in each flow independently in Notation Options > Accidentals > Altered Unisons.

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490 Notation Options dialog on page 730

Microtonal accidentals

Microtonal accidentals indicate pitches beyond the standard accepted chromatic scale in Western tonality, such as a quarter sharp or quarter flat. Microtonal accidentals are only shown in Dorico Elements if you open a project that already contains them. They are available for input only where the corresponding key signature and tonality system apply.

Accidental duration rules

Accidental duration rules determine how long accidentals apply, such as within a bar, at a different octave, or just for a single note. Dorico Elements allows you to use different accidental duration rules.

• You can find the available accidental duration rules on the **Accidentals** page in **Notation Options**.

Common practice

In common practice, an accidental affects all notes of the same pitch in the same octave within the same bar, unless it is cancelled by another accidental. If it is not cancelled, it is automatically cancelled in the following bar.

It is customary to show cautionary accidentals on subsequent notes in certain circumstances. For example, in the key of G major, an F# in a bar following an F# shows a cautionary sharp sign, even though the sharp is included in the key signature. Cautionary accidentals are also known as "courtesy accidentals".

When using the common practice accidental duration rule, you can choose to hide, show, or parenthesize cautionary accidentals in different circumstances.

In Dorico Elements, common practice is the default accidental duration rule.

Second Viennese School

The Second Viennese School accidental duration rule states that each accidental only applies to a single note. All notes show an accidental regardless of key signature, including naturals.

This accidental duration rule was used by Schoenberg and other composers of the Second Viennese School.

You can customize the options within the Second Viennese School accidental duration rule when changing the accidental duration rule, including choosing whether immediate repetitions of the same note within the same bar require a restatement of the accidental.

Modernist

The Modernist accidental duration rule states that only notes that have been altered from the key signature show accidentals. Naturals are not shown. However, accidentals that are shown only apply to the notes on which they are written, as with the Second Viennese School.

Charles Ives and Robert Crumb used this variation.

You can customize the options within the Modernist accidental duration rule when changing the accidental duration rule, including choosing whether or not the same accidental on the same pitch is restated later in the bar if the subsequent pitches occur immediately and if subsequent pitches occur after other, different notes. Similarly, there are options for accidentals on notes

in different octaves in the same bar and following bar. There is also an option controlling the restatement of accidentals within beam groups.

RELATED LINKS

Notation Options dialog on page 730

Changing the accidental duration rule

You can change the accidental duration rule in each flow independently; for example, if the Modernist accidental duration rule is appropriate for certain flows in your project but common practice is appropriate for others. In Dorico Elements, common practice is the default accidental duration rule.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-N to open Notation Options.
- 2. In the Flows list, select the flows in which you want to change the accidental duration rule. By default, only the current flow is selected when you open the dialog. You can select other flows by clicking Select All in the action bar, clicking and dragging across multiple flows, Shift -clicking adjacent flows, and Ctrl/Cmd -clicking individual flows.
- 3. In the category list, click **Accidentals**.
- 4. In the Basic section, choose one of the following options for Accidental duration rule:
 - Common Practice
 - Second Viennese School
 - Modernist
- 5. Optional: Customize the options for your chosen accidental duration rule.

TIP

Options in the **Basic** section can apply to all accidental duration rules.

6. Click Apply, then Close.

Hiding/Showing or parenthesizing cautionary accidentals

You can hide/show cautionary accidentals, or show them in parentheses, in different circumstances by default in flows that use the common practice accidental duration rule.

PREREQUISITE

The flows in which you want to hide, show, or parenthesize cautionary accidentals use the common practice accidental duration rule.

PROCEDURE

- **1.** Press **Ctrl/Cmd-Shift-N** to open **Notation Options**.
- **2.** In the **Flows** list, select the flows in which you want to hide, show, or parenthesize cautionary accidentals.
 - By default, only the current flow is selected when you open the dialog. You can select other flows by clicking **Select All** in the action bar, clicking and dragging across multiple flows, **Shift** -clicking adjacent flows, and **Ctrl/Cmd** -clicking individual flows.
- 3. In the category list, click Accidentals.

4. In the **Cautionary Accidentals** section, change each option as required.

For example, you can show cautionary accidentals for notes at different octaves in the same bar, but hide them in the following bar.

5. Click Apply, then Close.

RESULT

Cautionary accidentals are hidden, shown, or parenthesized in the corresponding circumstances in the selected flows.

If colors for accidentals are shown, cautionary accidentals appear pink.

TIP

For flows using the Modernist accidental duration rule, options for cautionary accidentals are available in the **Modernist Options** section of the **Accidentals** page.

RELATED LINKS

Hiding/Showing colors for accidentals on page 778

Changing the cancellation of double accidentals

You can change the convention of double accidental cancellation in each flow independently; for example, if some flows in your project require archaic cancellation. You can do this in combination with any accidental duration rule.

By default, Dorico Elements uses modern cancellation.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-N to open Notation Options.
- **2.** In the **Flows** list, select the flows in which you want to change the double accidental cancellation convention.

By default, only the current flow is selected when you open the dialog. You can select other flows by clicking **Select All** in the action bar, clicking and dragging across multiple flows, **Shift** -clicking adjacent flows, and **Ctrl/Cmd** -clicking individual flows.

- **3.** In the category list, click **Accidentals**.
- **4.** In the **Basic** section, choose one of the following options for **Single accidentals cancelling double accidentals**:
 - To show naturals immediately before single accidentals that come after double accidentals, choose **Use archaic cancellation**.
 - To replace double accidentals with single accidentals without showing naturals, choose
 Use modern cancellation.
- 5. Click Apply, then Close.

RESULT

The double accidental cancellation convention is changed in the selected flows.

EXAMPLE







Modern cancellation

Articulations

Articulations are markings that are drawn above or below notes and chords. Articulations tell a performer how to attack a note or how long to play a note relative to its notated duration.

In Dorico Elements, articulations are defined as something that alters the way a note is played, in a way that is consistent across all instruments. Because instructions like bowing directions, harmonics, or tonguing apply to different instrument groups, in Dorico Elements such directions are defined as playing techniques.



A musical phrase with accent, staccato, and staccatissimo articulations

Articulations are categorized into the following types:

Articulations of force

Indicate a stronger attack at the start of notes, and include articulations such as accent and marcato. Marcato is also sometimes known as a "strong accent". Dorico Elements shows these articulations at the start of a note or tie chain by default.

Articulations of duration

Indicate a shorter duration than notated, and include articulations such as staccatissimo, staccato, tenuto, and staccato-tenuto. Staccato-tenuto is also sometimes known as a "louré". If a note includes ties, Dorico Elements shows articulations of duration above the last note in the chain by default.

Articulations of stress

Indicate notes that should be emphasized or not emphasized where that contradicts the prevailing meter, using stressed and unstressed marks. Dorico Elements shows these articulations at the start of a note or tie chain by default.

Dorico Elements positions articulations automatically on the notehead or stem side of notes and chords, according to the musical context. A note or chord can display one of each type of articulation.

RELATED LINKS

Inputting articulations on page 266 Changing the positions of articulations on tie chains on page 790 Playback techniques on page 770

Copying and pasting articulations

You can copy an existing phrase and paste only its slurs, articulations, and jazz articulations to another phrase, without affecting the pitches of notes.

PROCEDURE

- **1.** In Write mode, make a selection containing the slurs, articulations, and jazz articulations you want to copy.
- 2. Press Ctrl/Cmd-C to copy the selected phrase.
- 3. Select the first note to which you want to paste articulations.
- Choose Edit > Paste Special > Paste Articulations. You can also choose this option from the context menu.

RESULT

Slurs, articulations, and jazz articulations included in the selection are pasted to notes from the selected note onwards.

RELATED LINKS

Large selections on page 410
Copying and pasting notes/items on page 445
Repitching notes without changing their rhythm on page 459
Arranging tools on page 443

Deleting articulations

Individual articulation markings cannot be selected and deleted separately from their notehead in Write mode, so articulations must be deleted by selecting the note or notes to which they are attached, and deselecting the articulation.

PROCEDURE

- 1. In Write mode, select the notes whose articulations you want to delete.
- **2.** Deselect the articulations in any of the following ways:
 - Press the key commands of the articulations you want to delete.
 - In the Notes panel, click the articulations you want to delete.

RELATED LINKS

Notes panel on page 196

Key commands for articulations on page 267

Positions of articulations

There are established conventions for the position and placement of articulations relative to notes, the staff, and staff lines, which ensure articulations are always clearly visible. For the smallest articulations, such as staccato marks, correct placement relative to staff lines in particular is vital.

Placement of articulations

Articulations are placed on the notehead side by default, with the following exceptions:

- In single-voice contexts, marcato is always placed above the staff, regardless of the stem direction of the note or chord on which it is used. In multiple-voice contexts, marcato can also be placed below the staff.
- If multiple voices are active, articulations are placed at the end of the stem side of a note or chord. This clarifies which articulations belong to the up-stemmed notes and which to the down-stemmed notes.
- If a note is placed on the middle staff line or on the space immediately on either side, articulations that are less than a space in height are centered in the next unoccupied space. This normally only applies to staccato and tenuto. If a note in the middle of the staff has a staccato-tenuto articulation, the component parts of the articulation are split up and placed in separate spaces.
- If an articulation cannot fit within a staff space, or if the note is placed high or low on the staff, the articulation is placed outside the staff.
- If a note or chord is tied and the tie is placed above or below the notehead, articulations that are placed on the notehead side of a note or chord are offset by an additional 1/4 space in order to avoid the end of the tie.

Articulations on the notehead side are always centered horizontally on the notehead. This also applies to articulations on the stem side, except if the only articulation is a staccato or staccatissimo. In this case, the articulation is centered on the stem.

Articulations in tie chains

By default, articulations of force and stress are shown on the first note/chord in tie chains, while articulations of duration are shown on the last note/chord.

You can change where in tie chains articulations appear individually.

RELATED LINKS

Moving items graphically on page 501

Order of articulations

If there are multiple articulations on the same notes, their vertical position and proximity to noteheads/stems depends on their type.

Articulations are positioned in the following order:

- 1. Articulations of duration are positioned closest to notehead/stems.
- 2. Articulations of force are positioned outside articulations of duration.
- 3. Articulations of stress are positioned furthest from noteheads/stems.

Order of articulations in relation to slurs

Articulations of duration are positioned as follows:

- Inside slurs that start/end on a note or chord with an articulation.
- Inside the curvature of a slur.
- Inside tuplet brackets.

Articulations of force are positioned as follows:

• Outside slurs that start/end on a note or chord with an articulation, except if they can be positioned within the staff.

- Inside the curvature of a slur if they fit between the slur and the note or stem, to which they belong, without colliding.
- Outside tuplet brackets.





Force and stress articulations outside the ends of the Duration articulations inside the ends of the slur

Changing the positions of articulations on tie chains

You can change where in tie chains articulations appear individually. By default, articulations of force and stress are shown on the first note/chord in tie chains, while articulations of duration are shown on the last note/chord.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** Is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the tied notes/chords whose articulation position you want to change. You can do this in Write mode and Engrave mode.
- **2.** In the **Articulations** group of the Properties panel, activate **Pos. in tie chain** under the corresponding heading for the articulation whose position you want to change.
 - For example, activate **Pos. in tie chain** under the **Articulations of force** heading to change the position of accents.
- **3.** Choose one of the following options:
 - First note
 - Last note

RESULT

The position of articulations in the selected tie chains is changed.

RELATED LINKS

Properties panel on page 646 Engrave toolbox on page 490

Changing the placement of articulations relative to notes

You can change whether individual articulations are placed on the notehead side or stem side of notes. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, Graphic Editing 3 is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** Select the notes/chords whose articulation placement you want to change. You can do this in Write mode and Engrave mode.
- **2.** In the **Articulations** group of the Properties panel, activate **Placement** under the corresponding heading for the articulations whose placement you want to change.
 - For example, activate **Placement** under the **Articulations of force** heading to change the placement of accents.
- **3.** Select one of the following options from the menu:
 - Notehead side
 - Stem side

RESULT

The articulation is placed on the selected side of the notes or chords. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain. If this creates a collision with other markings, such as playing techniques, Dorico Elements automatically makes adjustments to make sure all markings are clear and legible.

Changing the placement of articulations relative to slurs

You can change whether individual articulations of duration are placed inside or outside slur endpoints. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

NOTE

These steps only apply to articulations of duration. They do not apply to articulations of force or stress.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

1. Select the notes/chords whose articulation placement you want to change. You can do this in Write mode and Engrave mode.

- 2. In the Properties panel, activate **Inside slur endpoint** in the **Articulations** group.
- **3.** Activate/Deactivate the corresponding checkbox.

RESULT

Articulations of duration are placed inside slur endpoints when the checkbox is activated, and outside slur endpoints when the checkbox is deactivated. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490 Slur endpoints relative to articulations on page 1264

Articulations in playback

Articulations affect how notes sound in playback. Depending on whether your sound library has specific samples for different articulations, Dorico Elements changes playback in different ways to reflect articulations.

- If your sound library includes samples for articulations, Dorico Elements loads the required samples using playback techniques. Additionally, Dorico Elements makes notes with staccatos sound shorter and notes with accents sound louder.
- If your sound library does not include samples for articulations, Dorico Elements adjusts notes according to the articulation without loading different samples. For example, making notes with staccatos sound shorter and notes with accents sound louder.

Because articulations apply to whole notes, samples are triggered at the start of notes, including tie chains.

TIP

- You can find options on the **Timing** page in **Playback Options** for the default effect of
 articulations of duration. You can find options for articulations of force on the **Dynamics**page.
- You can enable independent voice playback for individual instruments to hear different sounds in different voices simultaneously; for example, if you have slurs in one voice and staccatos in another voice.

RELATED LINKS

Playback techniques on page 770 Playback Options dialog on page 732 Enabling independent voice playback on page 530

Bars

Bars indicate a usually regular pattern of beats, determined by the prevailing time signature. Bars are separated from adjacent bars by vertical barlines, and each bar has a unique bar number.

Dorico Elements automatically numbers bars and shows barlines between bars as required for the prevailing time signature.

RELATED LINKS

Barlines on page 798

Bar numbers on page 808

Note and rest grouping on page 841

Pick-up bars on page 1364

Input methods for bars, beats, and barlines on page 294

Input methods for time signatures and pick-up bars on page 277

Hiding/Showing time signatures on page 1374

Bar length

Bars usually last the same duration and start and end at the same positions for all players. However, some music involves bars of different lengths coinciding, and there are situations where some players may have no bars indicated at all.

You can change the duration of a bar by changing its time signature or, in music in open meter, by inputting barlines where required. You can hide time signatures you do not want to show in the music; for example, if you are writing music with an irregular meter and you require barlines only to group material together, but not to imply any sense of meter.

Deleting bars/beats

You can delete whole bars and specific beats of music from your project completely by using the bars and barlines popover.

PROCEDURE

- **1.** In Write mode, select one of the following:
 - The first bar you want to delete, or the first note or rest in that bar.
 - An item at the rhythmic position from which you want to delete beats.
- 2. Open the bars and barlines popover in any of the following ways:
 - Press Shift-B.
 - In the Notations toolbox, click **Popovers** , then **Bars and Barlines** .
- **3.** Enter (minus), followed by the number of bars or beats you want to delete into the popover.

For example, enter **-6** to delete six bars, meaning the bar you selected and the subsequent five bars, or **-2q** to delete two quarter note beats, starting from the selected rhythmic position.

4. Press **Return** to close the popover.

RESULT

The number of bars or beats specified is deleted. Just as when Insert mode is activated, music to the right of the selection moves up to fill in the gap.

NOTE

- Any signposts in the selection are also deleted.
- Deleting some, but not all, beats from bars according to the prevailing time signature deletes the contents of those beats only. If you want to shorten a bar's duration, such as at the end of flows that start with a pick-up bar, you must instead either input a time signature with the required number of beats then hide the time signature, or input a barline and delete any excess bars if necessary. You can also use the Global Adjustment of Current Bar Insert mode scope and delete notes/rests.
- You can also delete bars by selecting the bars you want to delete, then choosing Edit > Delete Bars.

RELATED LINKS

Bars and barlines popover on page 294
Pick-up bars on page 1364
Deleting notes/items on page 443
Deleting rests on page 1254
Insert mode on page 439
Signposts on page 438

Deleting bars/beats with the system track

You can delete whole bars and selected beats from your project completely using the system track.

PREREOUISITE

The system track is shown.

PROCEDURE

- 1. In the system track in Write mode, select the region that you want to delete.
- 2. Click **Delete** in the system track. It can also appear above the system track if your selection is narrow.

The system track changes color when you hover your mouse pointer over **Delete** .

RESULT

The selected region is deleted. Just as when Insert mode is activated, music to the right of the selection moves up to fill in the gap.

NOTE

- Any signposts in the selection are also deleted.
- Deleting some, but not all, beats from bars according to the prevailing time signature
 deletes the contents of those beats only. If you want to shorten a bar's duration, such as at
 the end of flows that start with a pick-up bar, you must instead either input a time signature
 with the required number of beats then hide the time signature, or input a barline and

delete any excess bars if necessary. You can also use the **Global Adjustment of Current Bar** Insert mode scope and delete notes/rests.

You can also delete bars by selecting the bars you want to delete, then choosing Edit >
 Delete Bars.

RELATED LINKS

System track on page 414

Deleting empty bars/beats at the end of flows

You can trim flows by deleting any empty bars or beats left at the end.

PROCEDURE

- 1. In Write mode, select an item in the flow you want to trim.
- 2. Open the bars and barlines popover in any of the following ways:
 - Press Shift-B.
 - In the Notations toolbox, click Popovers , then Bars and Barlines .
- 3. Enter **trim** into the popover.
- **4.** Press **Return** to close the popover.

RESULT

Empty bars/beats at the end of the selected flow are deleted.

TIP

You can also trim flows by choosing Write > Trim Flow.

RELATED LINKS

Bars and barlines popover on page 294 Splitting flows on page 487 Deleting rests on page 1254

Deleting the contents of bars

You can delete just the contents of bars without deleting barlines or the bars themselves.

PROCEDURE

1. In Write mode, select the bars whose contents you want to delete.

TIP

Notes, rests, and other objects are highlighted orange when selected.

2. Press Backspace or Delete.

RELATED LINKS

Large selections on page 410 Filters on page 417

Insert mode on page 439

Changing the width of empty bars

You can change the width of empty bars individually in Engrave mode.

PREREQUISITE

Note Spacing ⋈ is selected in the Engrave toolbox.

PROCEDURE

1. In Engrave mode, select a square note spacing handle at the rhythmic position of the barline at the end of each empty bar whose width you want to change.



- **2.** Adjust the spacing in any of the following ways:
 - To increase the space to the left of the selected handles, press Alt/Opt-Right Arrow.
 - To decrease the space to the left of the selected handles, press **Alt/Opt-Left Arrow**.

NOTE

- To move handles by large increments, press Ctrl/Cmd plus the standard key command; for example, Ctrl/Cmd-Alt/Opt-Left Arrow.
- To move handles by moderate increments, press **Shift** plus the standard key command; for example, **Shift-Alt/Opt-Left Arrow**.
- To move handles by small increments, press Ctrl/Cmd Shift plus the standard key command; for example, Ctrl/Cmd-Shift-Alt/Opt-Left Arrow.
- You cannot move note spacing handles with the mouse, you can only move them using the keyboard.

RESULT

The width of the selected empty bars is changed. For example, if you select the handle of the barline on the right of a bar and nudge the handle to the left, the bar appears narrower. If you select the barline on the right of a bar and nudge the handle to the right, the bar appears wider.

RELATED LINKS

Engrave toolbox on page 490 Note spacing on page 494 Hiding/Showing bar rests in empty bars on page 1256 Hiding/Showing multi-bar rests on page 1258

Splits in bars

You can split bars rhythmically by changing the number of beats in each bar. You can split bars visually across system or frame breaks, which might be required in music with an irregular meter or in passages of polymeter.

Splitting bars by inputting new time signatures

You can split bars into two or more bars by changing the time signature at any rhythmic position. New time signatures apply until the next existing time signature or the end of the flow, whichever comes first.

NOTE

If you change the time signature in the middle of an existing bar, we recommend inputting another time signature at the start of the preceding bar reflecting its new rhythmic duration to avoid confusion.

Splitting bars by inputting new barlines

You can also split bars by inputting new barlines that are not normal (single) barlines anywhere within a bar without affecting the time signature. However, inputting a normal (single) barline anywhere within an existing bar resets the prevailing time signature from that point onwards.

For example, selecting the third quarter note (crotchet) in a 4/4 bar and inserting a new barline causes a new 4/4 bar to start from the added barline. This leaves the equivalent of a 2/4 bar without a time signature to the left of the barline, but the bars to the right of the added barline are in 4/4 and continue to be in 4/4 until the next time signature or the end of the flow, whichever comes first.

Signposts are shown at the position of each barline that you add manually within bars.





Two 4/4 bars with quarter notes

Adding a normal barline halfway through the first 4/4 bar restarts the time signature from that point.

RELATED LINKS

Input methods for bars, beats, and barlines on page 294
Input methods for time signatures and pick-up bars on page 277
System breaks on page 617
Frame breaks on page 620
Insert mode on page 439

Barlines

Barlines are vertical lines that cross staves in order to show how music is divided into bars, according to the time signature. The most commonly used barline is the single barline between adjacent bars, but there are different types, such as double or repeat barlines.



The final system in a piece in 12/8 containing a key change with double barline, three normal barlines, and a final barline at the end

Dorico Elements automatically shows barlines as required for the prevailing time signature. For example, Dorico Elements automatically shows dashed barlines between the different meters in aggregate time signatures. If you change the time signature, Dorico Elements moves the barlines as required so that subsequent music is barred correctly.

By default, Dorico Elements uses single barlines in flows and final barlines at the end of flows. You can change the default barline used in and at the end of each flow independently.

Barlines automatically extend across staff groups that are joined by a bracket or brace.

NOTE

Because of their intrinsic connection, barlines are considered part of time signatures in Dorico Elements. Therefore, explicit barlines that you have input directly are treated as hidden time signatures and break multi-bar rests.

Explicit single barlines appear with time signature signposts.

RELATED LINKS

Types of barlines on page 799
Input methods for bars, beats, and barlines on page 294
Barlines across staff groups on page 805
Time signatures on page 1359
Bar numbers on page 808
Multi-bar rests on page 1257
Repeat counts on page 1222
Note and rest grouping on page 841
Signposts on page 438

Per-flow notation options for barlines

You can find options for the per-flow the appearance of barlines on the **Barlines** page in **Notation Options**.

For example, you can change the type of barline used in and shown at the end of each flow by default, whether single barlines between staves only appear between staves or extend across

staves, and whether barlines join all staves at the end of each system and at the end of the final system in a flow.

Musical examples demonstrate how each option affects the appearance of your music.

RELATED LINKS

Notation Options dialog on page 730

Types of barlines

There are multiple types of barlines in Dorico Elements, which can all be input, moved, and deleted in the same ways.

Normal (Single)

A standard single barline that spans the entire height of the staff. For single-line staves, the barline extends one space above and below the staff line by default.

Explicit single barlines appear with time signature signposts.



Double

A double barline consists of two lines, both the width of a single barline, positioned half a space apart by default. It is often used to denote significant changes in the music, or to mark the placement of rehearsal marks, key signature changes, and tempo changes.



Final

A final barline consists of two lines: one of normal width, the other thick. It marks where the music ends.



Start repeat

A start repeat line consists of a thick barline, followed by a normal barline, followed by one of the following arrangements of dots:

- Two dots, one each in the middle two spaces of a five-line staff
- Four dots, one each in all four spaces of a five-line staff

It shows the start of a repeated section. It is used alongside end repeat lines, which show the end of a repeated section.





End repeat

An end repeat line is the mirror of a start repeat line, so it consists of either two or four dots, followed by a normal barline, followed by a thick barline. It shows the end

of a repeated section. It is used alongside start repeat lines, which show the start of a repeated section.





End/Start repeat

This line combines the start repeat and end repeat barlines, with either two single barlines with a single shared thick barline in the middle, or two thick barlines and no single barlines. On either side, there are either two or four repeat dots. It is used when a repeated section is immediately followed by another, separate repeated section.









RELATED LINKS

Input methods for bars, beats, and barlines on page 294 Changing the number of playthroughs at repeat barlines on page 536 Repeat counts on page 1222 Signposts on page 438

Changing the default barline type in flows

By default, Dorico Elements uses single barlines to separate bars in flows. You can change which type of barline automatically separates bars in each flow independently. For example, short or tick barlines are frequently used for most barlines in chant notation.

- 1. Press Ctrl/Cmd-Shift-N to open Notation Options.
- 2. In the Flows list, select the flows whose default barline type you want to change.
 By default, only the current flow is selected when you open the dialog. You can select other flows by clicking Select All in the action bar, clicking and dragging across multiple flows,
 Shift -clicking adjacent flows, and Ctrl/Cmd -clicking individual flows.
- 3. In the category list, click **Barlines**.
- **4.** Choose one of the following options for **Default barline type**:
 - Normal
 - Double
 - Dashed
 - Final
 - Tick (Top)
 - Tick (Bottom)
 - Short (Center)
 - Short (Top)
 - Thick
 - Start Repeat

- End Repeat
- End and Start Repeat
- 5. Click Apply, then Close.

The default barline type in the selected flows is changed. This does not override any explicit barlines you have input, such as repeat barlines in repeat endings, or the final barlines in the selected flows.

RELATED LINKS

Repeat endings on page 1210

Input methods for bars, beats, and barlines on page 294

Changing the default barline at the end of flows

By default, Dorico Elements uses final barlines at the end of flows. You can choose which type of barline is placed automatically at the end of each flow independently; for example, you might show double barlines at the end of flows to indicate there should be no gap before the following flow.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-N to open Notation Options.
- 2. In the Flows list, select the flows whose default end barline you want to change.
 By default, only the current flow is selected when you open the dialog. You can select other flows by clicking Select All in the action bar, clicking and dragging across multiple flows,
 Shift -clicking adjacent flows, and Ctrl/Cmd -clicking individual flows.
- 3. In the category list, click **Barlines**.
- **4.** Choose one of the following options for **Automatic barline at end of flow**:
 - Final barline
 - Double barline
 - Normal barline
 - Dashed barline
 - Thick barline
 - No barline
- 5. Click Apply, then Close.

RESULT

The default final barline at the end of the selected flows is changed.

NOTE

You can override individual final barlines by inputting a barline of a different type, but you cannot delete individual final barlines.

Changing the barline shown before repeat barlines

You can change the barline shown at the end of individual systems that are followed by start repeat barlines at the beginning of the next system. For example, if you want to show normal

barlines at the end of some systems following by start repeat barlines but double barlines at the end of others.

These steps can also apply to barlines shown before key signature changes that coincide with start repeat barlines.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** Is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the barlines at the end of systems followed by start repeat barlines whose barline type you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate Barline at end of system in the Time Signatures group.
- **3.** Select one of the following options from the menu:
 - Normal
 - Double
 - Final
 - Dashed
 - Tick (top)
 - Short (center)
 - Thick
 - Triple
 - Short (top)
 - Tick (bottom)
 - None

RESULT

The barline type shown at the selected barlines is changed.

RELATED LINKS

Properties panel on page 646 Engrave toolbox on page 490 System breaks on page 617

Hiding/Showing systemic barlines and brackets/braces

You can hide/show systemic barlines and brackets/braces at individual system/frame breaks and codas; for example, when formatting music with incipits.

PREREQUISITE

- You have inserted system/frame breaks or codas at the positions where you want to hide/ show systemic barlines.
- Signposts are shown for system/frame breaks.
- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.

• If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.

PROCEDURE

1. Select the system/frame break signposts or codas at the positions where you want to hide/ show systemic barlines. You can do this in Write mode and Engrave mode.

NOTE

You must select either only system/frame break signposts or only codas.

2. In the Properties panel, activate/deactivate **Hide systemic barline** in either the **Format** or **Repeat Markers** group.

RESULT

Systemic barlines and brackets/braces are hidden/shown on the corresponding systems to the selected system/frame breaks or codas.

EXAMPLE



Systemic barline shown

Systemic barline hidden

RELATED LINKS

Properties panel on page 646

Engrave toolbox on page 490

Input methods for repeats and tremolos on page 395

Inserting system breaks on page 617

Inserting frame breaks on page 621

Hiding/Showing signposts on page 438

Changing the gap before codas on page 1221

Hiding/Showing systemic barlines on single-staff systems

By default, systemic barlines are shown at the start of systems containing two or more staves and hidden on single-staff systems. You can hide/show systemic barlines on single-staff systems on the first system and after the first system in each flow independently.

Showing systemic barlines on single-staff systems is a convention used in hand-copied lead sheets, usually in combination with hiding clefs and key signatures from the second system onwards.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-N** to open **Notation Options**.

2. In the **Flows** list, select the flows in which you want to hide/show systemic barlines after the first system.

By default, only the current flow is selected when you open the dialog. You can select other flows by clicking **Select All** in the action bar, clicking and dragging across multiple flows, **Shift** -clicking adjacent flows, and **Ctrl/Cmd** -clicking individual flows.

- 3. In the category list, click **Barlines**.
- **4.** In the **Systemic Barline** subsection, choose one of the following options for **Barline at start of first system**:
 - Show for one or more staves
 - Show for two or more staves
- 5. Choose one of the following options for Barline at start of systems following first system:
 - Show for one or more staves
 - Show for two or more staves
- 6. Click Apply, then Close.

RELATED LINKS

Notation Options dialog on page 730

Hiding/Showing used chord diagrams grids on page 880

Hiding/Showing clefs at the start of systems on page 893

Hiding/Showing key signatures at the start of systems on page 1003

Moving barlines graphically

You can adjust the spacing between barlines and neighboring notes, time signatures, key signatures, or rests.

PREREQUISITE

Note Spacing ⋈ is selected in the Engrave toolbox.

PROCEDURE

1. In Engrave mode, select a square note spacing handle at the rhythmic position of each barline you want to move.



- 2. Move the handles in any of the following ways:
 - To increase the space to the left of selected handles, press Alt/Opt-Right Arrow.
 - To decrease the space to the left selected handles, press Alt/Opt-Left Arrow.

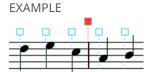
NOTE

- To move handles by large increments, press Ctrl/Cmd plus the standard key command; for example, Ctrl/Cmd-Alt/Opt-Left Arrow.
- To move handles by moderate increments, press **Shift** plus the standard key command; for example, **Shift-Alt/Opt-Left Arrow**.
- To move handles by small increments, press **Ctrl/Cmd Shift** plus the standard key command; for example, **Ctrl/Cmd-Shift-Alt/Opt-Left Arrow**.

 You cannot move note spacing handles with the mouse, you can only move them using the keyboard.

RESULT

The spacing to the right/left of the selected barlines is increased/decreased.



The new position of the barline after decreasing the space to its left

RELATED LINKS

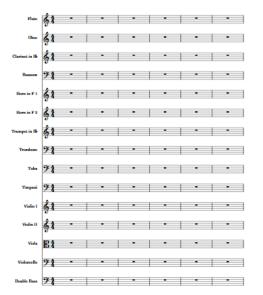
Engrave toolbox on page 490

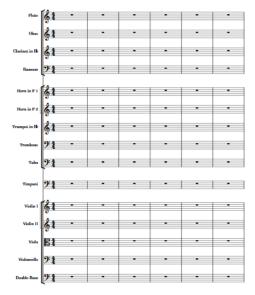
Barlines across staff groups

In order to make it easier to find a particular instrument within a score, barlines can extend across instrumental and staff groups.

Barlines across default staff groups

When a barline only appears on individual staves, it is much harder to locate individual lines at a glance. However, when barlines continue across instrumental groups in the score, instrument families are shown as blocks, which makes finding an instrument much easier.





Barlines on individual staves

Barlines across instrumental groups

By default, barlines automatically extend across staff groups that are joined by a bracket or brace, except for vocal staves, across which barlines never automatically extend. Which staves are included in a bracket depends on the instrumentation and context, but usually staves for instruments from the same family, such as woodwind or strings, are bracketed together.

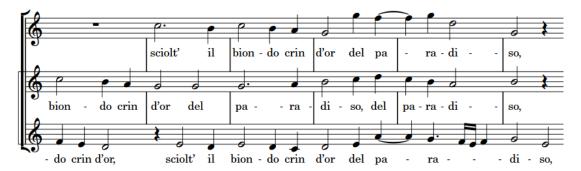
Dorico Elements automatically brackets staves according to the ensemble type set for each layout.

Barlines across grand staff instruments

Dorico Elements automatically joins barlines across grand staff instrument staves as they are braced. Because staves cannot be bracketed and braced simultaneously, grand staff instruments are excluded from brackets and therefore are not joined with barlines to any other staves.

Barline joins between staves

You can change whether single barlines only appear between staves or extend across the staves as well in each flow independently on the **Barlines** page in **Notation Options**. Barline joins only between staves are known as "Mensurstriche". They are commonly used when typesetting early music to aid readability for modern performers while minimizing the visual impact on the originally unmetered notation.



Barlines drawn between staves

Custom barline groups

You can create custom barline joins and bracket groups by manually arranging your players into groups. Player groups are bracketed together according to the ensemble type set for each layout.

RELATED LINKS

Brackets according to ensemble type on page 847 Designating players as soloists on page 125 Player groups on page 163 Player group labels on page 1295 Notation Options dialog on page 730

Changing the default barline joins

You can change whether barline joins automatically extend across staff groups that are joined by a bracket or brace, or break between each instrument, in each layout independently.

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- 2. In the **Layouts** list, select the layouts in which you want to change the default barline joins. By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.

- 3. In the category list, click **Brackets and Braces**.
- **4.** In the **Bracketing** section, choose one of the following options for **Barline joins**:
 - Follow primary brackets
 - Separate at each instrument
- 5. Click Apply, then Close.

Showing barlines across all staves at time signature changes

You can join all staves with a barline at time signature changes in individual layouts, regardless of your bracketing style.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing 1** is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the time signature changes where you want to join all staves with a barline. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate Barline joins all staves in the Time Signatures group.

RESULT

All staves in the layout currently open in the music area are joined by a barline at the selected time signature changes.

RELATED LINKS

Properties panel on page 646 Engrave toolbox on page 490

Bar numbers

Bar numbers provide crucial reference points in music and make the chronological sequence of music clear. By providing a unique number for each bar, they enable accurate references to specific parts of pieces and allow players to co-ordinate themselves easily in rehearsals and concerts.

In Dorico Elements, bar numbers appear automatically, following the most common practice of showing a bar number at the start of each system in all layouts by default. You can hide and show bar numbers in each layout independently, including showing them at a specified regular interval or in every bar, which is frequently used in film music scores.

TIP

The majority of options relating to bar numbers are on the **Bar Numbers** page in **Layout Options**. This is because it is very common to display bar numbers differently in different layouts, such as in every bar in full score layouts but only at the start of each system in part layouts.



Bar numbers shown every bar in a part layout

RELATED LINKS

Bar number paragraph styles on page 811
Positions of bar numbers on page 813
Bar number changes on page 817
Bars on page 793
Pick-up bars on page 1364
Barlines on page 798
Track overview on page 506
Layout Options dialog on page 728

Hiding/Showing bar numbers

You can hide/show bar numbers in each layout independently, including showing them at different frequencies. For example, you can show bar numbers every bar in full score layouts but only at the start of each system in part layouts.

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- 2. In the Layouts list, select the layouts in which you want to hide/show bar numbers. By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, Shift -clicking adjacent layouts, and Ctrl/Cmd -clicking individual layouts.
- 3. In the category list, click Bar Numbers.

- **4.** In the **Frequency** subsection, choose one of the following options for **Show bar numbers**:
 - Every system
 - Every n bars
 - Every bar
 - None
- **5.** Optional: If you chose **Every n bars**, set a custom frequency for bar numbers by changing the value for **Interval**.
- **6.** In the **Showing and Hiding** subsection, activate/deactivate each option as required. For example, you can hide the first bar number when bar numbers are shown every bar, and show standard bar numbers in addition to bar number ranges on multi-bar rests.
- 7. Click Apply, then Close.

Bar numbers are hidden in the selected layouts when you choose **None**, and shown at the corresponding frequency when you choose any other option.

Changing the **Interval** value changes how frequently bar numbers are shown. For example, setting an interval value of **10** means that bar numbers are shown every tenth bar.

TIP

You can also hide individual bar numbers in layouts where bar numbers are shown by selecting them and activating **Hide bar number** in the **Time Signatures** group of the Properties panel.

RELATED LINKS

Positions of bar numbers on page 813 Bar number paragraph styles on page 811 Numbered bar regions on page 1231

Hiding/Showing bar number enclosures

You can optionally show bar numbers in either a rectangular or circular enclosure in each layout independently; for example, if you want bar numbers to appear with rectangle enclosures in the full score layout, so the conductor can easily see them, but with no enclosures in part layouts, where pages tend to be less busy.

Bar numbers in enclosures automatically erase their backgrounds.

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- 2. In the **Layouts** list, select the layouts in which you want to change the bar number enclosure type.
 - By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, **Shift** -clicking adjacent layouts, and **Ctrl/Cmd** -clicking individual layouts.
- 3. In the category list, click Bar Numbers.
- 4. In the **Appearance** subsection, choose one of the following options for **Enclosure type**:
 - None

- Rectangle
- Circle
- 5. Click Apply, then Close.

The enclosure type of all bar numbers in the selected layouts is changed.

EXAMPLE

10

10

(10)

Bar number with no enclosure

Bar number with a rectangle enclosure

Bar number with a circle enclosure

RELATED LINKS

Layout Options dialog on page 728

Hiding/Showing bar number ranges on multi-bar rests

You can hide/show bar number ranges on multi-bar rests; for example, so it is clear in part layouts which bars the player does not play. Multi-bar rests can include bar repeat regions, if you have chosen to consolidate bar repeat regions as well as empty bars into multi-bar rests.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- 2. In the **Layouts** list, select the layouts in which you want to hide/show bar number ranges on multi-bar rests.
 - By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, **Shift** -clicking adjacent layouts, and **Ctrl/Cmd** -clicking individual layouts.
- 3. In the category list, click Bar Numbers.
- **4.** In the **Showing and Hiding** subsection, activate/deactivate **Show ranges of bar numbers** under multi-bar rests and consolidated bar repeats.
- 5. Click Apply, then Close.

RESULT

Bar number ranges are shown beneath multi-bar rests and consolidated bar repeats in the selected layouts when the option is activated, and hidden when it is deactivated.

RELATED LINKS

Hiding/Showing multi-bar rests on page 1258 Numbered bar regions on page 1231

Hiding/Showing guide bar numbers

You can hide/show guide bar numbers on every bar and above every system in page view and galley view independently; for example, to make it easier to check the bar number in scores with many staves. Guide bar numbers are not printed.

PROCEDURE

- Hide/Show guide bar numbers in any of the following ways:
 - To hide/show guide bar numbers in page view, choose View > Bar Numbers > Page View.
 - To hide/show guide bar numbers in galley view, choose View > Bar Numbers > Galley View.

RESULT

Guide bar numbers are hidden/shown for every bar and above every staff in the corresponding view type.



Guide bar numbers shown in page view

RELATED LINKS

Switching to galley/page view on page 49
Hiding/Showing guide page numbers on page 1132

Bar number paragraph styles

In Dorico Elements, bar numbers use paragraph styles so that you can use different paragraph styles in different layouts. In particular, part layouts often require differently formatted bar numbers compared to full score layouts.

By default, there are the following paragraph styles for bar numbers:

- Bar numbers (parts): Used in part layouts
- Bar numbers (score): Used in full score and custom score layouts

Initially, both paragraph styles have the same settings, but you can change the settings of each paragraph style independently. For example, you might want to use a bold italic font for bar numbers in part layouts but use a plain font with a much larger font size in full score layouts.

You can then change which paragraph style is used in each layout independently.

RELATED LINKS

Paragraph Styles dialog on page 739

Editing the bar number paragraph styles

You can edit the formatting of the paragraph styles used for bar numbers; for example, if you want to increase their font size. By default, there is a paragraph style for bar numbers in full score layouts and another paragraph style for bar numbers in part layouts.

PREREQUISITE

If you want to use additional bar number paragraph styles to the ones provided by default, you have created new paragraph styles.

PROCEDURE

- 1. Choose Library > Paragraph Styles to open the Paragraph Styles dialog.
- 2. In the paragraph styles list, select one of the following bar number paragraph styles:
 - Bar numbers (parts)
 - Bar numbers (score)
- **3.** Optional: Select one of the available styles from the **Parent** menu. If you select a parent style, an activated switch is shown beside all the options that are different in the selected paragraph style, compared to its parent style.
- **4.** Activate and change the options you want for the selected paragraph style.
- **5.** Click **OK** to save your changes and close the dialog.

RESULT

The selected bar number paragraph style is changed. This affects the appearance of bar numbers in all layouts that use the selected style.

TIP

You can also make additional bar number paragraph styles, as each layout can use a different paragraph style for bar numbers.

Changing the bar number paragraph style used in layouts

You can choose which paragraph style is used for bar numbers in each layout independently. By default, full score layouts and part layouts use different paragraph styles for bar numbers.

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- **2.** In the **Layouts** list, select the layouts in which you want to change the paragraph style used for bar numbers.
 - By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
- 3. In the category list, click Bar Numbers.
- **4.** In the **Appearance** subsection, select a paragraph style from the **Paragraph style** menu.
- 5. Click Apply, then Close.

The selected paragraph style is used for all bar numbers in the selected layouts.

Positions of bar numbers

Bar numbers are typically shown at the start of each system, above the staff, and aligned with the initial barline.

You can change the default positions and frequency of bar numbers in each layout independently on the **Bar Numbers** page in **Layout Options**, and you can move individual bar numbers in Engrave mode. For example, you might want to show bar numbers every bar in full score layouts but only at the start of each system in part layouts.

RELATED LINKS

Hiding/Showing bar numbers on page 808

Showing bar numbers above specific staves

You can change the staves above which bar numbers appear, which allows you to show bar numbers at multiple vertical positions in each system. For example, in large orchestral scores, you might show bar numbers both at the top of the system and above the string section.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- **2.** In the **Layouts** list, select the layouts in which you want to change the vertical positions of bar numbers.
 - By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, **Shift** -clicking adjacent layouts, and **Ctrl/Cmd** -clicking individual layouts.
- 3. In the category list, click Bar Numbers.
- **4.** In the **Placement** subsection, activate the checkbox for each player in the **Show above specific players** list above whose top staff you want to show bar numbers.
- 5. Click Apply, then Close.

RESULT

The vertical positions of bar numbers are changed in the selected layouts. For players holding multiple instruments, bar numbers appear above their top instrument staff.

NOTE

You can change the distances between bar numbers and the staff/other objects and your vertical spacing settings for the gaps between staves in order to accommodate bar numbers shown between staves.

RELATED LINKS

Per-layout vertical spacing options on page 605 Moving instruments on page 133

Changing the horizontal position of bar numbers

You can change the horizontal position of bar numbers in each layout independently. For example, you can have bar numbers centered in the middle of bars in full score layouts but centered on barlines in part layouts.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- **2.** In the **Layouts** list, select the layouts in which you want to change the horizontal position of bar numbers.

By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, **Shift** -clicking adjacent layouts, and **Ctrl/Cmd** -clicking individual layouts.

- **3.** In the category list, click **Bar Numbers**.
- **4.** In the **Horizontal Position** subsection, choose one of the following options for **Horizontal position**:
 - To show barlines left-aligned on barlines at the start of bars, choose Left-aligned on barline.
 - To show bar numbers centered on barlines at the start of bars, choose **Centered on barline**.
 - To show bar numbers in the middle of bars, choose **Centered on bar**.
- 5. Click Apply, then Close.

RESULT

The horizontal position of bar numbers is changed in the selected layouts.

RELATED LINKS

Moving items graphically on page 501

Changing the distance between bar numbers and the staff/other objects

You can change the minimum distance between bar numbers and the staff, and set a separate value for the distance between bar numbers and other objects, in each layout independently. For example, you can position bar numbers further from the staff/other objects in full score layouts than in part layouts.

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- **2.** In the **Layouts** list, select the layouts in which you want to change the minimum distance of bar numbers from the staff.
 - By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, **Shift** -clicking adjacent layouts, and **Ctrl/Cmd** -clicking individual layouts.
- **3.** In the category list, click **Bar Numbers**.
- **4.** In the **Placement** subsection, change the values for the following options, individually or together:

- Minimum distance from staff
- Minimum distance from other objects
- 5. Activate/Deactivate Align bar numbers across width of system.
- 6. Activate/Deactivate Avoid collisions.
- 7. Click Apply, then Close.

Increasing the values positions bar numbers further away from the staff and/or other objects, either above or below the staff depending on your setting for **Placement relative to staff**. Decreasing the values positions bar numbers closer to the staff and/or other objects.

When **Align bar numbers across width of system** is activated, bar numbers automatically vertically align within systems, with their position determined by the bar number furthest from the staff.

When **Avoid collisions** is deactivated, bar numbers do not automatically avoid collisions with other items, and are instead positioned using the minimum distance values you set. This allows bar numbers to appear directly above/below the staff, regardless of the pitch of notes or presence of other notations, such as ties and slurs.

NOTE

- Bar numbers can be positioned further from the staff than your minimum distance values when **Avoid collisions** is activated.
- If you want bar numbers within systems to appear closer to the staff than bar numbers at the start of systems, such as in part layouts with treble clefs, we recommend deactivating **Align bar numbers across width of system**.

RELATED LINKS

Hiding/Showing bar numbers on page 808

Changing the system-relative placement of bar numbers

You can show bar numbers either above or below each system in each layout independently. For example, bar numbers can appear below the system in full score layouts but above the system in individual part layouts.

NOTE

This does not affect the placement of bar numbers shown above specific staves.

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- 2. In the **Layouts** list, select the layouts in which you want to change the bar number placement.
 - By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
- 3. In the category list, click Bar Numbers.

- **4.** In the **Placement** subsection, choose one of the following options for **Placement relative to system**:
 - Show above top staff of system
 - Show below bottom staff of system
- 5. Click Apply, then Close.

The placement of bar numbers relative to the system is changed in the selected layouts.

Hiding bar numbers at time signatures shown at system object positions

You can choose to hide bar numbers at the same rhythmic position as time signatures shown at system object positions, as the resulting collision can be difficult to resolve in a visually clear way when bar numbers are centered on barlines.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- **2.** In the **Layouts** list, select the layouts in which you want to hide bar numbers at time signatures shown at system object positions.
 - By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, **Shift** -clicking adjacent layouts, and **Ctrl/Cmd** -clicking individual layouts.
- **3.** In the category list, click **Bar Numbers**.
- **4.** In the **Showing and Hiding** subsection, activate/deactivate **Show bar numbers at time signatures at system object positions**.
- 5. Click Apply, then Close.

RESULT

Bar numbers are shown at time signatures shown at system object positions when the option is activated, and hidden when it is deactivated.

EXAMPLE



Bar numbers shown at time signatures at system object positions



Bar numbers hidden at time signatures at system object positions

RELATED LINKS

Large time signatures on page 1365

Bar number changes

Bar numbers follow a continuous sequence, with each bar having a unique bar number that continues from the previous bar number. However, you can make manual changes to the bar number sequence, including changing to a subordinate sequence.

In Dorico Elements, you can make the following types of changes to bar number sequences using the **Insert Bar Number Change** dialog:

Primary

Adds a change to the main bar number sequence, which the bars in your project follow in a continuous sequence in each flow separately by default.

Subordinate

Adds a secondary bar number sequence that uses letters rather than numbers to indicate the sequence. This can be useful in situations where a new version of a piece has been created with more bars inserted, but the original bar numbers are required.

Don't Include

Excludes the selected bar from the current bar number sequence. If bar numbers are shown every bar, no bar number is shown in bars in which you have chosen **Don't Include**.

Continue Primary

Returns the bar number sequence to the **Primary** sequence without counting intervening bars; for example, after a section of bars following the **Subordinate** bar number sequence.

RELATED LINKS

Adding subordinate bar numbers on page 819

Adding bar number changes

You can manually add bar number changes to bar number sequences; for example, if you want bar numbers in the second flow in your project to appear to continue the sequence from the first flow, rather than start again from bar one.

- 1. In Write mode or Engrave mode, select one of the following:
 - An item in the bar from the beginning of which you want to change the bar number sequence.
 - An existing bar number or barline from which you want to change the bar number sequence.
- 2. Choose Edit > Notations > Bar Numbers > Add Bar Number Change to open the Insert Bar Number Change dialog. You can also choose this option from the context menu.
- **3.** Choose one of the following options for **Type**:
 - Primary
 - Subordinate
 - Don't Include
 - Continue Primary

- **4.** Optional: If you chose **Primary** or **Subordinate**, change the bar number where you want the bar number sequence change to start by changing the value in the corresponding value field
- **5.** Click **OK** to save your changes and close the dialog.

The bar number sequence changes, starting from the beginning of the bar in which you selected an item, or from the position of a selected bar number or barline.

This affects the corresponding bar number sequence from the changed bar number until the next bar number change, or until the end of the flow.

Deleting bar number changes

You can delete any bar number changes you have added.

PROCEDURE

- 1. In Write mode, select the bar number changes you want to delete.
- 2. Press Backspace or Delete.

RESULT

The bar number changes are deleted. Subsequent bars follow the previous bar number sequence until the next bar number change, or until the end of the flow.

Subordinate bar numbers

Subordinate bar numbers are useful for numbering repeat endings, and for situations when the music is being altered, but the original bar numbers cannot be changed.

For example, you can use subordinate bar numbers to show where music has been added if a previous, shorter version has already been rehearsed. In this situation, players have likely started to associate certain parts of the piece with particular bar numbers, so if four bars need to be added after bar 10, they would be numbered 10a to 10d. The bar number of the following bar then continues from 11 exactly as it did before the new bars were added.

They might also be useful if you want different bar numbers for a repeat ending.

Subordinate bar numbers are shown with lowercase letters.

You can show both primary bar numbers and subordinate letters or only subordinate alphabetical letters in subordinate bar number sequences.



Lowercase subordinate bar number

Adding subordinate bar numbers

You can create a subordinate bar number sequence that is independent of your primary bar number sequence. This can be useful if you want to insert new bars without changing the bar numbers of existing subsequent bars.

PROCEDURE

- 1. In Write mode or Engrave mode, select one of the following:
 - An item in the bar from the beginning of which you want subordinate bar numbers to start.
 - An existing bar number or barline from which you want subordinate bar numbers to start.
- 2. Choose Edit > Notations > Bar Numbers > Add Bar Number Change to open the Insert Bar Number Change dialog. You can also choose this option from the context menu.
- 3. Choose **Subordinate** for **Type** to activate the **Subordinate** value field.
- **4.** Optional: If you want to change the primary bar number that accompanies subordinate bar numbers, activate **Primary** and change the value in the value field.
 - For example, if you want the bar number sequence 6, 7a, 7b rather than 6, 7, 7a.
- 5. Change the first letter in the subordinate bar number sequence by changing the value in the **Subordinate** value field.
 - The corresponding alphabetical letter is shown to the right of the value field. For example, entering **1** into the value field is shown as **a**, **2** appears as **b**, and so on.
- **6.** Activate/Deactivate **Hide primary bar numbers**.
- 7. Click **OK** to save your changes and close the dialog.

RESULT

The subordinate bar number sequence starts from the bar in which you selected an item, or from the position of a selected bar number or barline.

- If you activated **Primary** and changed the value, the primary bar number shown alongside subordinate bar numbers is changed.
- If you deactivated **Hide primary bar numbers**, bar numbers in the subordinate sequence show both a number and an alphabetical letter. If you activated **Hide primary bar numbers**, they appear only with alphabetical letters.

For example, if you start a subordinate bar number sequence from what was originally bar 5 without changing the **Primary** value, the sequence starts from 4a and continues until the next specified bar number change, or until the end of the flow.

Returning to the primary bar number sequence

You can specify the point where you want to return to the primary bar number sequence after a section of subordinate bar numbers.

- 1. In Write mode or Engrave mode, select one of the following:
 - An item in the bar from the beginning of which you want to return to the primary bar number sequence.
 - An existing bar number or barline from which you want to return to the primary bar number sequence.

- 2. Choose **Edit** > **Notations** > **Bar Numbers** > **Add Bar Number Change** to open the **Insert Bar Number Change** dialog. You can also choose this option from the context menu.
- Choose Continue Primary for Type.
 Text indicating the new bar number appears below the value fields for Primary and Subordinate. For example, Primary sequence will continue from bar 5.
- **4.** Click **OK** to save your changes and close the dialog.

The primary bar number sequence resumes from the bar in which you selected an item, or from the position of a selected bar number or barline.

TIP

You do not have to add subordinate bar number changes in chronological order. You can enter a return to the primary bar number sequence first, before adding the subordinate bar number sequence.

Bar numbers and repeats

By default in Dorico Elements, repeats are not included in the bar number count. For example, if the first ending ends in bar 10, the second ending starts in bar 11, even though the first section is repeated and therefore more than ten bars have been played.

Including repeats in the bar number count, so that bar numbers reflect the total number of bars played rather than the number of bars written on the page, can make music with multiple playthroughs clearer, as you can refer to a specific bar number for each playthrough instead of, for example, "bar eight the third time round".

2 (12)



Bar number for subsequent repeat shown in parentheses beside the initial bar number

In Dorico Elements, you cannot automatically include repeats in the bar number count. However, you can add bar number changes manually if you want bar numbers to reflect the total number of bars played.

RELATED LINKS

Including/Excluding repeats in playback on page 535 Adding bar number changes on page 817

Beaming

A beam is a line that connects notes with tails to show rhythmic grouping, which varies according to the metrical structure of the prevailing time signature.

This way of grouping notes helps performers calculate quickly exactly how to play their given rhythm and helps them follow both their part and, if applicable, the conductor.

If appropriate for the current meter and position in the bar, beams are automatically formed in Dorico Elements when you input two or more adjacent notes or chords that are an eighth note (quaver) or shorter in duration.



Multiple beam groups in a 6/8 time signature

Dorico Elements has sophisticated underlying rules for producing beam groupings that follow the accepted conventions of music theory, including crossing the half-bar in time signatures like 4/4, beaming all eighth notes together in 3/4, beam groups that include tuplets, and many other situations.

You can control how notes are beamed in multiple ways in Dorico Elements.

- You can set beam grouping defaults in each flow in your project independently on the **Beam Grouping** page in **Notation Options**.
- You can set beam groups by controlling subdivisions of time signatures.
- You can beam notes together and split beams manually.

RELATED LINKS

Inputting notes on page 219
Secondary beams on page 836
Tuplets within beams on page 838
Rests within beams on page 839

Per-flow notation options for beam grouping

You can find options to control the default beam grouping rules in each flow independently on the **Beam Grouping** page in **Notation Options**.

The available options include beams crossing the half-bar in time signatures like 4/4, beaming all eighth notes together in 3/4, how to handle secondary beam groups, stemlets, and beams over rests.

Musical examples demonstrate how each option affects the appearance of your music.

RELATED LINKS
Notation Options dialog on page 730
Beam slants on page 828

Beam grouping according to meters

According to accepted conventions, notes are beamed differently in different time signatures to make the meter clear and easily readable. In Dorico Elements, default beam groupings are determined by time signatures.

Dorico Elements has default beaming settings for common time signatures, based on general conventions and your chosen settings. For example, although the time signatures of 3/4 and 6/8 contain the same number of beats, they imply different meters and so are beamed differently. In 3/4, phrases of eighth notes are beamed together within each bar and phrases of other durations are beamed in quarter notes (crotchets) by default, but in 6/8, phrases are beamed in dotted quarter notes.





Default eighth note beam grouping in 3/4

Default eighth note beam grouping in 6/8

Dorico Elements groups and beams notes in irregular time signatures, such as 5/8 or 7/8, according to the most common practices for those time signatures.





Default beam grouping in 5/8

Default beam grouping in 7/8

For situations where you want to control the beat grouping in more detail, you can input a custom time signature with an explicit rhythmic subdivision. Dorico Elements then automatically beams phrases according to this subdivision. For example, entering [7]/8 into the time signatures popover means all seven eighth notes (quavers) are beamed together, whereas entering [2+2+3]/8 subdivides the seven eighth notes into two, then two, then three.

NOTE

The duration of beam groups in Dorico Elements depends on the beat grouping in the prevailing time signature and your per-flow beam grouping settings in **Notation Options**.

RELATED LINKS

Note and rest grouping on page 841 Creating custom beat groupings for meters on page 842

Beaming notes together manually

You can beam notes in the same voice together manually, including notes across barlines as well as system/frame breaks. For example, if you want to beam a phrase differently to how it is usually beamed in the prevailing time signature.

Beams by default stay within bars and systems, so to have beams cross barlines, system breaks, and frame breaks, you must force the phrase to beam together.

TIP

If you want a single beam to span multiple staves, you can create cross-staff beams.

- Inputting time signatures with custom beat groupings is often the quickest and most consistent way to control beam grouping.
- You can find options to control the default beam grouping rules in each flow independently on the **Beam Grouping** page in **Notation Options**.

PREREQUISITE

If you are in Engrave mode, **Graphic Editing** Is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the notes you want to beam together. You can do this in Write mode and Engrave mode.
- Choose Edit > Notations > Beaming > Beam Together. You can also choose this option from the context menu.

RESULT

Selected notes in the same voice are beamed together, even if they cross barlines or system/ frame breaks.

If there are notes either side of the new beam group that were previously beamed to part or all of your selection, they either beam together as separate beams, or appear unbeamed. This depends on how many notes are left either side in the bar, and on the beam grouping settings for the flow.

NOTE

- Even if part of the beamed group previously had a centered beam, the new beam is not centered.
- You can assign a key command for **Beam Together** on the **Key Commands** page in **Preferences**.

EXAMPLE





Phrase with default beaming

Notes in each bar beamed together

RELATED LINKS

Engrave toolbox on page 490

Creating custom beat groupings for meters on page 842

Allowing/Disallowing tuplets to span barlines on page 1389

Changing the voice of existing notes on page 453

Creating cross-staff beams/tremolos on page 832

Key Commands page in the Preferences dialog on page 58

Unbeaming notes

You can separate all notes in a beamed group so that each note shows its own tail; for example, if you are engraving vocal music that requires syllabic beaming.

PREREQUISITE

If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the notes you want to make unbeamed. You can do this in Write mode and Engrave mode.
- 2. Choose **Edit** > **Notations** > **Beaming** > **Make Unbeamed**. You can also choose this option from the context menu.

RESULT

The selected notes are unbeamed and show their own tails.

TIP

You can assign a key command for **Make Unbeamed** on the **Key Commands** page in **Preferences**.

EXAMPLE





Phrase with default beaming

All notes unbeamed

Splitting beam groups

You can split beams into two beam groups at specific rhythmic positions. You can also split secondary beams within beamed groups.

PREREQUISITE

If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the noteheads to the right of where you want to split beams. You can do this in Write mode and Engrave mode.
- **2.** Split the beam or secondary beam in one of the following ways:
 - Choose Edit > Notations > Beaming > Split Beam.
 - Choose Edit > Notations > Beaming > Split Secondary Beam.

TIP

You can also choose these options from the context menu.

Beams/Secondary beams are split to the left of each selected note, but the notes either side of the split remain grouped if there are at least two beamed notes on each side that can be in a beam group.

TIP

- To unbeam the entire selection and give all notes in the group individual tails, you can make all notes unbeamed.
- You can change how beams and secondary beams are split by default in each flow independently on the **Beam Grouping** page in **Notation Options**
- You can assign key commands for Split Beam and Split Secondary Beam on the Key Commands page in Preferences.

EXAMPLE





Phrase with default beaming

Two beams split at the second 16th note

RELATED LINKS

Engrave toolbox on page 490

Beam grouping according to meters on page 822

Notation Options dialog on page 730

Key Commands page in the Preferences dialog on page 58

Resetting beam grouping

You can remove all changes made to the beam grouping of notes and chords. This can also be useful if, for example, MusicXML files you have imported have incorrect beaming, such as beam lines appearing instead of stem flags.

PREREQUISITE

If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the notes/chords whose beaming you want to reset. You can do this in Write mode and Engrave mode.
- 2. Choose **Edit** > **Notations** > **Beaming** > **Reset Beaming**. You can also choose this option from the context menu.

RESULT

Beam grouping is reset to your default settings in **Notation Options** for the current flow and time signature.

RELATED LINKS

Importing MusicXML files on page 81 Notation Options dialog on page 730 Resetting stem directions on page 1059

Changing the thickness of beams

You can change the thickness of individual beams, which can be useful in certain engraving situations. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing 3** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

1. In Engrave mode, select all the noteheads in the beams whose thickness you want to change.

NOTE

For the best results, we recommend selecting all notes in each beam.

- 2. In the Properties panel, activate **Thickness** in the **Beaming** group.
- 3. Change the value in the value field.

RESULT

The thickness of all beam lines in the selected beams is changed. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490 Changing the gaps between beam lines on page 838

Beam placement relative to the staff

The default staff-relative placement of beams is determined by the staff positions of the notes within the beamed group and their resulting stem directions.

This means that the note furthest from the middle line of the staff determines the placement of the beam, although there are exceptions to this rule and other considerations that can influence the staff-relative placement of beams.

Changing the staff-relative placement of beams involves changing the direction of the stems in the beam. Therefore, Dorico Elements categorizes changing the staff-relative placement of beams as a stem change.

Changing the staff-relative placement of beams

You can change the side of the staff on which beams appear by forcing the stem direction to change. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- If you are in Engrave mode, **Graphic Editing 3** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** Select at least one note in each of the beamed phrases whose staff-relative placement you want to change. You can do this in Write mode and Engrave mode.
- 2. Force the stem direction of notes in the selected beams in any of the following ways:
 - Choose Edit > Notations > Stem > Force Stem Up.
 - Choose Edit > Notations > Stem > Force Stem Down.

TIP

- You can also choose these options from the context menu.
- You can also change the staff-relative placement of selected beams by pressing F.

RESULT

The beam appears on the side of the staff that corresponds to its forced stem direction. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490

Removing beam placement changes

You can undo changes to the staff-relative placement of beams in order to remove the stem direction change. This reverts selected beams to their default placement.

PREREQUISITE

If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.

PROCEDURE

- 1. Select at least one note in each of the beamed phrases whose staff-relative placement change you want to remove. You can do this in Write mode and Engrave mode.
- Choose Edit > Notations > Stem > Remove Forced Stem. You can also choose this option from the context menu.

RESULT

The selected beams revert to their default staff-relative placement.

Beam slants

The slant of a beam controls how steeply the beam deviates from horizontal, according to the pitches of the notes within the beamed group.

- When the last note of the phrase is higher than the first, the beam slants upwards.
- When the last note of the phrase is lower than the first, the beam slants downwards.
- If the group makes a concave shape, where inner notes are closer to the beam than the
 outer ones at either end of the beam, then the beaming is horizontal by default.
 Beams are also horizontal if all the pitches are the same, or for certain patterns of repeated
 pitches.

When a beam is drawn inside the staff, each end of the beam, meaning the end of the stem of the note at either end of the beam, must be snapped to a staff line position. A beam line may sit on a staff line, be centered on a staff line, or hang from a staff line. Ted Ross describes these three positions as "sit", "straddle", and "hang" respectively in "Teach Yourself the Art and Practice of Music Engraving".



A phrase containing multiple different beam slants and directions

The amount by which a beam slants is typically determined by the interval between the first and last note in the beamed group, provided the pattern of notes in the beam does not dictate a horizontal beam instead. Smaller intervals require a shallower slant and larger intervals require a steeper one.

However, the desired amount of slant is not the only factor that must be considered. The innermost beam line should not come too close to the innermost notehead, and the beam itself, if possible, should be positioned relative to the staff lines such that it does not form a wedge. A wedge is a tiny triangle formed by the horizontal staff line, the vertical stem, and the angled line of the slanted beam, which can be visually confusing.

Determination of the amount of slant for a beam is therefore a balancing act that must weigh up several factors: the desired amount of slant, valid snapping positions for each end of the beam, ensuring a minimum distance between the note closest to the beam and the innermost beam line, and avoiding wedges where possible.

In Dorico Elements, you can change the beam slants of individual beams.

RELATED LINKS

Rests within beams on page 839

Changing beam slants

You can change the slants, or angles, of individual beams. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.

- **Graphic Editing I** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- 1. In Engrave mode, select the square handles on the beam corners of the beams whose slants you want to change.
- 2. Move the handles in any of the following ways:
 - To move beam handles upwards/downwards a standard amount, press Alt/Opt plus
 the corresponding arrow key. For example, press Alt/Opt-Up Arrow to move them
 upwards by 1/4 space per press.
 - To move beam handles a large amount, press Ctrl/Cmd plus the standard key command; for example, Ctrl/Cmd-Alt/Opt-Up Arrow. This moves beam handles by 1 space per press.
 - To move beam handles a moderate amount, press Shift plus the standard key command; for example, Shift-Alt/Opt-Up Arrow. This moves beam handles by 1/2 space per press.
 - To move beam handles a small amount, press Ctrl/Cmd Shift plus the standard key command; for example, Ctrl/Cmd-Shift-Alt/Opt-Up Arrow. This moves beam handles by 1/32 space per press.
 - Click and drag them upwards/downwards.
- **3.** Optional: Repeat steps 1 and 2 to move the other end of the selected beams.

RESULT

The slants of the selected beams are changed. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

TIP

You can also use **Beam direction** in the **Beaming** group of the Properties panel to change the slant of beams. The property is available when you select noteheads within the beam group, and its options all ensure that beam ends are positioned correctly relative to staff lines.

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490

Centered beams

Centered beams are beams that are vertically positioned between notes within the same beamed group, with stems for notes above the beam pointing downwards and stems for notes below the beam pointing upwards.

Centered beams are also known as "kneed" or "elbowed" beams due to their often angular shape.



When a beamed phrase spans a large pitch range, normal beams are often positioned very close to some notes in the phrase but very far from other notes in the phrase, making some stems very long. Having a centered beam in a phrase that spans a large pitch range can reduce the maximum distance between noteheads and the beam, but can also place the beam within the staff, which can obscure staff lines.

By default, Dorico Elements allows beams that include notes on both sides of the middle staff line to appear centered. You can also create custom centered beams for beams that include notes only on one side of the middle staff line.





A phrase with high and low notes with default beaming

The same phrase with high and low notes, but with a centered beam

TIP

To center beams between multiple staves, you can create cross-staff beams.

RELATED LINKS

Changing the staff-relative placement of beams on page 827 Creating cross-staff beams/tremolos on page 832

Creating centered beams

You can center beams between the notes in the beamed group. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

NOTE

These steps only apply to beams on a single staff. To center beams between multiple staves, you can create cross-staff beams.

PREREOUISITE

- If you are in Engrave mode, Graphic Editing 3 is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** Select at least one note in each of the beams you want to center. You can do this in Write mode and Engrave mode.
- **2.** Create a centered beam in one of the following ways:
 - If the selected beams include notes on both sides of the middle staff line, choose Edit >
 Notations > Stem > Force Centered Beam.
 - If the selected beams include notes only on one side of the middle staff line, choose
 Edit > Notations > Stem > Custom Centered Beam to open the Custom Centered
 Beam dialog.

TIP

You can also choose these options from the context menu.

3. Optional: If you created a custom centered beam, change the stem direction of each note in the selected beams as required in the **Custom Centered Beam** dialog, then click **OK**.

RESULT

Beams are centered between the notes in the selected beam groups. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

If you select notes in multiple beams, each beam is centered separately. If you want to create a single centered beam, you can beam the notes in those beam groups together. You can do this both before and after centering the beams.

NOTE

- Dorico Elements automatically angles the beam based on the shape of the phrase, but you can change the angles or slants of beams manually.
- You can assign a key command for Force Centered Beam on the Key Commands page in Preferences.

RELATED LINKS

Beaming notes together manually on page 822 Changing beam slants on page 828 Resetting stem directions on page 1059 Engrave toolbox on page 490

Removing centered beams

You can remove centered beams and revert beams to their default placements either above or below the phrase.

PREREOUISITE

If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.

PROCEDURE

- 1. Select at least one note in each centered beam that you want to revert to the default placement. You can do this in Write mode and Engrave mode.
- 2. Choose **Edit** > **Notations** > **Stem** > **Remove Centered Beam**. You can also choose this option from the context menu.

RESULT

The centered beams are removed.

TIP

You can assign a key command for **Remove Centered Beam** on the **Key Commands** page in **Preferences**.

Creating cross-staff beams/tremolos

Cross-staff beams and cross-staff tremolos work in a similar way to normal beams and tremolos, but allow a phrase that covers a wide pitch range to be shown on multiple staves. You can create cross-staff beams/tremolos by inputting all notes in the phrase on one staff and crossing some notes to appear on another staff.

PREREQUISITE

- You have input a phrase on one staff.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.

PROCEDURE

1. Select the notes you want to cross to another staff. You can do this in Write mode and Engrave mode.

NOTE

You can only cross notes to other staves held by the same player.

- **2.** Cross the notes to other staves in any of the following ways:
 - To cross notes to the staff above, press N.
 - To cross notes to the staff below, press M.
 - Choose Edit > Notations > Cross Staff > Cross to Staff Above.
 - Choose Edit > Notations > Cross Staff > Cross to Staff Below.

TIP

You can also choose these options from the context menu.

RESULT

The selected notes are shown on a different staff, with a cross-staff beam shown if the notes are part of a beam group. This does not change the staff to which the notes belong.

NOTE

- When crossing notes to a staff that already contains notes, the stem direction of the existing notes on the staff can change. This is due to how multiple voices at the same rhythmic position are handled. Therefore, you may have to change the stem direction of notes manually.
- If you want notes to belong to a different staff, you can move them to another staff.

EXAMPLE







Cross-staff beams created by crossing some notes to the other staff

AFTER COMPLETING THIS TASK

If your cross-staff beams/tremolos have incorrect stem directions, you can reset or change stem directions.

RELATED LINKS

Notes crossed to staves with existing notes in other voices on page 1422
Moving notes/items to other staves on page 451
Inputting notes on page 219
Hiding/Showing voice colors on page 1417
Stem direction on page 1055

Tremolos on page 1377 Engrave toolbox on page 490

Changing to optical cross-staff beam spacing

You can make the stems in cross-staff beams, rather than the noteheads, evenly spaced in each layout independently. This can make it easier to perceive the evenness of rhythmic spacing in cross-staff beams than when noteheads are evenly spaced.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- **2.** In the **Layouts** list, select the layouts that you want to change to optical cross-staff beam spacing.

By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, **Shift** -clicking adjacent layouts, and **Ctrl/Cmd** -clicking individual layouts.

- 3. In the category list, click Note Spacing.
- **4.** Activate **Use optical spacing for beams between staves**.
- 5. Click Apply, then Close.

RESULT

Optical cross-staff beam spacing is enabled in the selected layouts.

EXAMPLE





Default spacing: The distance between noteheads is even.

Optical spacing for cross-staff beaming: The distance between stems is even.

RELATED LINKS

Note spacing on page 494

Layout Options dialog on page 728

Cross-staff beam placement in multiple staves

When instruments have three or more staves, cross-staff beams can be placed in multiple ways. For example, the beam can be placed between the top and the middle staves, and also between the middle and bottom staves.

If a beam only crosses two staves, the cross-staff beam goes between those two staves.

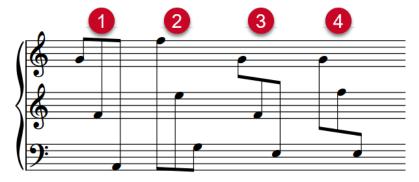




A cross-staff beam across the upper two staves on an instrument with three staves

A cross-staff beam across the lower two staves on an instrument with three staves

If a beam group contains notes on all three staves, the placement of the beam depends on the stem directions of the notes in each staff.



- 1 If all notes in the beam group are stem-up, the beam is placed above the top staff.
- 2 If all notes in the beam group are stem-down, the beam is placed below the bottom staff.
- **3** If notes are stem-down on the top staff and stem-up on the bottom two staves, the beam is placed between the top and middle staves.
- 4 If notes are stem-down on the top two staves and stem-up on the bottom staff, the beam is placed between the bottom and middle staves.

NOTE

If you have not specified stem directions, Dorico Elements might place the beam above/below the staff into which the notes were originally input, even if the stem directions mean it should be placed between other staves.

If you want the beam to be placed between specific staves, you can change the stem directions of notes in the beam group.

RELATED LINKS

Changing the stem direction of notes on page 1057

Resetting notes crossed to other staves

You can reset notes that have been crossed to other staves so that they appear on their default staff. We recommend resetting cross-staff notes before copying and pasting them to other staves to avoid unexpected beaming.

PROCEDURE

- Select the cross-staff notes you want to reset. You can do this in Write mode and Engrave mode.
- 2. Choose **Edit** > **Notations** > **Cross Staff** > **Reset to Original Staff**. You can also choose this option from the context menu.

RESULT

The selected cross-staff notes are reset and appear on their default staff.

TIP

You can assign a key command for this option on the **Key Commands** page in **Preferences**.

Beam corners

Beam corners can occur when a change of stem direction within a beam is combined with a break in the secondary beam group. This can be at the end of a subdivision or at a change in rhythmic speed.

Beam corners do not follow accepted rules regarding the order and rhythmic meaning of secondary beams, and can be confusing for the reader.





Dorico Elements avoids beam corners by analyzing the pitches and stems within a phrase, and implementing stem directions that avoid a beam corner.

Secondary beams

Secondary beams are the lines that are added between the primary beam and the notehead as the rhythmic division gets smaller.

The primary beam is the outermost beam line that joins all of the notes in the beamed group. Depending on the durations of the notes in the beamed group, the primary beam may in fact be two or more lines; that is, for notes of a 16th or shorter in duration.

Secondary beams are additional beam lines that join only some of the notes in the group, creating subdivisions of the beam in order to make the metrical groupings of the beam clearer.



A phrase of 64th notes, with secondary beams subdivided to show 16th and eighth note groups

You can set per-flow options for splitting secondary beams and their appearance on the **Beam Grouping** page in **Notation Options**.

RELATED LINKS

Rests within beams on page 839 Notation Options dialog on page 730

Changing the direction of partial beams

Dorico Elements automatically inputs a partial beam if one is required. You can change on which side of stems individual partial beams appear.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing ?** is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the notes whose partial beam direction you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Partial beam direction** in the **Beaming** group.
- **3.** Choose one of the following options:
 - Left

Right

RESULT

The partial beam appears on the corresponding side of the stem.

EXAMPLE



Partial beam direction Left



Partial beam direction Right

Changing the number of beam lines in secondary beams

You can change the number of beam lines shown in secondary beams individually, independently of your default setting for the current flow.

PREREOUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.

PROCEDURE

- 1. Select the notes to the right of where you want to change the number of secondary beaming lines. You can do this in Write mode and Engrave mode.
- **2.** Optional: If any of the notes you selected do not immediately follow existing splits in the secondary beam, split the secondary beams in any of the following ways:
 - In the Properties panel, activate Split secondary beam in the Beaming group.

NOTE

The **Beaming** group is only shown in the Properties panel if your selection only contains notes.

- Choose **Edit** > **Notations** > **Beaming** > **Split Secondary Beam**. You can also choose this option from the context menu.
- **3.** In the Properties panel, select the note value that corresponds to the number of beam lines you want shown from the **Split secondary beam** menu.

RESULT

The number of beam lines shown immediately to the left of each selected note is changed.

NOTE

- Deactivating the property returns the selected notes to showing their default number of beam lines.
- The number of beam lines shown at a split in the secondary beam cannot be the same or greater than the number of beam lines in the secondary beam. For example, if you split a

secondary beam containing 64th notes, the maximum number of beam lines shown at the split in that beam is three, the equivalent of 32nd notes.

 You can change the default number of secondary beam lines shown in each flow independently on the **Beam Grouping** page in **Notation Options**.

RELATED LINKS

Engrave toolbox on page 490 Notation Options dialog on page 730 Resetting beam grouping on page 825

Changing the gaps between beam lines

You can change the gaps that separate beam lines in individual beams, which can be useful in certain engraving situations. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing 7** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

1. In Engrave mode, select all the noteheads in the beams whose beam line gaps you want to change.

NOTE

For the best results, we recommend selecting all notes in each beam.

- 2. In the Properties panel, activate **Separation** in the **Beaming** group.
- **3.** Change the value in the value field.

RESULT

The gaps that separate beam lines in the selected beams are changed. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Changing the thickness of beams on page 826

Tuplets within beams

Tuplets that contain notes that produce beams, such as eighth notes, are beamed together. However, special beam grouping rules apply to tuplets within beams that also contain non-tuplet notes.

The default setting for a tuplet in a beamed group with secondary beams is to split the secondary beam and to show the tuplet with a bracket. The primary beam is not split. If necessary, you can hide/show tuplet brackets individually.

The default setting for a tuplet in a beamed group with only a primary beam is to separate the tuplet entirely. However, you can change this setting on the **Beam Grouping** page in **Notation Options**.



16th note triplet beamed together with non-tuplet 16th notes



Eighth note (quaver) triplet beamed separately from non-tuplet eighth notes

RELATED LINKS
Tuplets on page 1386
Hiding/Showing tuplet brackets on page 1391

Rests within beams

There are different conventions for how beams interact with rests, including whether beams should extend over rests or split at rests.

You can change how primary and secondary beams interact with rests in each flow independently on the **Beam Grouping** page in **Notation Options**.

RELATED LINKS

Note and rest grouping on page 841 Changing the direction of partial beams on page 836 Beam slants on page 828 Notation Options dialog on page 730

Stemlets

Stemlets are short stems that extend from beams to rests within beam groups. They can help make music easier to read, as they help to maintain a regular pattern of stems within beams.

In the examples, beaming all notes and rests together to show the boundaries of quarter note (crotchet) beats makes the syncopation of the notes easier to read. The stemlets on the rests help make clear where within the quarter note beats each note occurs.







The same phrase with stemlets

In Dorico Elements, you cannot add stemlets or change where they are shown. However, stemlets are shown if you import or open a project that contains them.

Fanned beams

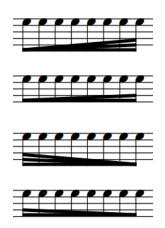
Fanned beams show either an *accelerando* or *rallentando* by having multiple beam lines either converging on, or diverging from, a single beam line at the other end. Fanned beams are also known as "feathered beams".

A single fanned beam can have multiple changes of direction within it.

The grouping can use either two or three beams, with three beams indicating a greater change of speed than two beams. The slowest part of the phrase is where the beams converge, and the fastest is where the beams are the most spread out.

In Dorico Elements, you cannot create fanned beams or change their direction. However, fanned beams are shown if you import or open a project that contains them.

EXAMPLE



Fanned beam accelerando with three lines

Fanned beam accelerando with two lines

Fanned beam rallentando with three lines

Fanned beam rallentando with two lines

Note and rest grouping

There are generally accepted conventions for how notes and rests of different durations are notated and grouped in different contexts and meters. In Dorico Elements, notes are automatically notated to fit within bars and are grouped according to your per-flow settings.

Depending on the prevailing time signature, there can be many different ways to beam notes together. For example, you might want to beam all notes in the bar together in time signatures that cannot be divided in half and are often not divided at all, such as 3/4.



A passage containing different meters. Notes are grouped and beamed differently in the different meters, and notes that cross beats and barlines are automatically shown as tied notes.

Tied notes are affected by your note and rest grouping settings, as there are different conventions for how notes within tie chains should be divided to indicate significant beat boundaries within bars, and in which contexts they can cross beat boundaries.

Similar options apply to dotted notes, which are often notated as a single dotted note if they start at the beginning of bars, but as a tie chain that shows significant beat boundaries in the bar if they start part-way through bars.

TIP

- You can change the default note grouping and beam grouping settings for each flow independently on the **Note Grouping** and **Beam Grouping** pages in **Notation Options**.
 - Musical examples demonstrate how each option affects the appearance of your music.
- You can also specify custom beat groupings within individual time signatures.

RELATED LINKS

Beam grouping according to meters on page 822

Note grouping in slash regions on page 1240

Types of time signatures on page 1360

Numbered bar regions on page 1231

Allowing/Disallowing noteheads in opposing voices to overlap on page 1418

Notation Options dialog on page 730

Hiding/Showing ties across beat boundaries

You can change whether notes that span beat boundaries are notated as tie chains or single notes in each flow independently; for example, to show half notes over half-bars, instead of two tied quarter notes.

PROCEDURE

1. Press Ctrl/Cmd-Shift-N to open Notation Options.

2. In the **Flows** list, select the flows in which you want to hide/show ties across beat boundaries.

By default, only the current flow is selected when you open the dialog. You can select other flows by clicking **Select All** in the action bar, clicking and dragging across multiple flows, **Shift** -clicking adjacent flows, and **Ctrl/Cmd** -clicking individual flows.

- 3. In the category list, click **Note Grouping**.
- **4.** Change the settings as required.

 There are separate options for ties across beat boundaries in time signatures with and without a half-bar, for notes followed by rests, and for ties in syncopated rhythm patterns.
- 5. Click Apply, then Close.

RESULT

Notes are notated as either tie chains or single notes in the corresponding contexts in the selected flows.

TIP

You can also force the duration of individual notes/rests to specify their notation.

EXAMPLE

- Notes starting at the start of the bar or the half-bar of multiple beats in duration affects the dotted half note in the first bar.
- Notes starting on a beat followed by a rest in the middle of the beat affects the dotted quarter note in the second bar.





Notes split at half-bar/beat boundaries

Notes notated as single notes

RELATED LINKS

Beam grouping according to meters on page 822 Forcing the duration of notes/rests on page 257 Notation Options dialog on page 730

Creating custom beat groupings for meters

If your music requires a different beat grouping for a particular meter than the default setting for that time signature, you can specify your preferred beat grouping within the time signature. You can choose whether or not the time signature shows this custom beat grouping. You can also input time signatures only on specific staves.

NOTE

The duration of beam groups in Dorico Elements depends on the beat grouping in the prevailing time signature and your per-flow beam grouping settings in **Notation Options**. For example, entering [1+1+1+1]/4 into the time signatures popover inputs a time signature with four quarter

note (crotchet) groups. Because this creates a time signature with a half-bar, beam grouping options for time signatures with a half-bar apply.

PROCEDURE

- **1.** In Write mode, do one of the following:
 - Start note input.
 - Select an item at the rhythmic position where you want to input a time signature with custom beat grouping. If you want to input a time signature with custom beat grouping on a single staff, select an item that belongs to that staff only.
- **2.** Optional: If you want to input a time signature with custom beat grouping onto multiple specific staves at once, extend the caret to those staves.
- **3.** Optional: If you want Dorico Elements to add beats at the end of the region affected by the new time signature if required, activate Insert mode in any of the following ways:
 - Press I.
 - In the Notes toolbox, click Insert
- **4.** Open the time signatures popover in any of the following ways:
 - Press Shift-M.
 - In the Notations toolbox, click **Popovers** , then **Time Signatures (Meter) 1**.
- **5.** Enter the division you want in square brackets into the popover.
 - For example, to divide a 7/8 time signature into 2+3+2, enter [2+3+2]/8 into the popover. To divide a 5/4 time signature into 2+3 rather than 3+2, enter [2+3]/4 into the popover.
- **6.** Input the time signature and close the popover in one of the following ways:
 - To input a time signature on all staves, press **Return**.
 - To input a time signature only on the selected staff or staves across which the caret extends, press **Alt/Opt-Return**.

RESULT

The time signature specified is input and beam and beat grouping in subsequent bars follows the division you specified.

TIP

You can change the appearance of numerators in individual time signatures so that they show a single number or beat groups.

RELATED LINKS

Time signatures popover on page 277
Changing the numerator style of time signatures on page 1368

Changing the beat grouping for cut common time signatures

You can change the beat grouping of individual cut common time signatures, independently of your per-flow setting. For example, if you want some cut common time signatures, such as 2/2, to group notes and rests in the same ways as common time signatures, such as 4/4.

PREREQUISITE

- The lower zone is shown.
- Properties is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the cut common time signatures whose beat grouping you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate/deactivate **Use common time note grouping** in the **Time Signatures** group.

RESULT

The selected cut common time signatures use common time beat grouping when **Use common time note grouping** is activated, and cut common time beat grouping when it is deactivated.

TIP

You can change the beat grouping for all cut common time signatures in each flow independently in **Notation Options** > **Note Grouping** > **Time Signatures With Half-bars**.

RELATED LINKS

Properties panel on page 646

Engrave toolbox on page 490

Changing the appearance of common/cut common time signatures on page 1371

Input methods for time signatures and pick-up bars on page 277

Notation Options dialog on page 730

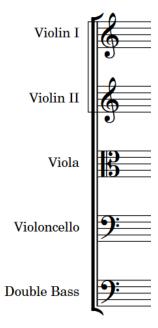
Brackets and braces

Brackets and braces are thick straight and curved lines in the left-hand margin that show instrument groupings.

Brackets

A bracket is a thick black line, the width of a beam, that groups staves together, most commonly according to instrument family. It often has winged ends that point inwards towards the score.

It is always positioned directly to the left of a systemic barline. If secondary brackets are used in addition to a bracket, they are positioned further away from the start of the system to allow space for the bracket.



An example of a bracket, connecting instruments in the string family. A sub-bracket connects the two violin lines.

By default in Dorico Elements, barlines join the same staves that are joined by brackets and braces, meaning that bracketed groups of staves and braced pairs of staves appear with barlines extending across the group.

Braces

A brace is a wavy or curly line that joins multiple staves belonging to the same instrument, usually a grand staff instrument such as the piano or harp. If necessary, a brace can extend to three or more staves, although two is most common.

The brace is also sometimes used instead of a sub-bracket to show groupings of identical instruments within a family whose staves are joined by a bracket.

It is positioned outside the systemic barline, and if used in place of a sub-bracket, outside of the bracket as well.



A brace connecting two piano staves

NOTE

- Staves cannot be bracketed and braced simultaneously. Therefore, braced staves are excluded from bracketed groups. They also cannot show sub-brackets or sub-sub-brackets.
- System objects are only shown above instrument families that are bracketed or braced together.
- Blank staves can only show brackets/braces when they are shown after final flows. You cannot show brackets/braces on blank staves in music frames.

RELATED LINKS

Player groups on page 163
Brackets according to ensemble type on page 847
Barlines across staff groups on page 805
System objects on page 1303
Staff labels on page 1287
Player group labels on page 1295

Changing bracket grouping according to ensemble type

You can change which staves are included in brackets by changing the ensemble type for each layout independently; for example, if a part layout containing all percussion players requires different bracketing than used for percussion staves in the full score layout.

The default setting is **Orchestral**. We recommend that you change this setting for projects containing small ensembles.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- **2.** In the **Layouts** list, select the layouts in which you want to change the ensemble type for bracket grouping.

By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, **Shift** -clicking adjacent layouts, and **Ctrl/Cmd** -clicking individual layouts.

- 3. In the category list, click Brackets and Braces.
- **4.** Choose one of the following options for **Ensemble type**:
 - No brackets
 - Orchestral
 - Small ensemble
 - Wind band
 - Big band

• British brass band

5. Click Apply, then Close.

RESULT

The default bracket grouping is changed in the selected layouts.

TIP

- There are further options for bracketing on the Brackets and Braces page, such as hiding/ showing brackets when there is only a single instrument in the bracket group and hiding/ showing braces when only a single staff is shown.
- Player groups and soloists also influence which staves are bracketed together.
- You can also input custom bracket/brace grouping for specific staves, independently of the bracket grouping setting in the layout. However, you cannot change brackets/braces on blank staves.

RELATED LINKS

Barlines across staff groups on page 805
Hiding/Showing blank staves after final flows on page 592
Player groups on page 163
Designating players as soloists on page 125
Staff labels on page 1287
Player group labels on page 1295

Brackets according to ensemble type

In Dorico Elements, default staff grouping is determined by the ensemble type chosen for each layout. This affects which staves are bracketed together and joined by barlines.

The following ensemble types are available on the **Brackets and Braces** page in **Layout Options**:

No brackets

All staves appear separately, with no brackets. Grand staff instruments are still shown with braces.

This is the default setting for full score layouts in projects started from **Solo** and small **Jazz** project templates.

Orchestral

Staves are bracketed according to their instrument family. For example, adjacent string instruments are bracketed together separately from adjacent woodwind instruments. However, vocal staves are not joined by barlines.

This is the default setting for all layouts in new projects and projects started from **Orchestral**, **Choral and Vocal**, and **Concert band** project templates, and for custom score and part layouts in projects started from all other project templates.

Small ensemble

All staves in the project are bracketed together, regardless of their instrument family, excluding braced staves.

This is the default setting for full score layouts in projects started from **Chamber** and **Pit band** project templates.

Wind band

Staves are bracketed according to their instrument type. For example, Flute 1 and Flute 2 are bracketed together, but separately from the other woodwind instruments.

Big band

Staves are bracketed according to their instrument family, except for brass instruments, which are all bracketed according to their instrument type.

Rhythm section instruments are bracketed together.

Percussion and timpani are bracketed together.

British brass band

Brass instruments are bracketed according to their instrument type, except for horns and trumpets, which are bracketed together.

Any other instruments in the score are bracketed according to their instrument family. Percussion and timpani are bracketed separately.

This is the default setting for full score layouts in projects started from the **Big band** project template.

NOTE

- Staves cannot be bracketed and braced simultaneously. Therefore, braced staves, such as the piano and other grand staff instruments, are excluded from brackets. They also split brackets if they are placed within a bracketed group.
- By default, there must be at least two adjacent instruments to show a bracket. You
 can choose to show brackets on single instruments in each layout independently on the
 Brackets and Braces page in Layout Options.
- Player groups and soloists also influence which staves are bracketed together.
- Vocal staves are never joined by barlines, even when bracketed together.
- System objects are only shown above instrument families that are bracketed or braced together.

RELATED LINKS

Project templates on page 76 System objects on page 1303 Layout Options dialog on page 728

Hiding/Showing braces on single staves

You can hide/show braces on single staves in each layout independently. For example, if you only want to show braces for the piano when both staves are shown.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- **2.** In the **Layouts** list, select the layouts in which you want to hide/show braces on single staves.

By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, **Shift** -clicking adjacent layouts, and **Ctrl/Cmd** -clicking individual layouts.

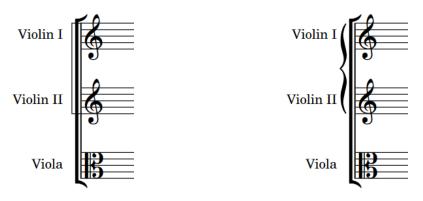
3. In the category list, click Brackets and Braces.

- **4.** Choose one of the following options for **When only one staff of braced group is shown**:
 - Draw brace
 - Do not draw brace
- 5. Click Apply, then Close.

Secondary brackets

Secondary brackets are a second level of staff grouping. They are positioned to the left of brackets and allow you to mark groups of staves within a bracketed group. In Dorico Elements, secondary brackets can appear as a brace or as a sub-bracket.

By default, secondary brackets appear as sub-brackets: thin lines with square corners that extend beyond the bracket. You can change the appearance of secondary brackets and hide/show them for adjacent identical instruments in bracketed groups in each layout independently.



Secondary bracket as a sub-bracket

Secondary bracket as a brace

NOTE

You cannot show sub-sub-brackets in addition to braces, you can only show sub-sub-brackets in addition to sub-brackets.

Hiding/Showing secondary brackets

You can hide/show secondary brackets for adjacent identical instruments in bracketed groups in each layout independently. You can also choose only to show secondary brackets when subbracketed groups contain at least two staves.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- 2. In the Layouts list, select the layouts in which you want to hide/show secondary brackets. By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, Shift -clicking adjacent layouts, and Ctrl/Cmd -clicking individual layouts.
- 3. In the category list, click Brackets and Braces.
- **4.** Choose one of the following options for **Instruments of the same kind within a bracketed group**:

- Use secondary brackets
- No secondary brackets
- Choose one of the following options for When only one staff of sub-bracketed group is shown:
 - Draw sub-bracket
 - Do not draw sub-bracket
- 6. Choose one of the following options for When sub-bracket matches primary bracket:
 - Draw sub-bracket
 - Do not draw sub-bracket
- 7. Choose one of the following options for Sub-brackets for adjacent violin players:
 - To show a single sub-bracket across all violin staves, choose Single.
 - To show a separate sub-bracket for each violin player, choose **Separate**.
 - To show a single sub-bracket when each violin player uses a single staff, but show
 a separate sub-bracket for each violin player when at least one player uses multiple
 staves, such as in a divisi section, choose Separate for multiple staves.
- 8. Click Apply, then Close.

RESULT

Secondary brackets are shown in the selected layouts when you choose **Use secondary brackets**, and hidden when you choose **No secondary brackets**.

If you chose **Use secondary brackets** and **Do not draw sub-bracket**, secondary brackets are only shown when sub-bracketed groups contain at least two staves.

Showing secondary brackets as sub-brackets/braces

Secondary brackets extend beyond brackets, allowing you to mark groups of staves within a bracketed group. You can show secondary brackets as either braces positioned outside the bracket or as sub-brackets in each layout independently.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- **2.** In the **Layouts** list, select the layouts in which you want to change the appearance of secondary brackets.
 - By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
- 3. In the category list, click **Brackets and Braces**.
- **4.** Choose one of the following options for **Secondary bracket appearance**:
 - Brace
 - Sub-bracket
- 5. Click Apply, then Close.

RESULT

The appearance of all secondary brackets in the selected layouts is changed.

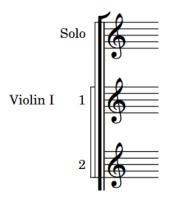
NOTE

Because you cannot show sub-sub-brackets in addition to braces, sub-sub-brackets are not shown in layouts where sub-brackets appear as braces.

Sub-sub-brackets

Sub-sub-brackets are a tertiary level of staff grouping with the same design as sub-brackets. They are positioned outside of both brackets and sub-brackets, allowing you to mark groups of staves within bracketed and sub-bracketed groups. Sub-sub-brackets can only appear as brackets in Dorico Elements.

Sub-sub-brackets cannot extend beyond their sub-bracket and cannot be shown on staves with a brace as either the primary or secondary group.



Chord symbols

Chord symbols describe the vertical harmony of the music at a specific moment. They are frequently used in jazz and pop music, where players often improvise around chord progressions.



Chord symbols shown above slashes on the Clarinet and Piano staves to help the players improvise around the notated Cornet melody.

You can input chord symbols using the chord symbols popover and you can automatically generate chord symbols based on existing music.

In Dorico Elements, chord symbols exist globally at the corresponding rhythmic positions by default. This means that you only have to input chord symbols once, but they can appear above multiple or no staves as required. However, in some circumstances it is necessary to show different chord symbols for different players at the same rhythmic position. In such cases, you can input local chord symbols.

Dorico Elements automatically shows the appropriate chord symbols for transposing instruments in transposing layouts, including for fretted instruments whose transposition you have changed to reflect a capo. You can also define capos for chord symbols and show only main chord symbols, only capo chord symbols, or both.

You can hide/show chord symbols project-wide above specific instrument staves, including if multiple instruments belong to the same player, and in different layouts. You can also show chord symbols only within chord symbol/slash regions and hide/show individual chord symbols.

If you have input chord symbols but no players in the current layout are set to show them, they are indicated by signposts.

Depending on the style of music, there are different conventions regarding how to present chord names.

Dorico Elements provides a comprehensive set of chord symbol appearance presets that you can choose from.

RELATED LINKS

Inputting chord symbols on page 310
Generating chord symbols from notes on page 319
Hiding/Showing chord symbols on page 859

Chord diagrams on page 875 Capos on page 154 Enabling chord symbol playback on page 520

Chord components

Chord symbols consist of a root and a quality, with intervals, alterations, and an altered bass note included if required.

Root

The root note of the chord, expressed either as a note name or as a specific degree of a scale.

Quality

Defines the type of chord, such as major, minor, diminished, augmented, halfdiminished, or with added note, such as six or nine.

Interval

Chord symbols can include one or more added intervals, such as a major seventh or ninth. Intervals in chord symbols are also known as "extensions".

Alterations

Define notes in chords that are different to what is normally expected of that chord. For example, a sharpened fifth, flattened ninth, suspensions, or omissions.

Altered bass note

A chord symbol has an altered bass note if the lowest pitch of a chord is not its root note, such as Cm765/Eb.

Chord symbol appearance presets

There are many conventions for the appearance of chord symbols, so Dorico Elements provides a choice of preset conventions that you can use and edit.

For example, you can edit default preset chord symbols, you can edit individual chord symbols without changing the default appearance for that chord symbol, and you can edit individual components within chord symbols.

 You can access chord symbol presets in the Chord Symbols Options dialog by choosing Library > Chord Symbols.

Chord symbol preset example	Chord symbol preset name
$\mathrm{B}\flat\mathrm{maj}7(^{\sharp11}_{\sharp9})\mathrm{/F}$	Default
Bbmaj7(#9#11)/F	Boston
$\mathrm{B}^{lat_{\mathrm{MA}}7}(\sharp_{9}^{\sharp_{1}1})$	Brandt-Roemer

Chord symbol preset example	Chord symbol preset name
$\mathrm{B}\flat\triangle_{+9}^{+11}/\mathrm{F}$	Indiana
BbMaj7 ⁺¹¹ /F	New York
$rac{{}^{\flat}7^{{}^{\sharp11}_{\sharp9}}}{4}$	Nashville
$\mathrm{B}^{lat_{\mathrm{MA}^{7}}\left(egin{matrix} \sharp11\ \sharp9 \end{smallmatrix} ight)}\mathrm{F}$	Jazz Standards
$\frac{B\flat maj7^{+11}_{+9}}{F}$	Ross
$\mathrm{B}^{lat}_{\mathrm{M7}}(^{\sharp 11}_{\sharp 9})^{on}\mathrm{F}$	Japanese

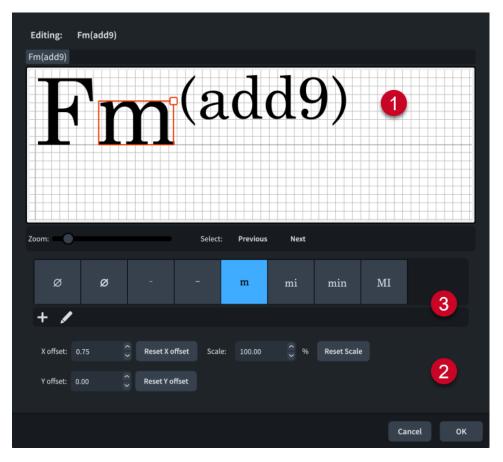
These presets use specific combinations of the options in the **Chord Symbols Options** dialog. You can also adjust these options individually to suit your requirements.

- Default uses a set of symbols intended to be as unambiguous as possible. For example,
 Default avoids the use of symbols for major seventh, augmented, diminished, and half-diminished. This is the default preset for new projects.
- **Custom** is automatically selected when you change any of the preset options.

Edit Chord Symbol Appearance dialog

The **Edit Chord Symbol Appearance** dialog allows you to edit the appearance and arrangement of single chord symbol instances, without changing the project default appearance of that chord symbol. For example, if you want the first Gmaj7 chord symbol to appear differently than all subsequent Gmaj7 chord symbols.

You can open the Edit Chord Symbol Appearance dialog in Engrave mode by selecting
the chord symbol you want to customize and pressing Return, or double-clicking a chord
symbol.



The **Edit Chord Symbol Appearance** dialog contains the following sections:

1 Editor

Allows you to arrange and edit the components that make up the chord symbol. As well as using the controls at the bottom of the dialog, you can move individual components in any of the following ways after selecting them in the editor:

- Press the standard key commands for moving items. For example, press Alt/
 Opt-Right Arrow to move components to the right, or press Ctrl/Cmd-Alt/Opt-Right Arrow to move components to the right by larger increments.
- Click and drag each component.

NOTE

You cannot move the first component in chord symbols.

In addition to using **Scale**, you can also change the size of components by clicking and dragging the square handle in the top right corner after selecting a component in the editor.

2 Controls

Allow you to move individual components and change their size. You can also reset their position and size.

- **X offset** moves components horizontally. Increasing the value moves components to the right, decreasing the value moves components to the left.
- **Y offset** moves components vertically. Increasing the value moves components upwards, decreasing the value moves components downwards.

- Scale changes the size of components. Increasing the value increases the size of
 components proportionally, decreasing the value decreases the size of components
 proportionally.
- **Reset X offset** resets the horizontal position of the selected component.
- Reset Y offset resets the vertical position of the selected component.
- **Reset Scale** resets the size of the selected component.

3 Components list

You can create new components and edit existing components by clicking the respective button in the action bar.

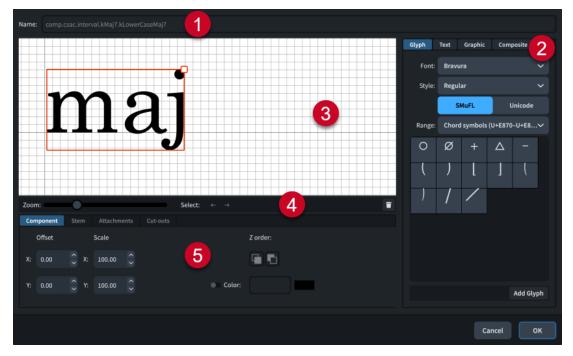
- Add Component +
- Edit Component

Clicking either button opens the **Edit Chord Symbol Component** dialog, in which you can create new components and edit existing components. Editing components from inside the **Edit Chord Symbol Appearance** dialog only affects the selected chord symbol.

Edit Chord Symbol Component dialog

The **Edit Chord Symbol Component** dialog allows you to create custom chord symbol components and edit existing components for single instances of chord symbols.

• You can open the **Edit Chord Symbol Component** dialog from inside the **Edit Chord Symbol Appearance** dialog by selecting the component you want to duplicate in the components list, and clicking **Add Component** in the components list action bar.



The **Edit Chord Symbol Component** dialog contains the following sections:

1 Name

Contains an automatically generated name for the chord symbol component. You cannot change this name.

2 Component selector

Allows you to choose components to add to your chord symbol component. You can add different types of components by clicking the respective tab titles.

• **Glyph**, for example, \(\frac{1}{2}\) or \(\frac{1}{2}\). You can use different styles of glyphs by selecting different fonts and font styles/weights from the menus. You can search using **SMuFL** or **Unicode** ranges. Click **Add Glyph** to add the selected glyph to the chord symbol component.

NOTE

A full list of the different ranges of glyphs is available on the SMuFL website.

- Text, including numbers and other text. You can use numbers and text from the
 available Preset text list or select any font available from the menu and enter your
 preferred text into the text box at the bottom. Click Add Text to add the selected or
 input text to the chord symbol component.
- Graphic: Allows you to load a new graphics file or select an existing graphic from the
 Select existing list in SVG, PNG, or JPG format. You can see a preview of the graphic
 in the Preview box. Click Add Graphic to add the selected graphic to the chord symbol
 component.
- **Composite**: Allows you to select a composite from the list. Click **Add Composite** to add the selected composite to the chord symbol component.

3 Editor

Allows you to arrange and edit the components that make up your chord symbol component. You can arrange and edit components using the controls at the bottom of the dialog.

4 Editor action bar

Contains selection and view options for the editor.

- **Zoom**: Allows you to change the zoom level in the editor.
- **Select**: Allows you to select the next/previous component.
- **Delete** : Deletes the selected component.

5 Controls

Contains controls that allow you to edit individual components. Controls are divided into tabs according to the aspect of the selected component they affect. For chord symbols, the **Component** and **Attachments** tabs are available.

The **Component** tab contains the following options:

- Offset: Controls the position of the selected component. X moves it horizontally, Y moves it vertically.
- **Scale**: Controls the size of the selected component. For graphics, **X** controls its width, **Y** controls its height.

NOTE

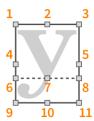
Although some components scale their height and width independently, others retain their aspect ratio, meaning only one value affects their overall size.

- **Z order**: Allows you to **Bring Forward** or **Send Backward** the selected component in relation to other components when they overlap.
- **Color**: Allows you to change the color of the selected component.

The **Attachments** tab is only available if the chord symbol component comprises at least two separate components. It contains the following options:

- **Attachment from**: Sets the attachment point on the component to the left of the selected component to which the selected component attaches. We recommend that you select a right edge attachment point for **Attachment from**.
- **Attachment to**: Sets the attachment point on the selected component which attaches to the component to its left. We recommend that you select a left edge attachment point for **Attachment to**.

There are eight attachment points for glyphs and graphics, and eleven for text, due to the extra space required for letters that extend below the baseline. The example diagram helps you visualize how these points relate to components.



The attachment points have the following names in the **Edit Chord Symbol Component** dialog:

- 1 Top Left
- 2 Top Center
- 3 Top Right
- 4 Middle Left
- 5 Middle Right
- 6 Baseline Left (text only)
- 7 Baseline Center (text only)
- 8 Baseline Right (text only)
- 9 Bottom Left
- 10 Bottom Center
- 11 Bottom Right

RELATED LINKS

Chord symbol appearance presets on page 853

Chord symbol font styles

There are different font styles for different chord symbol components. You can change different aspects of these fonts in the **Edit Font Styles** dialog, such as changing their font size to make accidentals in chord symbols appear larger.



- 1 Chord Symbols Font: Used for note names in chord symbols, such as "B" or "F".
- 2 Chord Symbols Music Text Font: Used for accidentals in chord symbols, such as b and #. Must be SMuFL-compliant.
- 3 Chord Symbols Altered Bass Separator Font: Used for text altered bass separators.

RELATED LINKS

Edit Font Styles dialog on page 737
Changing the default font family on page 743

Positions of chord symbols

In layouts where chord symbols are shown, they are positioned either above all instrument staves set to show chord symbols or only above the top staff in each system.

By default, chord symbols are left-aligned with noteheads and vertically aligned across the width of each system.

RELATED LINKS

Hiding/Showing capo chord symbols on page 160 Moving notes/items rhythmically on page 448 Moving items graphically on page 501 Chord symbol regions on page 863

Hiding/Showing chord symbols

You can hide/show chord symbols above particular staves or only within chord symbol/slash regions project-wide on a per-player basis. By default, chord symbols appear above rhythm section instrument staves, such as keyboards, guitars, and bass guitars.

Any player on whose staff you input chord symbols is automatically set to show chord symbols for all instruments and in the current layout type.

PROCEDURE

- 1. In Setup mode, select a player in the **Players** panel for whom you want to hide/show chord symbols.
- 2. In the action bar, click **Player Settings** and choose one of the following options:
 - To show chord symbols above all instrument staves held by the player, choose Chord Symbols > Show for All Instruments.
 - To show chord symbols only above rhythm section instrument staves held by the player, choose Chord Symbols > Show for Rhythm Section Instruments.
 - To show chord symbols only in chord symbol/slash regions on instrument staves held by the player, choose **Chord Symbols** > **Show in Chord Symbol and Slash Regions**.
 - To hide chord symbols above all instrument staves held by the player, choose Chord Symbols > Hide for All Instruments.

RESULT

Chord symbols are hidden/shown above the corresponding instrument staves held by the selected player, depending on the layouts in which chord symbols are shown for that player in your project.

TIP

- You can also right-click players and choose these options from the context menu.
- You can choose to show chord symbols only once at the top of each system in each layout independently.

You can also hide/show individual chord symbols in layouts where chord symbols are shown
by selecting them and activating **Hidden** in the **Chord Symbols** group of the Properties
panel. Signposts are shown at the position of each hidden chord symbol. However, signposts
are not printed by default.

You can assign a key command for **Hide/Show Item** on the **Key Commands** page in **Preferences**.

RELATED LINKS

Players panel on page 108
Inputting chord symbols on page 310
Chord symbol regions on page 863
Slash regions on page 1239
Hiding/Showing chord diagrams on page 877
Signposts on page 438
Capo vs. main chords on page 155
Key Commands page in the Preferences dialog on page 58

Hiding/Showing chord symbols in layouts

You can hide/show chord symbols in different types of layouts. By default, chord symbols appear in all applicable layouts for rhythm section instruments.

NOTE

If chord symbols are hidden for all instruments in the current layout, signposts are shown above the top staff.

PROCEDURE

- 1. In Setup mode, select a player in the **Players** panel.
- 2. In the action bar, click **Player Settings** and choose one of the following options:
 - To show chord symbols for the selected player in all layouts, choose Chord Symbols > Show in Full Score and Parts.
 - To show chord symbols for the selected player only in full score/custom score layouts and not in part layouts, choose Chord Symbols > Show in Full Score Only.
 - To show chord symbols for the selected player only in part layouts and not in full score/ custom score layouts, choose Chord Symbols > Show in Parts Only

TIP

You can also right-click players and choose these options from the context menu.

Showing chord symbols above one/multiple staves

You can choose to show chord symbols above all instrument staves set to show chord symbols or only above the top staff in each system in each layout independently.

PROCEDURE

1. Press Ctrl/Cmd-Shift-L to open Layout Options.

2. In the **Layouts** list, select the layouts in which you want to change the vertical position of chord symbols.

By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, **Shift** -clicking adjacent layouts, and **Ctrl/Cmd** -clicking individual layouts.

- 3. In the category list, click Chord Symbols and Diagrams.
- **4.** In the **Chord Symbols** section, choose one of the following options for **Show chord symbols**:
 - Above specific players' staves
 - Above top staff of system
- 5. Click Apply, then Close.

RELATED LINKS

Inputting chord symbols on page 310 Showing only chord symbols or chord diagrams on page 878 Hiding/Showing capo chord symbols on page 160

Changing the alignment of chord symbols relative to notes

You can change the horizontal alignment of individual chord symbols relative to notes, independently of your project-wide setting. For example, you might center-align wide chord symbols to avoid collisions with barlines. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing 1** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** Select the chord symbols whose alignment you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Alignment** in the **Chord Symbols** group.
- **3.** Select one of the following alignment options from the menu:
 - Left
 - Center
 - Right

RESULT

The alignment of the selected chord symbols is changed. Note spacing is automatically adjusted to avoid collisions with adjacent chord symbols.

If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

TIP

You can change the default horizontal alignment of all chord symbols project-wide in the **Position** section of the **Chord Symbols Options** dialog.

EXAMPLE







Left-aligned G#dim7 chord symbol on beat 3

Center-aligned G#dim7 chord symbol on beat 3

Right-aligned G#dim7 chord symbol on beat 3

Changing the vertical alignment of chord symbols

You can change whether chord symbols are aligned at the same vertical position across the width of each system. You can also change how multi-line chord symbols, such as polychord chord symbols, are vertically aligned relative to single-line chord symbols.

PROCEDURE

- 1. Choose Library > Chord Symbols to open the Chord Symbols Options dialog.
- 2. In the Position section, activate/deactivate Align chord symbols across width of system.
- 3. Choose one of the following options for Alignment of multi-line chord symbols relative to single-line chord symbols:
 - Top
 - Middle
 - Bottom
- 4. Click Apply, then Close.

RELATED LINKS

Changing the arrangement of compound chord symbols on page 867 Hiding/Showing capo chord symbols on page 160 Chord symbol appearance presets on page 853

Changing the staff-relative placement of chord symbols

You can show individual chord symbols either above or below the staff, independently of your project-wide setting. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, Graphic Editing ? is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** Select the chord symbols whose staff-relative placement you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Placement** in the **Chord Symbols** group.
- **3.** Choose one of the following options:
 - Above
 - Below

RESULT

The staff-relative placement of the selected chord symbols is changed. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

TIP

- You can choose to show chord symbols between the staves of grand staff instruments in each layout independently in Layout Options > Chord Symbols and Diagrams > Chord Symbols.
- You can change the default placement of all chord symbols project-wide in the **Position** section of the **Chord Symbols Options** dialog.

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490 Large selections on page 410 Layout Options dialog on page 728

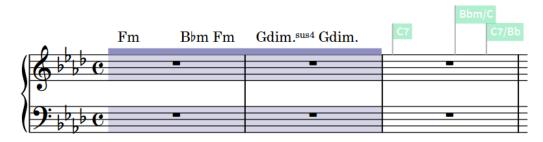
Chord symbol regions

Chord symbol regions specify passages where you want to show chord symbols. They are particularly useful for players and layouts that do not need chord symbols for most of the project but have improvisation sections that require chord symbols to be shown.

Chord symbol regions allow you to show chord symbols only where players require them, instead of showing chord symbols throughout the project and manually hiding the ones you do not want to show.

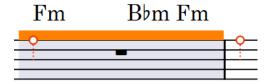
When you input, copy, or move chord symbol regions in Dorico Elements, the corresponding players are automatically set to show chord symbols in chord symbol/slash regions. This is because it is common to use both slashes and chord symbols to aid players in improvisation sections. Any chord symbols outside chord symbol/slash regions are automatically hidden and are indicated by signposts.

By default, chord symbol regions are highlighted with a solid colored line above the top staff line and a colored background. As you zoom out, the colored backgrounds become more opaque, which is especially useful when viewing full score layouts in galley view. These highlights are considered annotations, are not printed by default, and you can hide/show them.



Chord symbol region followed by chord symbol signposts after the end of the chord symbol region

In Write mode, each region has a handle at the start and end, which you can use to move and lengthen/shorten regions.



Handles on a selected chord symbol region

RELATED LINKS

Inputting chord symbol regions on page 318 Slash regions on page 1239 Hiding/Showing chord symbols on page 859 Hiding/Showing signposts on page 438 Annotations on page 581

Hiding/Showing chord symbol region highlights

You can hide/show colored highlights for chord symbol regions at any time; for example, if you want to show the highlights when inputting music but hide them when engraving.

PROCEDURE

• Choose View > Highlight Chord Symbol Regions.

Transposing chord symbols

You can transpose chord symbols after you have input them, independently of any notes.

TIP

- Dorico Elements automatically shows the appropriate chord symbols for transposing instruments in transposing layouts.
- If you want to transpose chord symbols to reflect a capo, you can instead show capo chord symbols.

PROCEDURE

- 1. In Write mode, select the chord symbols you want to transpose.
- **2.** Choose **Write** > **Transpose** to open the **Transpose** dialog.
- **3.** Adjust the parameters required for your transposition, such as interval and quality.

TIP

- We recommend using the **Calculate interval** section to determine your required settings; for example, if you want to transpose from Gb major to G major.
- Different intervals have different possible qualities. For example, you can specify a major third but not a major octave. Therefore, if you want to set your transposition parameters manually, we recommend selecting the interval before the quality.
- **4.** Click **OK** to save your changes and close the dialog.

RESULT

The selected chord symbols are transposed.

RELATED LINKS

Transpose dialog on page 457 Concert vs. transposed pitch on page 174 Fretted instrument tuning on page 150 Capos on page 154

Respelling chord symbols

You can change the enharmonic spelling of chord symbols for transposing instruments; for example, to choose a simpler enharmonic equivalent spelling. This changes the enharmonic spelling of chord symbols in all transposing layouts and for all instruments with the same transposition.

PROCEDURE

- **1.** In Write mode, open a layout with the transposition for which you want to respell chord symbols.
 - For example, to respell a chord symbol for all instruments in Bb, open the part layout for an instrument in Bb.
- **2.** Select the chord symbol you want to respell.
- **3.** Press **Return** to open the chord symbols popover for the selected chord symbol. The existing entry for the chord symbol is shown inside the popover.
- **4.** Change the root name of the chord, but leave other details as they were, such as quality, interval, or alterations.
 - For example, change just the root of Dbmaj13 from **Db** to **C#**.
- **5.** Press **Return** to close the popover.

RESULT

The spelling of the chord symbol is changed in transposing layouts for all instruments with the same transposition. For example, changing the spelling of a chord symbol for a Clarinet in Bb also changes the spelling of that chord symbol in the part layout for a Trumpet in Bb.

RELATED LINKS

Chord symbols popover on page 312 Concert vs. transposed pitch on page 174 Respelling notes on page 460 Fretted instrument tuning on page 150 Hiding/Showing capo chord symbols on page 160

Showing chord symbols as modes

You can show individual chord symbols as their modal equivalent if one exists for that chord symbol.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing !** is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the chord symbols you want to show as a mode. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Show as mode** in the **Chord Symbols** group.
- **3.** Select the mode you want from the menu.

RESULT

The selected chord symbols are respelled according to the selected mode. This does not affect the notes included in the chord symbols.

RELATED LINKS

Properties panel on page 646 Engrave toolbox on page 490

Resetting the enharmonic spelling of chord symbols

You can remove enharmonic spelling overrides for chord symbols you have respelled and return them to their default spelling. You can remove overrides for instruments with a single transposition only, such as instruments in Bb, or for all instrument transpositions.

PROCEDURE

- 1. In Write mode, select the chord symbol whose spelling you want to reset.
 - If you want to reset the enharmonic spelling of the chord symbol for a single instrument transposition only, select the chord symbol on a staff belonging to an instrument with that transposition. For example, select it on the staff of any instrument in Bb to reset the chord symbol for all instruments in Bb.
 - If you want to reset the enharmonic spelling of the chord symbol for all instrument transpositions, select the chord symbol on any staff that belongs to a transposing instrument.
- **2.** Press **Return** to open the chord symbols popover for the selected chord symbol. The existing entry for the chord symbol is shown inside the popover.
- **3.** Reset the enharmonic spelling of the chord symbol in any of the following ways:
 - To reset the enharmonic spelling of the chord symbol for instruments only with the selected transposition, enter **Alt/Opt-S** into the chord symbols popover.
 - To reset the enharmonic spelling of the chord symbol for all instrument transpositions, enter **Shift-Alt/Opt-S** into the popover.

4. Press **Return** to close the popover.

RESULT

The enharmonic spelling of the selected chord symbol in transposing layouts is reset, either just for instruments with the specified transposition or for all transposing instruments.

Hiding/Showing the root and quality of chord symbols

You can hide the root and quality of chord symbols if they follow another chord symbol with the same root and quality, but have a different altered bass note.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, Graphic Editing 3 is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the chord symbols whose root and quality you want to hide. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Hide root and quality** in the **Chord Symbols** group.
- **3.** Activate/Deactivate the corresponding checkbox.

RESULT

The root and quality of the selected chord symbols are hidden when the checkbox is activated, and shown when the checkbox is deactivated.

When the property is deactivated, chord symbols follow your project-wide setting.

TIP

You can choose to show the root and quality of chord symbols always, even if successive chord symbols have the same root and quality, in the **Altered Bass Notes** section of the **Chord Symbols Options** dialog.

RELATED LINKS

Properties panel on page 646 Engrave toolbox on page 490 Chord symbol appearance presets on page 853

Changing the vertical alignment of chord symbols on page 862

Large selections on page 410

Changing the arrangement of compound chord symbols

You can change the arrangement of individual polychord and altered bass note chord symbols, independently of your project-wide settings. For example, if you want to show some polychord chord symbols stacked vertically but others in a horizontal row. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

The lower zone is shown.

- **Properties s** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** 3 is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- 1. Select the compound chord symbols whose arrangement you want to change. You can do this in Write mode and Engrave mode.
- **2.** In the Properties panel, activate **Compound chord arrangement** in the **Chord Symbols** group.
- **3.** Select one of the following options from the menu:
 - Diagonal arrangement
 - Stacked arrangement
 - Linear arrangement

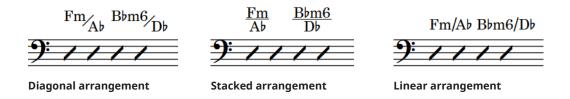
RESULT

The arrangement of the selected compound chord symbols is changed. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

TIP

You can change the default arrangement of all polychord and altered bass note chord symbols project-wide and independently of each other in the **Chord Symbols Options** dialog.

EXAMPLE



RELATED LINKS

Properties panel on page 646
Changing the property scope on page 648
Engrave toolbox on page 490
Large selections on page 410
Chord components on page 853
Inputting chord symbols on page 310

Erasing the background of chord symbols

You can erase the background of individual chord symbols; for example, to ensure chord symbols remain legible when crossing barlines. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

The lower zone is shown.

- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing ?** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

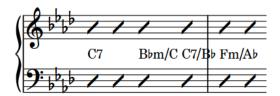
- 1. In Engrave mode, select the chord symbols whose backgrounds you want to erase.
- 2. In the Properties panel, activate **Erase background** in the **Chord Symbols** group.

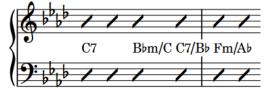
RESULT

The backgrounds of the selected chord symbols are erased. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

Deactivating **Erase background** returns the selected chord symbols to the default non-erased background.

EXAMPLE





Chord symbol with non-erased background

Chord symbol with erased background

RELATED LINKS

Engrave toolbox on page 490

Changing the alignment of chord symbols relative to notes on page 861 Changing the staff-relative placement of chord symbols on page 862

Changing the erasure padding of chord symbols

You can change the erasure padding of individual chord symbols, including changing the padding between chord symbols and each edge of their erased areas independently. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing]** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- 1. In Engrave mode, select the chord symbols whose erasure padding you want to change.
- **2.** In the Properties panel, activate the **Erasure padding** properties, individually or together, in the **Chord Symbols** group.
 - L changes the padding between chord symbols and their left edge.
 - **R** changes the padding between chord symbols and their right edge.

- **T** changes the padding between chord symbols and their top edge.
- **B** changes the padding between chord symbols and their bottom edge.
- **3.** Change the values in the value fields.

RESULT

Increasing the values increases the padding, decreasing the values decreases the padding. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

TIP

You can change the default erasure padding of all chord symbols project-wide in the **Design** section of the **Chord Symbols Options** dialog. However, this does not allow you to change the padding of each edge independently.

Parenthesized chord symbols

Parentheses around chord symbols are often used to indicate an alternative set of chord changes or that chords are optional. In Dorico Elements, you can show parentheses around any chord symbol that uses appearance presets.

(Fm) (Bbm) (Fm) (Gdim.sus4) (Gdim.) C7

C7/Bb Fm/Ab

F7/A F/A



A phrase containing parenthesized chord symbols

You can add chord symbol parentheses both when inputting chord symbols and by parenthesizing existing chord symbols.

By default, parenthesized chord symbols show parentheses on both sides. You can show only a single left or right parenthesis on individual parenthesized chord symbols.

NOTE

- You cannot show parentheses on custom chord symbols; that is, chord symbols whose appearance you have overridden.
- You can change the default appearance of chord symbol parentheses project-wide, including suppressing parentheses around alterations inside parenthesized chord symbols in different circumstances, in the **Parentheses** section of the **Chord Symbols Options** dialog.

RELATED LINKS

Inputting chord symbols on page 310 Chord symbol appearance presets on page 853 Bracketed noteheads on page 1047 Showing single brackets on figured bass on page 941

Parenthesizing chord symbols

You can show individual chord symbols in parentheses; for example, to indicate optional chords. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

NOTE

You cannot show parentheses on custom chord symbols; that is, chord symbols whose appearance you have overridden.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

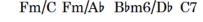
- **1.** Select the chord symbols you want to parenthesize. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Parenthesized** in the **Chord Symbols** group.

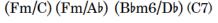
RESULT

Parentheses are shown around each selected chord symbol. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

Deactivating **Parenthesized** removes parentheses from the selected chord symbols.

EXAMPLE









Chord symbols without parentheses

Chord symbols with parentheses

Showing single parentheses on chord symbols

You can show only a single left or right parenthesis on individual parenthesized chord symbols; for example, to indicate that all chord symbols between two parenthesized chord symbols are optional. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

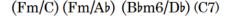
PROCEDURE

- 1. Select the parenthesized chord symbols on which you want to show a single parenthesis. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Parenthesis to show** in the **Chord Symbols** group.
- **3.** Choose one of the following options:
 - Start
 - End

RESULT

Parentheses are hidden on the corresponding side of the selected chord symbols, leaving a single parenthesis on the other side. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

EXAMPLE



(Fm/C Fm/Ab Bbm6/Db C7)





Parentheses around all chord symbols

Parentheses at the start of the first chord and end of the last chord

RELATED LINKS

Properties panel on page 646

Changing the property scope on page 648

Engrave toolbox on page 490

Large selections on page 410

Showing brackets around one/all noteheads in tie chains on page 1050

Changing the style of chord symbol parentheses

You can change the parenthesis style for individual chord symbols. For example, you might show stacked chord symbols with slender/tall parentheses due to their height.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** 3 is selected in the Engrave toolbox.

PROCEDURE

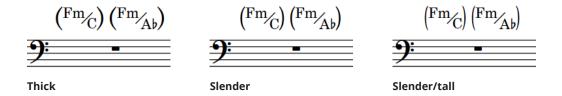
- **1.** Select the parenthesized chord symbols whose parenthesis style you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Parenthesis style** in the **Chord Symbols** group.
- **3.** Select one of the following options from the menu:
 - Thick
 - Slender

Slender/tall

RESULT

The parenthesis style of the selected parenthesized chord symbols is changed.

EXAMPLE



Changing the size of chord symbol parentheses

You can change the size of chord symbol parentheses without changing the size of the chord symbols to which they apply; for example, to ensure that parentheses appear the same size on adjacent chord symbols with different heights. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** 3 is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the parenthesized chord symbols whose parenthesis size you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Parenthesis scale %** in the **Chord Symbols** group.
- 3. Change the value in the value field.

The scale size is expressed as a percentage of the parenthesis glyph rather than the chord symbol, allowing you to create a consistent parenthesis size regardless of the chord symbol height.

RESULT

The size of parentheses around the selected chord symbols is changed.

TIP

You can change the default height of all chord symbol parentheses project-wide in the **Parentheses** section of the **Chord Symbols Options** dialog.

RELATED LINKS

Chord symbol font styles on page 858 Large selections on page 410

Moving chord symbol parentheses graphically

You can move individual chord symbol parentheses graphically to the right or left. For example, to increase the space between particular chord symbols and their parentheses. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- Properties is selected in the lower zone toolbar.
- **Graphic Editing 3** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** In Engrave mode, select the parenthesized chord symbols whose parentheses you want to move.
- **2.** In the Properties panel, activate the following properties, individually or together, in the **Chord Symbols** group:
 - Open parenthesis offset
 - Closed parenthesis offset
- **3.** Move the corresponding parentheses in one of the following ways:
 - To move them to the right, increase the value in the value field.
 - To move them to the left, decrease the value in the value field.

RESULT

The corresponding parentheses for the selected parenthesized chord symbols are moved graphically. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

TIP

You can change the default gap between all chord symbols and parentheses project-wide in the **Parentheses** section of the **Chord Symbols Options** dialog.

Chord symbols imported from MusicXML

Chord symbols are imported from MusicXML files. However, chords that specify Neapolitan, Italian, French, German, Pedal, Tristan, and Other values for the kind of element are ignored during import, as there is no information to specify what notes these chord symbols are meant to describe.

RELATED LINKS

Generating chord symbols from notes on page 319

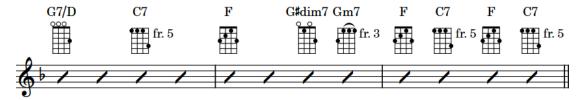
Chord diagrams

Chord diagrams represent the pattern of strings and frets on fretted instruments and use dots to indicate the stopped finger positions required to produce the corresponding chord. This demonstrates the specific shape of chords in a compact way and is useful if a particular voicing is required.

In Dorico Elements, chord diagrams are part of chord symbols, meaning you can show them below chord symbols wherever they are shown. For players set to show chord diagrams, you can show only the chord symbol or chord diagram for individual chord symbols.

You can show chord diagram shapes for any fretted instrument, including different tunings and string arrangements, such as guitar DADGAD tuning. This can be different to the instrument above which they appear; for example, if you want to show chord diagram shapes for standard guitar tuning above the bass staff.

You can also show chord diagrams for all chord symbols used in a flow in a grid at the start of the flow, as is common in lead sheets for pop and rock music. You can show used chord diagrams grids independently of showing them alongside chord symbols in the music.



A sequence of chord symbols with chord diagrams for banjo

The positions of stopped frets relative to each other are known as "shapes" in Dorico Elements. Any playable shape can be re-used for other chords whose pitches match the shape, including any new chord diagram shapes you have created. This includes shapes being available for other instruments, other tunings, and other positions along the fretboard, so long as any open strings included in the shape can be played with a barré at other fret positions.

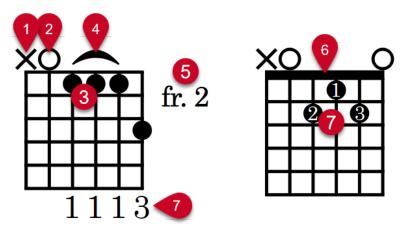
A single chord can appear with different chord diagram shapes for different instruments and tunings, as their open string pitches and the number of strings they have varies.

RELATED LINKS

Hiding/Showing chord diagrams on page 877 Showing only chord symbols or chord diagrams on page 878 Used chord diagrams grids on page 879 Capos on page 154

Chord diagram components

Chord diagrams use a combination of symbols, dots, and lines to convey the information about strings, fret positions, and finger positions that performers require to play the corresponding chord.



1 Omitted string

Indicates a string that must not sound.

2 Open string

Indicates a string that must sound but must be left open; that is, not stopped.

3 Dots

Indicate the fret positions where strings should be stopped, usually with left-hand fingers.

4 Barré

Indicates that multiple strings must be stopped with the same finger, usually pressed flat against the fretboard.

5 Starting fret number

Indicates the number of the highest fret in the chord diagram when this is not the first fret.

6 Nut

Represents the top of the fretboard, or "nut", and appears in chord diagrams whose highest fret is the first fret.

7 Fingerings

Indicate the finger used to stop the string. Fingerings can be positioned inside dots or at the ends of strings.

RELATED LINKS

Changing the chord diagram shape on page 883 Hiding/Showing fingerings in chord diagrams on page 882 Chord diagram font styles on page 887

Hiding/Showing chord diagrams

You can hide/show chord diagrams for any type of fretted instrument alongside all chord symbols on a per-player basis. You can also change the fretted instrument or tuning for which chord diagrams are shown.

NOTE

You cannot show chord diagrams when chord symbols are hidden entirely. However, you can show only the chord symbol or chord diagram for individual chord symbols.

PREREQUISITE

- You have input the chord symbols for which you want to show chord diagrams.
- Chord symbols are shown above the staves where you want to show chord diagrams.
- If you want to show chord diagrams using a custom fretted instrument tuning, you have imported the tuning or changed the tuning of a fretted instrument in the project accordingly.

PROCEDURE

- **1.** In Setup mode, in the **Players** panel, select a player for whom you want to hide/show chord diagrams.
- **2.** In the action bar, click **Player Settings** and choose one of the following options:
 - To show chord diagrams, choose Chord Diagrams > [Fretted instrument and tuning].
 For example, to show chord diagrams for a guitar in DADGAD tuning, choose Chord Diagrams > DADGAD guitar tuning.
 - To hide chord diagrams, choose **Chord Diagrams** > **No Chord Diagrams**.

RESULT

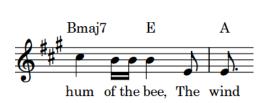
Chord diagrams are shown alongside all chord symbols for the selected player, as appropriate for the selected fretted instrument and tuning. Dorico Elements shows the simplest shape available for each chord; that is, shapes with the most open strings, easy barré positions, or finger positions closest to the nut.

If no chord diagram is available for a chord symbol, an empty chord diagram is shown.

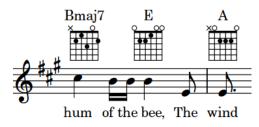
TIP

- You can also hide/show chord diagrams by right-clicking players and choosing these options from the context menu.
- You can edit empty chord diagrams to save a new chord diagram shape.

EXAMPLE



Chord symbols shown but chord diagrams hidden



Chord diagrams shown (standard guitar tuning)

RELATED LINKS

Players panel on page 108
Inputting chord symbols on page 310
Hiding/Showing chord symbols on page 859
Fretted instrument tuning on page 150
Hiding/Showing used chord diagrams grids on page 880
Changing the chord diagram shape on page 883

Showing only chord symbols or chord diagrams

You can show only the chord symbol or chord diagram for individual chord symbols on staves set to show chord diagrams. For example, if you want to show both the symbol and diagram for the first time each chord appears but only show chord symbols for subsequent instances. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- You have shown chord diagrams for the players on whose staves you want to show only chord symbols or chord diagrams.
- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing 3** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

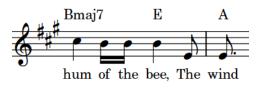
- **1.** Select the chord symbols whose shown symbols/diagrams you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Show only** in the **Chord Symbols** group.
- **3.** Choose one of the following options:
 - Chord Symbol
 - Chord Diagram

RESULT

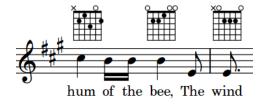
The selected chord symbols show only symbols or diagrams. In systems containing both chord symbols and chord diagrams, chord symbols are aligned further from the staff than chord diagrams.

If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

EXAMPLE



Chord symbols shown



Chord diagrams shown (standard guitar tuning)

RELATED LINKS
Properties panel on page 646
Changing the property scope on page 648
Engrave toolbox on page 490

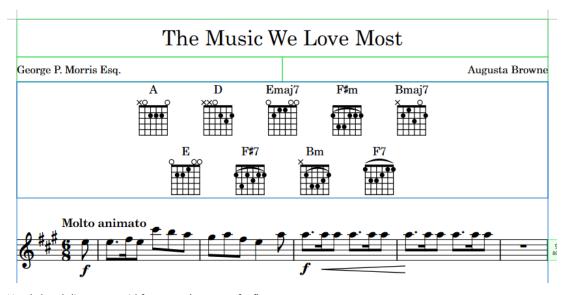
Used chord diagrams grids

Used chord diagrams grids are commonly used in lead sheets for pop and rock music. They are typically shown instead of chord diagrams alongside chord symbols in the music to save vertical space, and so they can appear at a larger scale size, making the details of each chord diagram easier to read.

By default, all chord diagrams in each flow are included in the corresponding used chord diagrams grid.

The order of chord diagrams in used chord diagrams grids is determined by the order in which they first appear in the flow. Each different voicing appears as a separate chord diagram, but each voicing appears only once in the grid.

If you input more chord symbols or change the voicing of existing chord diagrams, the used chord diagrams grids update automatically to include them.



Used chord diagrams grid frame at the start of a flow

In Engrave mode, used chord diagrams grids appear inside frames.

You can hide/show used chord diagrams grids in each layout independently. You can also include/exclude individual chord diagrams.

NOTE

- You cannot select or edit used chord diagrams grid frames.
- You cannot select or edit individual chord diagrams in used chord diagrams grids.

Hiding/Showing used chord diagrams grids

You can hide/show grids that contain all chord diagrams used in each flow in each layout independently. By default, used chord diagrams grids display standard guitar tuning chord diagrams, but you can change this to show chord diagrams for any fretted instrument or tuning.

PREREQUISITE

- You have removed page template overrides from all pages on which you want to show used chord diagrams grids.
- If you want to show chord diagrams using a custom fretted instrument tuning, you have imported the tuning or changed the tuning of a fretted instrument in the project accordingly.
- We recommend that you have input chord symbols and changed the shape of any chord symbols you want to appear with a specific voicing.

NOTE

It is customary not to show chord diagrams alongside chord symbols when showing a used chord diagrams grid, and you cannot change the chord diagram shape when chord diagrams are hidden.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- **2.** In the **Layouts** list, select the layouts in which you want to hide/show used chord diagrams grids at the start of flows.
 - By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, **Shift** -clicking adjacent layouts, and **Ctrl/Cmd** -clicking individual layouts.
- 3. In the category list, click **Chord Symbols and Diagrams**.
- In the Chord Diagrams section, activate/deactivate Show chord diagrams used at start of flow.
- **5.** Optional: Change the settings for used chord diagrams grids as required. For example, you can change the fretted instrument tuning for chord diagrams in the grid, their scale size, and the distance between chord diagrams and/or rows of chord diagrams.
- 6. Click Apply, then Close.

RESULT

Chord diagrams for all chord symbols used in the flow are shown in a grid above the start of each flow in the selected layouts, and are positioned according to the settings for the selected layouts. If flow headings are shown, the used chord diagrams grid appears below them.

NOTE

Even if no chord symbols exist in a flow, vertical space for the used chord diagrams grid is added at the start of the flow.

AFTER COMPLETING THIS TASK

You can change the margins of pages, music frames, and/or flow headings if required to accommodate used chord diagrams grids.

RELATED LINKS

Inputting chord symbols on page 310
Creating new chord diagram shapes on page 885
Defining capos for used chord diagrams grids on page 162
Fretted instrument tuning on page 150
Margins on page 598
Removing page template overrides on page 633

Including/Excluding chord diagrams from used chord diagrams grids

You can include/exclude individual chord diagram shapes from used chord diagrams grids. This allows you to control how many shapes appear for the same chord.

By default, all chord diagrams in each flow are included in the corresponding used chord diagrams grid.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing 3** is selected in the Engrave toolbox.

PROCEDURE

1. Select the chord symbols whose diagram shape you want to include/exclude from used chord diagrams grids. You can do this in Write mode and Engrave mode.

NOTE

To exclude a chord diagram that occurs multiple times in the flow, you must select all occurrences.

2. In the Properties panel, activate/deactivate **Exclude from chords used at start of flow** in the **Chord Symbols** group.

RESULT

The selected chord diagrams are excluded from used chord diagrams grids when the property is activated for all occurrences of the corresponding shape in the flow.

The selected chord diagrams are included in used chord diagrams grids when the property is deactivated for at least one occurrence of the corresponding shape.

RELATED LINKS

Properties panel on page 646 Engrave toolbox on page 490 Hiding/Showing chord diagrams on page 877 Changing the chord diagram shape on page 883

Hiding/Showing fingerings in chord diagrams

You can hide/show fingerings in chord diagrams shown alongside chord symbols and in used chord diagrams grids independently of each other and in each layout independently. You can choose whether fingerings appear inside dots or at the ends of strings.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- **2.** In the **Layouts** list, select the layouts in which you want to hide/show fingerings in chord diagrams.

By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, **Shift** -clicking adjacent layouts, and **Ctrl/Cmd** -clicking individual layouts.

- 3. In the category list, click Chord Symbols and Diagrams.
- **4.** In the **Chord Diagrams** section, activate/deactivate the following options, individually or together:
 - To hide/show fingerings in chord diagrams shown alongside chord symbols, activate/ deactivate Show fingerings in chord diagrams.
 - To hide/show fingerings in used chord diagrams grids, activate/deactivate **Show fingerings in chord diagrams at start of flow**.
- **5.** Choose one of the following options for **Fingerings position**:
 - Inside dot
 - At end of string
- 6. Click Apply, then Close.

RESULT

Fingerings are shown in the corresponding position in chord diagrams in the selected layouts when the options are activated, and hidden when they are deactivated. This also affects whether fingerings appear in the **Edit Chord Diagram** dialog.

EXAMPLE







Fingerings shown inside dots



Fingerings shown at the ends of strings

AFTER COMPLETING THIS TASK

You can change the fingerings shown in chord diagrams when editing their shape.

RELATED LINKS

Used chord diagrams grids on page 879 Creating new chord diagram shapes on page 885 Edit Chord Diagram dialog on page 885 Fingering on page 952

Resetting chord diagram fingerings

You can reset changes you have made to fingerings in individual chord diagrams without resetting other changes to the shape.

PREREQUISITE

If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the chord diagrams whose fingerings you want to reset. You can do this in Write mode and Engrave mode.
- 2. Choose Edit > Notations > Chord Symbols and Diagrams > Reset Chord Diagram Finger Numbering. You can also choose this option from the context menu.

Changing the chord diagram shape

You can change the chord diagram shape shown at individual rhythmic positions; for example, if you require a shape with a different voicing. Many chords have multiple playable shapes.

You can also apply your changes to all other instances of the same chord for instruments with compatible tunings.

PREREQUISITE

If you are in Engrave mode, **Graphic Editing** Is selected in the Engrave toolbox.

PROCEDURE

1. Select the chord diagram whose shape you want to change. You can do this in Write mode and Engrave mode.

NOTE

You can only change the shape of a single chord diagram at a time.

- **2.** Change the shape in any of the following ways:
 - To cycle through all the available shapes for the selected chord, press Alt/Opt-Q.
 - To open the **Choose Chord Diagram** dialog and see all the available shapes for the selected chord at once, press **Shift-Alt/Opt-Q**.
- 3. Optional: In the **Choose Chord Diagram** dialog, select the shape you want to use.

TIP

If the shape you require is not available, you can click **Edit**, which allows you to create a new shape.

- **4.** Click **OK** to save your changes and close the dialog.
- **5.** Optional: To apply the new shape to other instances of the same chord for instruments with compatible tunings, choose **Edit** > **Notations** > **Chord Symbols and Diagrams** > **Copy**

Shape to Matching Chord Symbols. You can also choose this option from the context menu.

RESULT

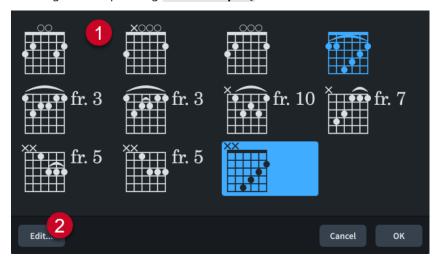
The shape shown for the selected chord diagram is changed. This also updates all other chord diagrams using the same fretted instrument tuning at the same rhythmic position.

Your most recently selected chord diagram shapes are automatically shown when you subsequently input the same chord symbols at other rhythmic positions in the flow.

Choose Chord Diagram dialog

The **Choose Chord Diagram** dialog allows you to view all available chord diagram shapes for the selected chord and select the one you want to use.

• You can open the **Choose Chord Diagram** dialog in Write mode by selecting a chord diagram and pressing **Shift-Alt/Opt-Q**.



The **Choose Chord Diagram** dialog comprises the following:

1 Available chord diagrams

Displays all the valid chord diagram shapes for the selected chord and allows you to select a different shape to show at the selected rhythmic position. Shapes you have created yourself appear in a different color.

2 Edit

Opens the **Edit Chord Diagram** dialog, which allows you to edit the shape of chord diagrams, including changing the number of frets shown, stopped fret positions, and the starting fret number.

RELATED LINKS

Edit Chord Diagram dialog on page 885

Creating new chord diagram shapes

You can create new chord diagram shapes by editing an existing one; for example, if you want an alternative voicing for a chord or to show a barré. Your changes to existing chord diagram shapes are saved as a new shape, they do not overwrite the existing one.

NOTE

In Dorico Elements, you cannot start new chord diagram shapes from scratch.

PROCEDURE

- 1. In Write mode, select the chord diagram whose shape you want to edit.
- 2. Press Shift-Alt/Opt-Q to open the Choose Chord Diagram dialog.
- 3. Click Edit to open the Edit Chord Diagram dialog.
- **4.** Edit the shape and settings of the chord diagram as required. For example, you can change open strings to omitted strings, change the stopped fret position on strings to change the corresponding string pitch, or change the fingering of individual stopped fret positions.
- **5.** Optional: If you want the shape to be available for chords with different start fret positions, activate **Chord may be moved along the neck**.
- 6. Click Save, then Close.

RESULT

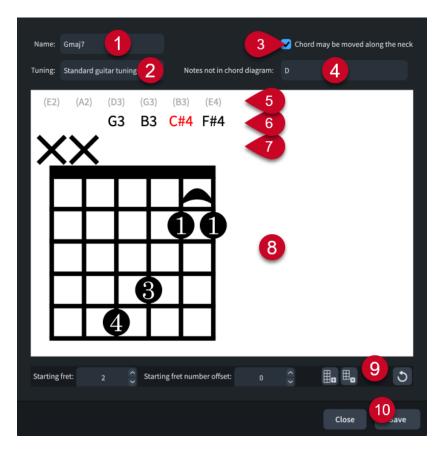
The new shape is saved and is used for the selected chord diagram. The new shape also becomes available for any other chord for which it is valid.

Edit Chord Diagram dialog

The **Edit Chord Diagram** dialog allows you to edit the shape of individual chord diagrams, including changing the number of frets shown, stopped fret positions, and the starting fret number.

You can open the Edit Chord Diagram dialog in any of the following ways:

- In Write mode by opening the **Choose Chord Diagram** dialog, selecting the chord diagram whose shape you want to edit, and clicking **Edit**.
- In Engrave mode by double-clicking a chord diagram, or selecting it and pressing **Return**.



The **Edit Chord Diagram** dialog contains the following options and sections:

1 Name

Displays the name of the chord whose chord diagram you are editing in the dialog. You cannot change this name.

2 Tuning

Displays the fretted instrument and tuning for the current chord diagram.

3 Chord may be moved along the neck

Allows you to specify whether or not the shape of the chord diagram can be reused at other fret positions; for example, by playing open strings with a barré at higher fret positions.

4 Notes not in chord diagram

Displays any pitches that are part of the chord but not currently included in the chord diagram.

5 Open string pitch

Displays the open pitch of the corresponding string for reference.

6 Current string pitch

Displays the current pitch of the corresponding string if it is open or stopped. If the pitch of a string is not part of the chord, the string pitch appears red.

7 String status

Displays the current usage status of the corresponding string and allows you to switch the status of individual strings between open and omitted by clicking in this row.

- O: Open string
- X: Omitted string
- No symbol: Stopped string

8 Chord diagram shape editor

Displays the current arrangement of stopped frets using dots and allows you to change the chord diagram shape. You can move stopped frets by clicking at the required positions. Each string can only have a single stopped fret position.

If two or more strings are stopped at the same fret, you can hide/show a barré by clicking any of the dots at that fret position.

You can change fingerings by double-clicking them and entering a new number, including **0** to show no fingering or **T** for thumb fingerings on the lowest string.

9 Action bar

Contains options that allow you to edit and change the number of frets.

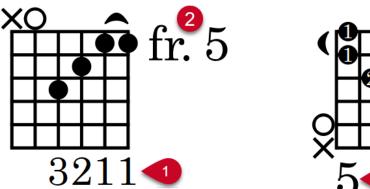
- **Starting fret**: Changes the fret number of the highest fret in the chord diagram.
- **Starting fret number offset**: Changes the offset of the starting fret number. For example, if you want the starting fret label to appear beside the second fret down the chord diagram in order to include a barré.
- Add fret :: Adds a fret to the bottom of the chord diagram.
- **Remove fret** :: Removes a fret from the bottom of the chord diagram.
- **Reset Chord Diagram** : Removes your changes to the chord diagram and resets it to its default shape.

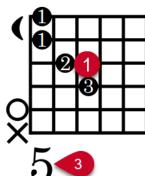
10 Save

Saves the chord diagram shape and updates the selected chord diagram in the music area. The shape also becomes available as an alternative shape for other compatible chords.

Chord diagram font styles

There are different font styles for fingerings and starting fret numbers in chord diagrams. You can change different aspects of these fonts in the **Edit Font Styles** dialog, such as changing their font size to make chord diagram fingerings appear smaller.





The following font styles are used for chord diagrams:

- **Chord Diagram Fingering Font**: Used for fingerings in chord diagrams, both inside dots and at the ends of strings. However, fingerings inside dots never appear larger than dots, regardless of the font size.
- **2 Chord Diagram Fret Number Font**: Used for starting fret numbers in vertical chord diagrams.
- **3 Chord Diagram Horizontal Fret Number Font**: Used for starting fret numbers in horizontal chord diagrams.

RELATED LINKS
Edit Font Styles dialog on page 737
Hiding/Showing fingerings in chord diagrams on page 882
Changing the chord diagram shape on page 883

Clefs

Clefs are the symbol at the start of every system that give the notes on the staff context; that is, the clef tells you which note of the scale applies to each line or space of the staff. To minimize the number of ledger lines required for notes, different clefs are typically used according to the register of instruments.

The common clefs are:

- Treble clef, or G clef, whose spiral shape centers around G, normally the G above middle C.
- The bass clef, or F clef, in which two dots are shown either side of the line corresponding to F, normally the F below middle C.
- The C clef, in which the center of the bracket to the right of the clef's thick vertical line is positioned on the line that corresponds to C, normally middle C. When positioned on the middle line of the staff, the C clef is known as the alto clef. When positioned on the second staff line from the top, the C clef is known as the tenor clef.









The E below middle C shown in a treble clef

The E below middle C shown in a bass clef

The E below middle C shown in a C (alto) clef

The E below middle C shown in a C (tenor) clef

In Dorico Elements, notes are automatically positioned on staves according to the prevailing clef.

Initial clefs at the start of flows and systems appear full size, while mid-system clef changes are automatically scaled down.



Many instruments in Dorico Elements have variants that show alternative clefs according to the layout transposition by default. You can select the appropriate instrument variant from the instrument picker when adding or changing instruments.

NOTE

- You can only select clefs that you have input. You cannot select initial clefs at the start of flows or clefs shown automatically at the start of each system.
- You can hide/show clefs in individual layouts, according to the layout transposition, and at the start of single-staff systems.
- If clef changes occur at the start of a new system or page, a cautionary clef is shown at the end of the previous system. In Dorico Elements, the clefs shown at the end of one system and at the start of the next system are the same item, not separate items. You cannot hide cautionary clefs.

RELATED LINKS

Input methods for clefs and octave lines on page 321 Clefs with octave indicators on page 895 Instrument picker on page 110 Cautionary key signatures on page 1005 Cautionary time signatures on page 1362

Showing clefs after grace notes

According to convention, clefs are positioned before grace notes so this is the default in Dorico Elements. However, in some circumstances you might want to position clefs between grace notes and normal notes.

PREREQUISITE

If you are in Engrave mode, **Graphic Editing** 3 is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the clefs you want to show after grace notes. You can do this in Write mode and Engrave mode.
- 2. Choose **Edit** > **Notations** > **Clef** > **After Grace Notes**. You can also choose this option from the context menu.

RESULT

The selected clefs are positioned between normal notes and grace notes.

NOTE

You can reset the position of clefs relative to grace notes by selecting the clefs whose position you want to reset and choosing **Edit** > **Notations** > **Clef** > **Reset Clef Position**. You can also choose this option from the context menu.

EXAMPLE







Treble clef after grace notes to align with bass clef

RELATED LINKS

Engrave toolbox on page 490

Moving clefs graphically

You can move individual clefs graphically without affecting the positions of any other items.

PREREQUISITE

Note Spacing is selected in the Engrave toolbox.

PROCEDURE

1. In Engrave mode, select the square note spacing handle above the clef you want to move.



A circular handle appears beside the clef.

2. Press **Tab** to select the circular handle.



- **3.** Move the handle in any of the following ways:
 - To move it a standard amount to the right or left, press Alt/Opt plus the corresponding arrow key. For example, press Alt/Opt-Left Arrow to move handles to the left.
 - To move it a large amount, press Ctrl/Cmd plus the standard key command; for example, Ctrl/Cmd-Alt/Opt-Left Arrow.
 - To move it a moderate amount, press Shift plus the standard key command; for example, Shift-Alt/Opt-Left Arrow.
 - To move it a small amount, press **Ctrl/Cmd Shift** plus the standard key command; for example, **Ctrl/Cmd-Shift-Alt/Opt-Left Arrow**.

NOTE

You cannot move note spacing handles with the mouse, you can only move them using the keyboard.

RESULT

The clef is moved graphically to the right/left without affecting other items at the same rhythmic position.

TIP

You can also change **Spacing offset** in the **Clefs** group of the Properties panel to move clefs horizontally. However, this also affects global note spacing around the rhythmic position of the clef.

The **Spacing offset** property in the **Clefs** group of the Properties panel is not available when **Note Spacing** is activated.

RELATED LINKS

Note spacing on page 494

Hiding/Showing clefs

You can hide/show individual clefs in layouts of any transposition; for example, if some clef changes are only necessary in full scores to avoid ledger lines. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing 3** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** Select the clefs you want to hide, or the signposts of clefs you want to show. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate/deactivate **Hide** in the **Clefs** group.

RESULT

The selected clefs are hidden when **Hide** is activated, and shown when it is deactivated. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

Signposts are shown at the position of each hidden clef. However, signposts are not printed by default.

TIP

- You can hide/show clef signposts by choosing View > Signposts > Clefs.
- You can assign a key command for Hide/Show Item on the Key Commands page in Preferences.

RELATED LINKS

Properties panel on page 646
Changing the property scope on page 648
Engrave toolbox on page 490
Input methods for clefs and octave lines on page 321
Key Commands page in the Preferences dialog on page 58
Signposts on page 438

Hiding/Showing clefs according to layout transpositions

You can show individual clefs only in layouts that are either concert or transposed pitch. For example, due to their transpositions, some instruments require clef changes in concert pitch scores to avoid excess ledger lines, but do not require those clef changes in their transposed pitch parts.

By default, all clefs appear in all layouts.

TIP

Many instruments in Dorico Elements have variants that show alternative clefs according to the layout transposition by default. You can select the appropriate instrument variant from the instrument picker when adding or changing instruments.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the clefs or signposts of clefs you want to hide/show according to the layout transposition. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Show for transposition** in the **Clefs** group.
- **3.** Choose one of the following options:
 - Concert Pitch
 - Transposing Pitch

RESULT

The selected clefs only appear in layouts with the corresponding transposition. In layouts where clefs are hidden, they are indicated by signposts.

Hidden clefs have no effect on note and staff spacing.

RELATED LINKS

Engrave toolbox on page 490
Instrument picker on page 110
Making layouts transposed/concert pitch on page 173
Transposing instruments on page 130
Signposts on page 438

Hiding/Showing clefs at the start of systems

By default, clefs are shown at the start of all systems. You can hide/show clefs at the start of single-staff systems from the second system onwards in each flow independently.

Hiding clefs on single-staff systems after the first system is a convention used in hand-copied lead sheets, usually in combination with hiding key signatures and showing systemic barlines.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-N to open Notation Options.
- 2. In the Flows list, select the flows in which you want to hide/show clefs after the first system. By default, only the current flow is selected when you open the dialog. You can select other flows by clicking Select All in the action bar, clicking and dragging across multiple flows, Shift -clicking adjacent flows, and Ctrl/Cmd -clicking individual flows.
- 3. In the category list, click **Clefs**.
- 4. Choose one of the following options for Clefs at start of systems following first system:
 - Show clefs
 - Hide clefs
- 5. Click Apply, then Close.

RESULT

Clefs are hidden or shown at the start of single-staff systems from the second system onwards in the selected flows.

NOTE

Clefs are always shown at the start of systems that contain more than one staff.

RELATED LINKS

Hiding/Showing systemic barlines on single-staff systems on page 803 Hiding/Showing key signatures at the start of systems on page 1003

Changing the octave of clefs

You can change the octave shift of individual clefs. For example, to accommodate different horn and bass clarinet transposition conventions. You can change the octaves of clefs in concert pitch and transposed pitch layouts independently.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, Graphic Editing 3 is selected in the Engrave toolbox.
- You have opened a layout with the required transposition in the music area. For example,
 if you want to change the octave of clefs in concert pitch, you have opened a concert pitch
 layout.
- If you want to change the octave of initial clefs, you have input clefs at the start of each flow.

PROCEDURE

- **1.** Select the clefs whose octave you want to change. You can do this in Write mode and Engrave mode.
- **2.** In the Properties panel, activate **Octave shift** in the **Clefs** group.
- **3.** Change the value in the value field.

RESULT

The octave of the selected clefs is changed in all layouts with the same transposition. For example, **1** shifts clefs up one octave, and **-1** shifts clefs down one octave.

The pitches of notes on the staves of the selected clefs are adjusted automatically. For example, if you shift a clef up one octave, notes after the clef appear an octave lower than they do without the octave shift.

TIP

- You can specify octave shifts when inputting clefs using the clefs and octave lines popover.
- You can also change whether Dorico Elements respects or ignores octave indicators on clefs, such as treble G clef, octave above.

RELATED LINKS

Engrave toolbox on page 490 Input methods for clefs and octave lines on page 321 Concert vs. transposed pitch on page 174

Clefs with octave indicators

Clefs with octave indicators indicate that notes are played in a different register to the one notated. An octave indicator above the clef indicates that notes are played higher than notated, while an octave indicator below the clef indicates that notes are played lower than notated.

Of these clefs, only the treble clef 8 below is still commonly used for tenor vocal parts.



Traditionally, clef octave indicators were used as a reminder of transposing instruments; however, in more recent music, some composers use clef octave indicators as an alternative to octave lines for extended passages. Therefore, Dorico Elements ignores clef octave indicators by default. However, transposing instruments are always transposed correctly automatically. For example, notes belonging to piccolo instruments are automatically notated an octave lower than their pitch in playback, regardless of whether they have a clef with an octave indicator. You can change whether Dorico Elements respects or ignores clef octave indicators in each flow independently.

RELATED LINKS

Transposing instruments on page 130 Concert vs. transposed pitch on page 174 Octave lines on page 897 Input methods for clefs and octave lines on page 321

Respecting/Ignoring clef octave indicators

Traditionally, clef octave indicators were used as a reminder of transposing instruments; however, in more recent music, some composers use clef octave indicators as an alternative to octave lines for extended passages. You can change whether Dorico Elements respects or ignores clef octave indicators in each flow independently.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-N to open Notation Options.
- 2. In the Flows list, select the flows in which you want to respect/ignore clef octave indicators. By default, only the current flow is selected when you open the dialog. You can select other flows by clicking Select All in the action bar, clicking and dragging across multiple flows, Shift -clicking adjacent flows, and Ctrl/Cmd -clicking individual flows.
- 3. In the category list, click Clefs.
- 4. Choose one of the following options for Clefs with octave indicators:
 - Ignore octave indicator
 - Respect octave indicator
- 5. Click **Apply**, then **Close**.

RESULT

The handling of clefs with octave indicators is changed in the selected flows. When clef octave indicators are respected, the pitches of notes on staves with clefs with octave indicators are

adjusted automatically. For example, notes with treble G clefs, octave above, appear an octave lower than they do when clef octave indicators are ignored.

RELATED LINKS

Changing the octave of clefs on page 894 Hiding/Showing clefs according to layout transpositions on page 892

Octave lines

Octave lines indicate where notes are played higher/lower than they appear in the score or part. They are dashed or dotted horizontal lines with an italic numeral at the start. The numeral indicates the number of pitches by which the phrase is changed, such as 8 for one octave and 15 for two octaves.

Octave lines that indicate notes are played higher than notated are placed above the staff, while octave lines that indicate notes are played lower than notated are placed below the staff.







A treble clef phrase notated at pitch

The treble clef phrase with an octave above line

The treble clef phrase with a two octaves above line







A bass clef phrase notated at pitch The bass clef phrase with an

octave below line

The bass clef phrase with a two octaves below line

In Dorico Elements, pitches are adjusted automatically when an octave line is present. You do not have to change the register of the notes within octave lines.

Octave lines should be horizontal, meaning they can take up significant vertical space, as octave lines are usually placed outside all other notations. However, they can be placed within slurs and tuplet brackets if the slur or tuplet bracket is longer than the octave line.

Octave lines can continue across system and page breaks. It is customary to show the numeral again at the start of each system as a reminder. Cautionary octave line numerals are usually parenthesized and the suffix is optional.

RELATED LINKS

Input methods for clefs and octave lines on page 321 Clefs with octave indicators on page 895 Lines on page 1174

Positions of octave lines

By default, octave lines that indicate notes are played higher than written are placed above the staff, while octave lines that indicate notes are played lower than written are placed below the staff.

You can move octave lines to new rhythmic positions in Write mode. They are automatically positioned to avoid collisions.

You can move octave lines graphically in Engrave mode, but this does not change the rhythmic positions to which they apply.

RELATED LINKS

Input methods for clefs and octave lines on page 321 Moving notes/items rhythmically on page 448 Moving items graphically on page 501 Tucking index properties on page 504

Changing the alignment of octave line numerals relative to notes

You can change whether the left edge, center, or right edge of individual octave line numerals is aligned with the first note to which each octave line applies. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, Graphic Editing 3 is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- 1. Select the octave lines whose numeral alignment relative to notes you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate L alignment in the Octave Lines group.
- **3.** Select one of the following options from the menu:
 - Left
 - Center
 - Right

RESULT

The alignment of the numerals of the selected octave lines is changed. For example, if you select **Right**, the right edge of the selected octave line numerals is aligned with the first noteheads to which the octave lines apply. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490

Changing the position of octave line numerals relative to accidentals

You can change whether the numerals at the start of individual octave lines are positioned on noteheads or accidentals. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, Graphic Editing I is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** Select the octave lines whose numeral alignment relative to accidentals you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **L position** in the **Octave Lines** group.
- **3.** Choose one of the following options:
 - Notehead
 - Accidental

RESULT

The alignment of the numerals of the selected octave lines is changed. For example, if you choose **Accidental**, the octave line numerals are aligned with the accidental on the first noteheads to which the octave lines apply. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

Hiding/Showing octave lines

You can hide/show individual octave lines in layouts of any transposition; for example, if some octave lines are only necessary in full scores to avoid ledger lines. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- Properties is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** 3 is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** Select the octave lines you want to hide, or the signposts of octave lines you want to show. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate/deactivate Hide in the Octave Lines group.

RESULT

The selected octave lines are hidden when **Hide** is activated, and shown when it is deactivated. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

Signposts are shown at the position of each hidden octave line. However, signposts are not printed by default.

TIP

- You can hide/show octave line signposts by choosing View > Signposts > Octave Lines.
- You can assign a key command for Hide/Show Item on the Key Commands page in Preferences.

RFLATED LINKS

Properties panel on page 646
Changing the property scope on page 648
Engrave toolbox on page 490
Hiding/Showing clefs on page 892
Signposts on page 438
Key Commands page in the Preferences dialog on page 58

Octave lines in Engrave mode

In Engrave mode, each octave line has three square handles. You can use these handles to move the start/end of octave lines graphically, and to lengthen/shorten octave line hooks.



An octave line in Engrave mode

- The start handle moves the start of octave lines graphically. You can move this handle to the right/left. When using the keyboard, you can also move this handle upwards/downwards to move the whole octave line.
- The top end handle moves the end of octave lines graphically. You can move this handle to the right/left.
- The bottom end handle changes the length of the hook. You can move this handle upwards/ downwards.

If octave lines cross system and frame breaks, you can move the line segments on each side of the break independently.

RELATED LINKS

Moving items graphically on page 501 Lengthening/Shortening items on page 419 Tucking index properties on page 504

Changing the vertical stacking order of octave lines

You can change the placement of individual octave lines relative to other objects in the vertical stack by changing their tucking index value. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

According to general convention, octave lines are placed outside all other objects, but there are some instances where they can go inside other objects; for example, inside a slur if that slur is longer than the octave line.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing 3** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** In Engrave mode, select the octave lines whose placement in the vertical stack you want to change.
- 2. In the Properties panel, activate **Tucking index** in the **Octave Lines** group.
- **3.** Change the value in the value field.
 - **0** positions items closest to notes. The higher the number, the further the item is positioned from notes in the stacking order.

RESULT

The placement of the selected octave lines in the vertical stacking order is changed. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

RELATED LINKS

Properties panel on page 646
Changing the property scope on page 648
Engrave toolbox on page 490
Changing the vertical order of playing techniques on page 1165
Tucking index properties on page 504

Cues

Cues are passages of music shown in instrumental parts that are played by a different player, usually to help orientate players before entries or solos following a significant passage of rests.

Cues can also be used to assist with co-ordination or tuning between players, or to indicate material that the player might be asked to double.



A cue in a timpani part showing music from the bassoons

NOTE

In Dorico Elements, you cannot input or edit cues. However, cues are shown if you import or open a project that contains them.

Dynamics

Dynamics indicate the loudness of the music and can be combined with expressive text to give further clarification about how to perform the music. Dynamics can indicate an immediate change in volume or a gradual change over a specified duration.



A phrase with multiple different dynamics

You can add modifiers to dynamics that can give stylistic direction context alongside the volume level, such as f espressivo, which indicates that a passage is played loudly but also with expressive feeling.

While almost all expressive text is written in italics, dynamics such as ff and pp use a bold italic font.

RELATED LINKS

Input methods for dynamics on page 302 Voice-specific dynamics on page 913 Groups of dynamics on page 930 Linked dynamics on page 931 Dynamics editor on page 677 Exporting text on page 101

Types of dynamics

Dorico Elements categorizes dynamics into different groups according to their function.

Immediate dynamics

Immediate dynamics apply to the note to which they are attached until the next dynamic marking, and indicate an immediate change from any previous dynamic. Immediate dynamics include dynamic symbols, such as pp or f, and dynamic modifiers, such as subito or subi

Gradual dynamics and hairpins

Gradual dynamics indicate a change in volume that happens incrementally over the specified duration. They usually appear either as hairpins or as text instructions, such as *cresc*. or *dim*..

Gradual dynamics can also have dynamic modifiers that qualify the change in volume, such as *poco*, *molto*, *poco a poco*, and *niente*.

In Dorico Elements, a hairpin can be shown as *messa di voce*, which shows a pair of hairpins. In some cases, this is easier than having separate lines for each half of the pair.

Force/Intensity of attack

These dynamics, such as fz and sffz, indicate that a note has a stronger attack than is usually expected for the dynamic, similar to an accent articulation.

Combined dynamics

Combined dynamics, such as fp or p-mf, specify a sudden change of dynamic.

You can create custom combined dynamics in Dorico Elements, and control the intensity of each dynamic in the pair, in the **Combined Dynamics** section of the Dynamics panel. For example, you can make dynamics such as *pppf*, *fff-mp*, and *ffff pppp*.

NOTE

Combined dynamics must include one f level and one p level.

RELATED LINKS

Gradual dynamics on page 918

Messa di voce hairpins on page 925

Niente markings on page 928

Dynamic modifiers on page 914

Hiding/Showing immediate dynamics on page 909

Changing the appearance/position of subito modifiers on page 916

Changing the appearance of sforzando/rinforzando dynamics on page 911

Hiding/Showing combined dynamic separators on page 909

Positions of dynamics

By default, dynamics are placed below instrumental staves, where they can be read alongside the notes, and above vocal staves. This way, they do not clash with lyrics placed below the staff, and are still close enough to the notes to be read simultaneously.

Immediate dynamics, such as **pp** or **f**, are centered on the notehead to which they apply. The beginnings of gradual dynamics are centered on the notehead from which they begin, or immediately after an immediate dynamic at the same position. The ends of gradual dynamics are centered on the notehead at which they end, or immediately before an immediate dynamic at the same position.

The staff-relative placement of dynamics varies, depending on their function and the type of player. For example, dynamics are placed below instrumental staves and above vocal staves by default. This ensures dynamics are kept as close to the staff as possible for legibility but are not placed between noteheads and lyrics on vocal staves. For grand staff instruments, such as piano or harp, dynamics are usually placed between the two staves, but can be placed both above and below when each staff requires separate dynamics.

In general, dynamics are not placed within the staff, as hairpins in particular become very hard to read. They are also not usually placed within tuplet brackets. Dynamics are placed outside of notations such as slurs, which must be kept close to noteheads, but inside pedal lines, which can be placed further from noteheads and still be clearly understood.

You can move dynamics to different rhythmic positions in Write mode. They are automatically positioned to avoid collisions.

NOTE

When using the mouse, you can only move and lengthen/shorten dynamics to noteheads. When using the keyboard, you can move and lengthen/shorten dynamics according to the current rhythmic grid resolution.

You can move dynamics graphically in Engrave mode; however, this does not change the rhythmic positions to which they are attached.

RELATED LINKS

Moving the center of messa di voce hairpins on page 926 Changing the staff-relative placement of items on page 423 Moving notes/items rhythmically on page 448 Lengthening/Shortening items on page 419 Moving items graphically on page 501 Gradual dynamics in Engrave mode on page 919

Changing the horizontal beat-relative position of dynamics

You can position individual dynamics before or after the beat. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** 3 is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** Select the dynamics whose position relative to the beat you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Beat-relative position** in the **Dynamics** group.
- **3.** Choose one of the following options:
 - Before
 - After

RESULT

The beat-relative position of the selected dynamics is changed. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

EXAMPLE



A dynamic positioned before the beat



A dynamic positioned after the beat

RELATED LINKS

Erasing the background of dynamics on page 911 Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490

Changing the alignment of dynamics relative to noteheads

Immediate dynamics, such as *ff* and *mp*, are usually horizontally aligned with the optical center of noteheads. However, you can change the horizontal alignment of immediate dynamics individually. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing ?** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** Select the dynamics whose alignment relative to noteheads you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Text alignment** in the **Dynamics** group.
- **3.** Choose one of the following options:
 - Align optical center with notehead 🔝
 - Left-align with notehead 🖫
 - Align optical center with left of notehead

RESULT

The alignment of the selected immediate dynamics is changed. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

Aligning dynamics

You can graphically align individually selected dynamics in a row without grouping/ungrouping them; for example, if system breaks in part layouts are different to the full score layout and so require parts of different groups of dynamics to be aligned. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- **Graphic Editing !** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

- 1. In Engrave mode, select the dynamics you want to align.
- **2.** Choose **Edit** > **Notations** > **Dynamics** > **Align Dynamics**. You can also choose this option from the context menu.

RESULT

The selected dynamics are aligned in a row with the dynamic within the selection that was furthest from the staff. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490 Resetting the position of items on page 425 Groups of dynamics on page 930

General placement conventions for hairpins relative to barlines

In Dorico Elements, the ends of hairpins align with the left edge of the note to their right. This can include hairpins extending across barlines.

Hairpins that end on the first note of a bar extend across the preceding barline in the following cases:

- If there is no immediate dynamic on the first note in the next bar.
- If there is a time signature or key signature change at the barline that increases the gap between the end of the current bar and the first note in the new bar.

Dorico Elements avoids hairpins overlapping barlines by a small amount, as this is less visually clear. However, this means that the same dynamic phrase on different staves can appear differently if one of the staves does not have a barline join extending below it.



The hairpin ends are not aligned because the barline does not extend beyond the bottom staff

You can allow/disallow hairpins across barlines if the hairpin ends on the first note in the next bar. Disallowing hairpins across barlines ensures hairpins appear the same length on all staves.

Allowing/Disallowing hairpins across barlines

You can allow/disallow hairpins across barlines when they end on the first note in the next bar; for example, so all hairpins appear the same length across multiple staves that do not all have

barline joins. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** Select the hairpins you want to allow/disallow across barlines. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Barline interaction** in the **Dynamics** group.
- **3.** Choose one of the following options:
 - Stop before
 - Continue

RESULT

The selected hairpins are allowed across barlines when you choose **Continue**, and disallowed when you choose **Stop before**. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

Changing dynamic levels

You can change the levels of dynamics without reopening the dynamics popover and for multiple different dynamics simultaneously; for example, if you want to increase the dynamic level of all dynamics in a phrase.

PROCEDURE

- 1. In Write mode, select the dynamics whose dynamic level you want to change.
- **2.** Change the dynamic level in one of the following ways:
 - To increase the dynamic level, choose Edit > Notations > Dynamics > Increase
 Dynamic Intensity.
 - To decrease the dynamic level, choose Edit > Notations > Dynamics > Decrease
 Dynamic Intensity.

TIP

You can also choose these options from the context menu.

RESULT

The dynamic level of the selected dynamics is increased/decreased. For example, increasing the dynamic level of a mf dynamic changes it to f.

TIP

You can assign key commands for these options on the **Key Commands** page in **Preferences**.

RELATED LINKS

Dynamics editor on page 677
Changing existing items on page 421
Dynamic modifiers on page 914
Key Commands page in the Preferences dialog on page 58

Hiding/Showing immediate dynamics

You can hide/show individual immediate dynamics such as f and pp; for example, if you only want to show the dynamic modifier, such as "sim.", without its accompanying immediate dynamic. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** 3 is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- 1. Select the immediate dynamics you want to hide, or the signposts of immediate dynamics you want to show. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate/deactivate **Hide intensity marking** in the **Dynamics** group.

RESULT

The selected immediate dynamics are hidden when **Hide intensity marking** is activated, and shown when it is deactivated. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

If no other dynamic exists at their rhythmic position, they are indicated by signposts. However, signposts are not printed by default.

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490 Dynamic modifiers on page 914 Input methods for dynamics on page 302 Signposts on page 438

Hiding/Showing combined dynamic separators

You can hide/show different separators in combined dynamics individually. For example, if you want to separate some fp dynamics with slashes. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

By default, only combined dynamics with at least one *mezzo* dynamic in the pair, such as *mf-p*, show a separator.

PREREQUISITE

The lower zone is shown.

- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** Select the combined dynamics whose separator you want to hide/show. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Separator shown** in the **Dynamics** group.
- **3.** Activate/Deactivate the corresponding checkbox.
- **4.** Optional: If you showed separators, activate **Separator** and select one of the following options from the menu:
 - Hyphen
 - Colon
 - Space
 - Slash

RESULT

Separators are shown when the **Separator shown** checkbox is activated, and hidden when it is deactivated. The separator shown follows your selection for **Separator**. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

RELATED LINKS

Types of dynamics on page 903

Changing the appearance/position of subito modifiers on page 916

Parenthesizing dynamics

You can show individual dynamics in parentheses; for example, to indicate editorial dynamics that were not in the original manuscript. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** Select the dynamics you want to parenthesize. You can do this in Write mode and Engrave mode.
- $\textbf{2.} \quad \text{In the Properties panel, activate } \textbf{Parenthesized} \text{ in the } \textbf{Dynamics} \text{ group}.$

RESULT

Parentheses are shown around each selected dynamic. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

Deactivating **Parenthesized** removes parentheses from the selected dynamics.

Changing the appearance of sforzando/rinforzando dynamics

You can change the appearance of individual rfz and sfz dynamics. For example, if you want some sfz dynamics to appear as sf. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

NOTE

These steps do not apply to force/intensity of attack dynamics with other intensities, such as effz.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, Graphic Editing 3 is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- 1. Select the *rfz* and/or *sfz* dynamics whose appearance you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate rfz/sfz style in the Dynamics group.
- **3.** Choose one of the following options:
 - sf rf
 - sfzrfz

RESULT

The appearance of the selected rfz and/or sfz dynamics is changed. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

RELATED LINKS

Properties panel on page 646

Engrave toolbox on page 490

Abbreviating gradual dynamics on page 924

Changing the appearance/position of subito modifiers on page 916

Erasing the background of dynamics

You can erase the background of individual dynamics; for example, to ensure dynamics remain legible when crossing barlines. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- Properties is selected in the lower zone toolbar.
- **Graphic Editing ?** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- 1. In Engrave mode, select the dynamics whose backgrounds you want to erase.
- 2. In the Properties panel, activate **Erase background** in the **Dynamics** group.

RESULT

The backgrounds of the selected dynamics are erased. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

Deactivating **Erase background** returns the selected dynamics to the default non-erased background.

NOTE

This does not affect hairpins, including stems crossed by hairpins.

EXAMPLE





Dynamic with non-erased background

Dynamic with erased background

AFTER COMPLETING THIS TASK

You can change the padding between dynamics and each edge of their erased areas.

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490 Positions of dynamics on page 904 Dynamic modifiers on page 914

Changing the erasure padding of dynamics

You can change the erasure padding of individual dynamics, including changing the padding between dynamics and each edge of their erased areas independently. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

Erasure padding considers the prefix/suffix separately from immediate dynamics and also takes into account ascenders/descenders in the text. This can cause the erasure padding to appear larger below the dynamic than above, such as for "espressivo" due to the "p". In such cases, you can change the padding on the affected edge to make the padding appear symmetrical.

PREREQUISITE

- The lower zone is shown.
- **Properties is** is selected in the lower zone toolbar.

- **Graphic Editing I** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- 1. In Engrave mode, select the dynamics whose erasure padding you want to change.
- **2.** In the Properties panel, activate the **Erasure padding** properties, individually or together, in the **Dynamics** group.
 - L changes the padding between dynamics and their left edge.
 - R changes the padding between dynamics and their right edge.
 - **T** changes the padding between dynamics and their top edge.
 - B changes the padding between dynamics and their bottom edge.
- 3. Change the values in the value fields.

RESULT

Increasing the values increases the padding, decreasing the values decreases the padding. This also affects the area considered for collision avoidance. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

Voice-specific dynamics

Voice-specific dynamics only apply to a single voice on a staff, which allows you to specify different dynamics for each voice in multiple-voice contexts or for the separate staves of grand staff instruments. By default, dynamics apply to all voices on all staves belonging to a single instrument, including grand staff instruments.

Inputting voice-specific dynamics allows you to show different dynamics for multiple voices on a staff, or to highlight an inner melody voice in a piano part. Voice-specific dynamics change the dynamics of each voice in playback independently.

NOTE

- You can only input voice-specific dynamics when the caret is active, such as during note
 input. Voice-specific dynamics apply to the voice indicated by the quarter note symbol beside
 the caret.
- Voice-specific dynamics only affect playback automatically for sounds that use velocity to control dynamics. When using playback devices that control dynamics in other ways, such as with CC, you must enable independent voice playback to hear different dynamics in different voices for the same instrument.

RELATED LINKS

Input methods for dynamics on page 302
Caret on page 214
Enabling independent voice playback on page 530
Dynamics editor on page 677
Extra staves on page 1300

Dynamic modifiers

Modifiers add further detail to dynamics than simply their volume level, and can help guide how a player performs a note or phrase. Modifiers include *poco a poco*, *molto* and *subito*. They are also known as "expressive text".



Modifiers accompanying immediate and gradual dynamics

In Dorico Elements, modifiers must accompany either a dynamic level, such as p or f, or a gradual dynamic.

You can input dynamic modifiers by entering them into the dynamics popover alongside an immediate dynamic or by clicking available options in the Dynamics panel. You can also add dynamic modifiers to existing dynamics.

You can add modifiers both before and after immediate dynamics. Modifiers can also appear either inside hairpins or above/below the start of hairpins.

TIP

You can hide immediate dynamics if you only want to show the modifier.

RELATED LINKS

Input methods for dynamics on page 302

Hiding/Showing immediate dynamics on page 909

Adding poco a poco text to gradual dynamics on page 923

Changing the appearance of sforzando/rinforzando dynamics on page 911

Showing consecutive hairpins as continuous on page 921

Exporting text on page 101

Adding modifiers to existing dynamics

You can add modifiers both before and after dynamics after they have been input; for example, if you want to add "sim." instead of repeating dynamics across multiple phrases.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, Graphic Editing J is selected in the Engrave toolbox.

- **1.** Select the dynamics to which you want to add modifiers. You can do this in Write mode and Engrave mode.
- **2.** In the Properties panel, activate the following properties, individually or together, in the **Dynamics** group:
 - To add modifiers before dynamics, activate **Prefix**.
 - To add modifiers after dynamics, activate Suffix.
- **3.** Enter the text you want to add into the corresponding value field.

4. Press Return.

RESULT

The text you entered is added to the selected dynamics as a modifier. Text entered into the **Prefix** field appears before immediate dynamics, while text entered into the **Suffix** field appears after immediate dynamics.

Modifiers appear below hairpins placed below the staff and above hairpins placed above the staff, and are aligned with the start of the hairpin.

Deactivating the properties removes the corresponding modifiers from the selected dynamics.

NOTE

Deactivating properties permanently deletes any custom text entered.

AFTER COMPLETING THIS TASK

If you added modifiers to hairpins, you can show them centered inside the hairpins.

RELATED LINKS

Properties panel on page 646

Engrave toolbox on page 490

Niente markings on page 928

Adding poco a poco text to gradual dynamics on page 923

Input methods for dynamics on page 302

Abbreviating dynamic modifiers

You can show individual *subito/possibile* dynamic modifiers with either abbreviated or full text, such as *sub*. or *subito*. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, Graphic Editing ? is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

- **1.** Select the dynamics whose *subito/possibile* modifiers you want to abbreviate. You can do this in Write mode and Engrave mode.
- **2.** In the Properties panel, activate the following properties, individually or together, in the **Dynamics** group:
 - Subito style
 - Possibile style
- **3.** Choose one of the following options:
 - subito or possibile
 - sub. or possib.

RESULT

The length of the corresponding dynamic modifiers is changed. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

RELATED LINKS

Abbreviating gradual dynamics on page 924 Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490

Changing the appearance/position of subito modifiers

You can change the appearance and/or position of individual *subito* modifiers. For example, if you want to show *subito* modifiers as *sub*. on the left of dynamics, or fp *sub*. dynamics as sfp. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing 3** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** Select the dynamics whose *subito* modifier appearance and/or position you want to change. You can do this in Write mode and Engrave mode.
- **2.** In the Properties panel, activate **Subito position** and choose one of the following options:
 - Left
 - Right
- **3.** Optional: If you selected dynamics that include at least one f, activate **Subito forte style** and choose one of the following options:
 - sub.f
 - *sf*

RESULT

The appearance and/or position of the selected *subito* modifiers is changed. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

RELATED LINKS

Changing the appearance of sforzando/rinforzando dynamics on page 911

Showing modifiers centered inside hairpins

You can show modifiers you have added to hairpins, such as *poco a poco* or *molto*, centered both horizontally and vertically inside hairpins. You can do this for the current layout and frame chain only, or for all layouts and frame chains. By default, modifiers appear at the start of and either above or below hairpins.

PREREQUISITE

• The lower zone is shown.

- **Properties s** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** 3 is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** Select the hairpins whose modifiers you want to show centered inside hairpins. You can do this in Write mode and Engrave mode.
- **2.** In the Properties panel, activate **Modifier position** in the **Dynamics** group.
- **3.** Choose one of the following options:
 - Above or Below
 - Inside

RESULT

Modifiers on the selected hairpins appear centered inside the hairpins. They automatically erase their background so the text does not collide with the hairpin lines. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

EXAMPLE







Modifier (molto) centered inside hairpin

RELATED LINKS

Properties panel on page 646

Changing the property scope on page 648

Engrave toolbox on page 490

Changing the erasure padding of dynamics on page 912

Showing consecutive hairpins as continuous on page 921

Moving gradual dynamic modifiers graphically

You can move individual dynamic modifiers graphically, independently of the gradual dynamics to which they apply. For example, if you want specific modifiers to appear further from hairpins than other modifiers. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing 3** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** In Engrave mode, select the gradual dynamics whose modifiers you want to move graphically.
- 2. In the Properties panel, activate **Modifier offset** in the **Dynamics** group.
- Change the values in the value fields.X moves modifiers horizontally, Y moves modifiers vertically.

RESULT

The selected gradual dynamic modifiers are moved graphically. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490

Gradual dynamics

Gradual dynamics indicate a change in volume that happens incrementally over the specified duration. They usually appear either as hairpins or as text instructions, such as *cresc.* or *dim.*.

The change in volume indicated by individual hairpins is shown in the distance between the two diverging lines at their apertures.

Hairpins typically have a closed end and an open end. If the hairpin crosses a system or frame break, the closed end appears with a small gap so that the hairpin is not misread as two separate hairpins.

A pair of hairpins without an immediate dynamic in the middle is known as a messa di voce.



A phrase containing multiple gradual dynamics

In Dorico Elements, gradual dynamics appear as hairpins by default. You can change the appearance of individual gradual dynamics. For example, if you want to show a particularly long crescendo using *cresc*. text rather than a hairpin.

You can show gradual dynamic text in the following ways:

- cresc. or dim.: Abbreviated text with no continuation line
- cresc... or dim...: Abbreviated text with a dotted continuation line
- *cre-scen-do* or *di-mi-nuen-do*: The full word spread out across the duration of the gradual dynamic

In Write mode, ungrouped gradual dynamics each have start and end handles that show their duration.



NOTE

Pairs of separate hairpins are treated differently than *messa di voce* hairpins. For example, separate hairpins each have start and end handles in Write mode, whereas *messa di voce* hairpins share a single center handle.

RELATED LINKS

Input methods for dynamics on page 302
Dynamic modifiers on page 914
Groups of dynamics on page 930
Allowing/Disallowing hairpins across barlines on page 907
Moving the center of messa di voce hairpins on page 926

Gradual dynamics in Engrave mode

In Engrave mode, each hairpin has multiple handles that you can move to adjust their graphical position, length, angle, and aperture.

- The middle handles at the start/end of hairpins change their start/end offset positions. Moving one middle handle changes the angle of the hairpin.
- The pair of outer handles at the start/end of hairpins, and in the center of messa di voce
 hairpins, adjusts the corresponding aperture. These handles are linked and mirror each
 other: moving one handle also moves the other handle by the same amount, but in the
 opposite direction. This ensures that hairpins remain symmetrical.



A hairpin with the start middle handle selected in Engrave mode



A *messa di voce* hairpin with a center aperture handle selected in Engrave mode

NOTE

- You can also change the aperture of individual hairpins by activating **Hairpin open aperture** and/or **Hairpin closed aperture** in the **Dynamics** group of the Properties panel.
 - Increasing the value makes the corresponding aperture wider. Decreasing the value makes the corresponding aperture narrower.
- Pairs of separate hairpins are treated differently than messa di voce hairpins. For example, separate hairpins each have start and end handles in Write mode, whereas messa di voce hairpins share a single center handle.

You can move separate hairpins independently; for example, if you want to adjust the graphical peak of a pair of hairpins. You can move the graphical peak of *messa di voce* hairpins by moving their center.

EXAMPLE



A diminuendo that goes across a system break: aperture at the start is open, aperture at the end is closed. It appears slightly open to indicate the diminuendo continues after the system break.



The diminuendo continues onto a new system: aperture at the start is open, aperture at the end is closed.

RELATED LINKS

Input methods for dynamics on page 302
Groups of dynamics on page 930
Niente markings on page 928
Moving the center of messa di voce hairpins on page 926
Moving items graphically on page 501
Note spacing on page 494

Changing the appearance of gradual dynamics

You can change the appearance of individual gradual dynamics; for example, to show a particularly long crescendo using "cresc." text rather than a hairpin. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, Graphic Editing 3 is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

- **1.** Select the gradual dynamics whose appearance you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Gradual style** in the **Dynamics** group.
- **3.** Select one of the following options from the menu:
 - Hairpin
 - cresc./dim.
 - cresc...
 - cre scen do
- **4.** Optional: Customize the appearance of the selected gradual dynamics in one of the following ways, depending on their **Gradual style**:
 - If you selected **Hairpin**, activate **Hairpin line style** and choose one of the available options.
 - If you selected **cresc./dim.**, **cresc...**, or **cre scen do**, activate **Diminuendo style** and select one of the available options from the menu.

- If you selected cresc..., activate Continuation line style and choose one of the available options.
- If you selected **cre scen do**, activate **Final syllable at end of line**, then activate/ deactivate the corresponding checkbox.

RESULT

The appearance of the selected gradual dynamics is changed. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

EXAMPLE

cresc.

cresc..... cre_scen_do

Hairpin cresc./dim. cresc.... cre - scen - do

RELATED LINKS

Showing modifiers centered inside hairpins on page 916
Turning existing gradual dynamics into messa di voce hairpins on page 927
Adding niente markings to existing gradual dynamics on page 928

Showing consecutive hairpins as continuous

You can show two or more consecutive hairpins of the same direction that are separated by immediate dynamics as a single hairpin that continues through any immediate dynamics; for example, to indicate that you want a single smooth change in dynamic rather than multiple separate ones. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The hairpins are grouped together.
- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing 3** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** In Engrave mode, select at least one of the hairpins in each group that you want to show as continuous.
- 2. In the Properties panel, activate **Hairpin shown as continuation** in the **Dynamics** group.
- **3.** Activate the corresponding checkbox.

RESULT

Consecutive hairpins of the same direction in the selected groups appear as a single continuous hairpin. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

EXAMPLE





Hairpin not shown as continuation

Hairpin shown as continuation

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490 Grouping dynamics together on page 930

Hiding/Showing flared ends on hairpins

Flared ends are usually shown at the end of crescendo hairpins and indicate a sudden burst in volume at the end of the crescendo. You can hide/show flared ends on any hairpin.

NOTE

You can only show flared ends on hairpins with solid lines.

PREREQUISITE

- The lower zone is shown.
- **Properties i** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** 3 is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the hairpins on which you want to hide/show flared ends. You can do this in Write mode and Engrave mode.
- **2.** In the Properties panel, activate/deactivate **Flared end** in the **Dynamics** group.

RESULT

A flared end is shown on the selected dynamics when **Flared end** is activated, and hidden when it is deactivated.

EXAMPLE



Crescendo hairpin with flared end hidden

Crescendo hairpin with flared end shown

Changing the size of flared ends on hairpins

You can change the height and width of flared ends on individual hairpins. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing !** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- 1. In Engrave mode, select the flared hairpins whose flare size you want to change.
- **2.** In the Properties panel, activate **Flare size** in the **Dynamics** group.
- **3.** Change the flare size of the selected hairpins in any of the following ways:
 - To change the width of the flared ends, change the value for W.
 - To change the height of the flared ends, change the value for **H**.

RESULT

The size of the flared ends on the selected hairpins is changed. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

- Increasing the **W** value makes the selected flared ends wider by starting their angle earlier in the hairpin, decreasing the value makes the selected flared ends narrower.
- Increasing the **H** value makes the selected flared ends taller, decreasing the value makes them shorter.
- Changing the values independently of each other changes the angle of the flared ends. For example, increasing the **W** value without changing the **H** value makes the angle shallower.

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490

Adding poco a poco text to gradual dynamics

You can add poco a poco text to individual gradual dynamics after they have been input.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing 1** is selected in the Engrave toolbox.

- **1.** Select the gradual dynamics to which you want to add *poco α poco*. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Poco a poco (little by little)** in the **Dynamics** group.

RESULT

Poco a poco is shown immediately after gradual dynamic text, below hairpins placed below the staff, and above hairpins placed above the staff.

Deactivating **Poco a poco (little by little)** removes *poco a poco* text from the selected gradual dynamics.

EXAMPLE







Hairpin gradual dynamic with poco a poco

AFTER COMPLETING THIS TASK

You can show *poco* a *poco* text centered inside hairpins.

RELATED LINKS

Properties panel on page 646

Changing the property scope on page 648

Engrave toolbox on page 490

Showing modifiers centered inside hairpins on page 916

Abbreviating gradual dynamics

You can show individual gradual dynamics with either abbreviated or full text, such as *cresc.* or *crescendo*. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** 3 is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** Select the gradual dynamics that you want to abbreviate. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Abbreviate** in the **Dynamics** group.
- **3.** Activate/Deactivate the corresponding checkbox.

RESULT

The selected gradual dynamics appear with abbreviated text when the checkbox is activated, and full text when the checkbox is deactivated. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

RELATED LINKS

Changing the appearance of gradual dynamics on page 920

Abbreviating dynamic modifiers on page 915

Gradual dynamic spacing

Dorico Elements ensures that hairpins can always be clearly distinguished by giving hairpins a minimum default length. However, this can affect note spacing.

The default minimum hairpin length is three spaces. When hairpins are shorter than this, they can sometimes be confused with the accent articulation mark. Therefore, if you add a hairpin to a note which would make the hairpin less than three spaces long, the spacing of the note is changed to ensure the hairpin meets the minimum length.

RELATED LINKS

Moving the center of messa di voce hairpins on page 926 Gradual dynamics in Engrave mode on page 919

Gradual dynamics truncated by immediate dynamics

A hairpin is automatically truncated if an immediate dynamic is positioned within its range, either before or after the hairpin is input.

The hairpin remains tied to its originally designated rhythmic positions, even if graphically it appears shorter. This means that if the immediate dynamic that truncated it is ever deleted, the hairpin extends up to its end or the next immediate dynamic within its range.

The examples demonstrate a crescendo hairpin that is truncated by two dynamics, but the hairpin extends to its total length as they are deleted. The dotted attachment line shows the link between the hairpin and the rhythmic position to which its end is attached.



A long hairpin truncated by a p

After deleting the p, the hairpin is now truncated by the f

Deleting both immediate dynamics allows the hairpin to extend to its full length

RELATED LINKS

Showing consecutive hairpins as continuous on page 921 Lengthening/Shortening items on page 419 Hiding/Showing attachment lines on page 426

Messa di voce hairpins

Messa di voce hairpins are single gradual dynamic items that appear as a pair of hairpins without an immediate dynamic in the middle. They indicate that within their duration, the volume either increases then decreases, or decreases then increases.



A phrase containing two messa di voce hairpins

In Write mode, *messa di voce* hairpins have three handles: one at the start, one at the end, and one in the center. This is different to separate, ungrouped hairpins, which each have a handle at the start and end.



You can move the graphical peak of *messa di voce* hairpins by moving their center. In Engrave mode, you can use *messa di voce* center handles to control their center aperture.

RELATED LINKS

Input methods for dynamics on page 302 Groups of dynamics on page 930 Gradual dynamics in Engrave mode on page 919 Note spacing on page 494

Moving the center of messa di voce hairpins

You can move the center of individual *messa di voce* hairpins rhythmically; for example, if you want them to peak on different notes.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, Graphic Editing 3 is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the *messa di voce* hairpins whose center you want to move. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Messa di voce inflection** in the **Dynamics** group.
- 3. Move the center of the selected *messa di voce* hairpins in any of the following ways:
 - To move them to the right, increase the value in the left value field.
 - To move them to the left, decrease the value in the left value field.
 - To move them to the left to grace notes at the rhythmic position set by the left value field, decrease the value in the right value field.

TIP

1 represents a quarter note.

RESULT

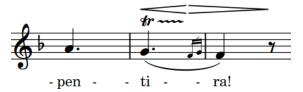
The centers of the selected *messa di voce* hairpins are moved rhythmically.

TIP

In Write mode, you can also click and drag *messa di voce* hairpin center handles to noteheads to the right/left.

EXAMPLE

For example, entering **1 1/2** into the left value field and **-1/2** into the right value field moves *messa di voce* hairpin centers a dotted quarter note to the right of their start position, and to the first of two sixteenth grace notes at that rhythmic position.



RELATED LINKS

Showing grace notes before/after barlines on page 986 Lengthening/Shortening items on page 419

Turning existing gradual dynamics into messa di voce hairpins

You can turn existing gradual dynamics into *messa di voce* hairpins; for example, if you change your mind about the dynamic phrasing in some bars.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, Graphic Editing 3 is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the gradual dynamics that you want to turn into *messa di voce* hairpins. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, choose **Messa di voce** for **Type** in the **Dynamics** group.

RESULT

The selected gradual dynamics are turned into *messa di voce* hairpins. The first direction follows the previous overall direction of the selected gradual dynamics.

TIP

You can also turn existing gradual dynamics into *messa di voce* hairpins by selecting them and clicking the corresponding buttons in the **Gradual Dynamics** section of the Dynamics panel.

You can also press **Shift-Alt/Opt-**, for a crescendo/diminuendo *messa di voce* hairpin, or **Shift-Alt/Opt-**. for a diminuendo/crescendo *messa di voce* hairpin.

RELATED LINKS

Properties panel on page 646 Engrave toolbox on page 490 Dynamics panel on page 309

Niente markings

Niente markings at the start/end of gradual dynamics indicate that the dynamic either increases from, or decreases to, silence.

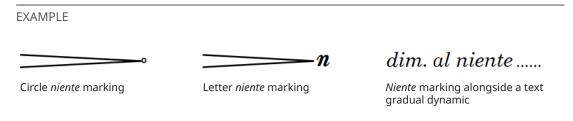
This effect works very well on strings and singers with vowels, but it cannot always be played literally. For example, singers with words beginning with consonants cannot begin from silence, nor can reed and brass instruments, as they have to achieve a certain air pressure before a note sounds.



Niente markings can be shown in the following ways, depending on the gradual dynamic style:

- For hairpins, *niente* markings can be shown as either a circle, or the letter "n".
- For text gradual dynamics, niente markings appear as "dal niente" for crescendos, and as "al niente" for diminuendos.

You can input gradual dynamics with *niente* markings in the same ways as inputting other dynamics. You can also add *niente* markings to existing gradual dynamics.



RELATED LINKS

Input methods for dynamics on page 302
Gradual dynamics in Engrave mode on page 919
Lengthening/Shortening items on page 419
Showing consecutive hairpins as continuous on page 921

Adding niente markings to existing gradual dynamics

You can add *niente* markings to, and remove them from, existing gradual dynamics; for example, if you change your mind about which diminuendos should decrease to silence.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.

- **1.** Select the gradual dynamics to which you want to add *niente* markings. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Niente** in the **Dynamics** group.

RESULT

Niente markings are added to the selected gradual dynamics.

TIP

- Deactivating the property removes *niente* markings from the selected gradual dynamics.
- You can also add *niente* markings to, and remove them from, existing gradual dynamics by selecting them and clicking **niente** in the **Gradual Dynamics** section of the Dynamics panel.

AFTER COMPLETING THIS TASK

You can change the appearance of individual *niente* hairpins; for example, if you want to show some *niente* hairpins with a circle but others with text.

Changing the appearance of niente hairpins

You can show *niente* hairpins in two ways in Dorico Elements, and you can change how they appear individually. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing 1** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** Select the hairpins whose *niente* style you want to change. You can do this in Write mode and Engrave mode.
- **2.** In the Properties panel, activate **Niente style** in the **Dynamics** group.
- **3.** Choose one of the following options:
 - Circle on hairpin
 - Text n

RESULT

The *niente* style of the selected hairpins is changed. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

EXAMPLE A niente shown as Circle on hairpin A niente shown as Text

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490

Groups of dynamics

Groups of dynamics are automatically aligned in a row and can be moved and edited as a group. When you move immediate dynamics within a group, the length of the hairpins on either side automatically adjust to compensate.





A group of dynamics

The same group of dynamics adjusts to compensate when the middle dynamic moves rhythmically.

A single dynamic, either immediate or gradual, is considered a group on its own.

Two or more dynamics are automatically grouped together if they immediately follow each other horizontally on the staff, were input together or in sequence, and have gradual dynamics between the immediate dynamics.

All of the dynamics in a group are highlighted when any of the dynamics in the group are selected.



NOTE

- Groups of dynamics apply project-wide, meaning you cannot have dynamics grouped one
 way in some layouts but differently in other layouts. However, you can graphically align
 selected dynamics independently of their groups.
- As well as horizontal groups of dynamics, you can also link groups of dynamics vertically if
 you want the same dynamics to appear on multiple staves. This can be useful when multiple
 instruments play the same dynamics simultaneously and you want to make the same change
 in all staves; for example, moving the peak of a crescendo to a later beat, or changing a f to
 a fff.

RELATED LINKS

Linked dynamics on page 931 Aligning dynamics on page 906 Inputting dynamics with the popover on page 302

Grouping dynamics together

You can manually group dynamics together that were not automatically grouped when they were input. Grouped dynamics are automatically aligned in a row and can be moved and edited as a group.

PROCEDURE

1. In Write mode, select the dynamics you want to group together.

2. Choose **Edit** > **Notations** > **Dynamics** > **Group Dynamics**. You can also choose this option from the context menu.

RESULT

The selected dynamics are grouped together. If the first dynamic in the group is linked to other staves, all dynamics in the group are added to those staves. This applies to all layouts in which the dynamics appear.

Ungrouping dynamics and removing dynamics from groups

You can ungroup dynamics so that all dynamics in the group become ungrouped. You can also remove only selected dynamics from groups while leaving other dynamics in the group.

This applies to all layouts in which the dynamics appear.

PROCEDURE

- **1.** In Write mode, select the dynamics you want to ungroup or remove from groups.
- **2.** Do one of the following:
 - To ungroup all dynamics in the selected groups, choose Edit > Notations > Dynamics > Ungroup Dynamics.
 - To remove only the selected dynamics from their groups, choose Edit > Notations > Dynamics > Remove from Group.

TIP

You can also choose these options from the context menu.

Linked dynamics

Identical dynamics at the same rhythmic position on multiple staves can be linked together. This happens automatically when you copy and paste dynamics between staves.

If you select one dynamic in a linked group, all other dynamics in the linked group appear highlighted. If one linked dynamic is moved to a new rhythmic position, all linked dynamics move.



Two linked dynamics with only the top dynamic selected



Moving just the top dynamic of the linked group automatically moves the other to match its new position.

Similarly, if you change one linked dynamic, for example, from p to mf, all dynamics linked to the changed dynamic are also changed. If you group other dynamics to one of the linked dynamics, such as a hairpin, the hairpin is added at the same position in all linked staves.

If one staff has another immediate dynamic before the end of a hairpin, the hairpin is truncated automatically. If you delete such a dynamic, the hairpin extends automatically up to the next immediate dynamic or to its full length, whichever comes first.





Two staves with linked dynamics, but the lower staff has another immediate dynamic that truncates the hairpin. Deleting the **mf** at the end of the first bar in the second staff causes the hairpin to extend to match the range of the top staff.

NOTE

- If you delete only some dynamics from a group that is linked to other staves, those dynamics
 are also deleted from the linked staves. If you delete a whole dynamic group from one staff,
 this does not affect linked dynamics on other staves.
- As well as vertically linked dynamics, you can also group dynamics horizontally. This automatically aligns the dynamics in a row and allows them to be moved and edited as a group.
- Linking or unlinking dynamics applies project-wide, meaning you cannot have dynamics linked one way in some layouts but differently in other layouts.

RELATED LINKS

Disabling automatic linking of dynamics and slurs when pasting on page 447 Groups of dynamics on page 930 Linked slurs on page 1275

Linking dynamics together

When you copy and paste identical dynamics to the same rhythmic position on other staves, those dynamics are linked together automatically. You can also manually link dynamics and groups of dynamics together that are not automatically linked to allow simultaneous editing.

NOTE

Groups of dynamics must be the same in order to link them together. For example, you can link two p dynamics together if neither is part of a group, but you cannot link them together if one is grouped with a hairpin.

- **1.** In Write mode, select the dynamics you want to link together.
- Choose Edit > Notations > Dynamics > Link. You can also choose this option from the context menu.

RESULT

The selected dynamics are linked together. If you later change one of the linked dynamics, all linked dynamics are changed to match. This applies to all layouts in which the dynamics appear.

RELATED LINKS

Groups of dynamics on page 930 Copying and pasting notes/items on page 445

Unlinking dynamics

You can unlink dynamics, including dynamics that were linked automatically. For example, if you want to lengthen/shorten gradual dynamics independently of each other.

PROCEDURE

- 1. In Write mode, select a dynamic in each linked group that you want to unlink.
- 2. Choose **Edit** > **Notations** > **Dynamics** > **Unlink**. You can also choose this option from the context menu.

RESULT

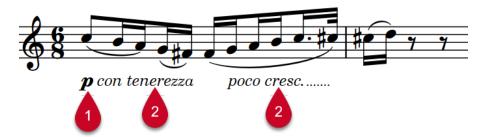
All dynamics in the linked groups are unlinked. This applies to all layouts in which the dynamics appear.

RELATED LINKS

Disabling automatic linking of dynamics and slurs when pasting on page 447

Dynamics font styles

There are different font styles for different types of dynamics. You can change different aspects of these fonts in the **Edit Font Styles** dialog, such as changing their font size to make dynamics appear larger.



The following font styles are used for dynamics:

- **1 Dynamic Music Text Font**: Used for dynamic glyphs, such as **pf** and **mp**. Must be SMuFL-compliant.
- **2 Dynamic Text Font**: Used for dynamic modifiers, such as *poco a poco* and *molto*, and gradual dynamics shown as text.

NOTE

Changes made to font styles apply to the entire project, including part layouts.

RELATED LINKS

Edit Font Styles dialog on page 737

Types of dynamics on page 903

Dynamic modifiers on page 914

Changing the default font family on page 743

Input methods for dynamics on page 302

Dynamics in playback

The volume settings for sustaining instruments and non-sustaining instruments vary in terms of their control of gradual dynamics.

Sustaining instruments

Sustaining instruments include string, wind, and brass instruments, because they can hold a note while being in control of its volume throughout.

Dorico Elements applies gradual dynamics to these instruments in playback.

Non-sustaining instruments

Non-sustaining instruments, such as piano, harp, marimba, and most percussion instruments, have no further control of the dynamic of notes after they have been struck. For this reason, non-sustaining software instruments often use note velocity for dynamics, because this is set at the start of the note.

TIP

You can control settings for each software instrument in the Expression Maps dialog.

RELATED LINKS

Dynamics editor on page 677

MIDI CC editor on page 684

Expression Maps dialog on page 745

Playback Options for dynamics

You can change how the dynamics of all instruments project-wide are interpreted in playback on the **Dynamics** page in **Playback Options**.

Dynamic Curve

The graph at the top of the **Dynamics** page in **Playback Options** maps a continuous curve. This curve determines how the volume of dynamics increases across the default range *pppppp* to *ffffff*.

A dynamic curve power of 1 creates a straight line, producing a steady dynamic increase. The difference between pppp and pp is the same as between p and pf.

A dynamic curve power higher than 2 creates a curved line, producing a faster dynamic increase in the middle of the range. The difference between pppp and pp is much smaller than the difference between p and mf.

The higher the dynamic curve power, the greater the contrast between dynamics in the middle of the range, and the smaller the contrast between dynamics at the ends of the range.

TIP

If your project uses a wide range of dynamics, including dynamics such as *pppp* and *fffff*, you might want a lower curve power with larger differences between the extremes of the range.

If your project has a smaller range of dynamics, such as a minimum of pp to a maximum of ff, you might prefer a higher curve power, so the differences between the dynamics in the middle of the range are more discernible. You might also prefer a smaller dynamic level range, such as -2 to 2 for this example.

Humanize

Humanize allows dynamics to vary randomly, to mimic the natural fluctuations in a live performance.

For sound libraries that use MIDI CC 1 to control dynamics, you can see the effect humanization has on dynamics in the MIDI CC 1 editor.

Polyphonic Instruments

In the **Polyphonic Instruments** section, you can enable/disable polyphonic voice balancing and rules for contrapuntal music, which automatically adjust dynamic levels between voices belonging to the same instrument.

These options are most useful for instruments that can play multiple musical lines simultaneously, such as piano, harp, guitar, and pitched percussion.

Note Dynamics

In the **Note Dynamics** section of the **Dynamics** page, you can set how much the volume of notes in playback is affected by stresses and articulation marks.

RELATED LINKS

Playback Options dialog on page 732 Changing dynamic levels on page 908 Playback techniques on page 770 Expression maps on page 744

VST Expression Maps for volume types

If you are using a third-party sound library, you may need to change or edit the expression map to make instruments respond to gradual dynamics. Otherwise, the sound library uses velocity by default.

The setup of the expression map for dynamics depends on how the instrument is configured. Consult the documentation for the sound library for further information.

Dorico Elements provides the following default expression maps:

- CC11 Dynamics for dynamics produced by changing MIDI channel expression
- Modulation Wheel Dynamics for dynamics produced by changing MIDI controller 1

TIP

You can edit expression maps in the **Expression Maps** dialog.

Enabling/Disabling pitch contour emphasis

Pitch contour emphasis emulates the subtle dynamic changes produced by performers, allowing melodies to play back more expressively. You can enable/disable pitch contour emphasis projectwide, and change how much it affects the dynamic level.

In general, performers increase dynamics when melodies rise in pitch, and decrease dynamics when melodies fall in pitch.

Pitch contour emphasis considers the pitch of notes, as well as their duration and position relative to other notes, on each staff independently to calculate changes to dynamic levels.

NOTE

- Pitch contour emphasis does not affect unpitched percussion instruments.
- In order to produce smooth transitions between phrases, pitch contour emphasis can reduce dynamic levels as well as increasing them.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-P to open Playback Options.
- 2. In the category list, click **Dynamics**.
- 3. In the **Humanize** section, activate/deactivate **Use pitch contour emphasis**.
- **4.** Optional: If you activated **Use pitch contour emphasis**, change its effect on the default dynamic level by changing the values for the following options:
 - Scale effect by
 - Maximum change to written dynamic

NOTE

Scale effect by never exceeds the Maximum change to written dynamic value.

5. Click Apply, then Close.

RELATED LINKS

Dynamics editor on page 677 Velocity editor on page 674 Enabling independent voice playback on page 530

Enabling/Disabling polyphonic voice balancing

Dorico Elements can identify melodies and bass notes in polyphonic music, and emphasize them by different amounts relative to any remaining accompanying notes. You can enable/disable rules for contrapuntal music project-wide, and change how much they affect the dynamic level.

- 1. Press Ctrl/Cmd-Shift-P to open Playback Options.
- **2.** In the category list, click **Dynamics**.
- **3.** In the **Polyphonic Instruments** section, activate/deactivate **Use automatic polyphonic instrument voice balancing**.
- **4.** Optional: If you activated **Use automatic polyphonic instrument voice balancing**, change the values of the available options.

5. Click Apply, then Close.

Enabling/Disabling dynamic rules for contrapuntal music

In addition to polyphonic voice balancing, Dorico Elements can identify contrapuntal themes specifically, and emphasize them and bass notes by different amounts, relative to any remaining accompanying notes. You can enable/disable rules for contrapuntal music project-wide, and change how much they affect the dynamic level.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-P to open Playback Options.
- **2.** In the category list, click **Dynamics**.
- **3.** In the **Polyphonic Instruments** section, activate/deactivate **Use rules for contrapuntal music**.
- **4.** Optional: If you activated **Use rules for contrapuntal music**, change the values of the available options.
- 5. Click Apply, then Close.

RELATED LINKS

Playback Options dialog on page 732 Enabling independent voice playback on page 530

Figured bass

Figured bass is a shorthand that uses figures to specify the harmony above the notated bass notes. It is particularly common in Baroque and early Classical music and in the parts of accompanying instruments, such as harpsichords and viols.

Figured bass informs performers about the intended harmony but allows room for interpretation, such as improvised arpeggiated phrases using notes from the chord.

Figures use a combination of Arabic numbers, accidentals, and horizontal hold lines to specify both the intervals above the bass note that make up the chord and its duration. For example, they show where suspensions resolve or when the bass note changes but the chord remains the same.

Tasto solo indications inform performers that sections should be played without harmony.



A basso continuo part with figured bass below the staff

In Dorico Elements, figured bass exists globally at the corresponding rhythmic positions by default because most music that includes figured bass is tonal, meaning players perform notes from the same chord. Therefore, you only have to input figures once, but they can appear above multiple or no staves as required and the figures automatically update according to the notes on each staff. However, in some circumstances it is necessary to specify different chords for different players at the same rhythmic position. In such cases, you can input local figured bass.

Dorico Elements calculates and saves the pitches implied by the figures you enter in relation to the lowest note at that rhythmic position. This semantic understanding of the harmony implied by figures allows Dorico Elements to update the displayed figures on different staves and if you transpose or change the pitch of notes.

When you transpose music that includes figured bass, Dorico Elements also transposes the figures accordingly.

Figured bass in Dorico Elements uses a bold roman font by default. You can edit the formatting of figured bass font styles. You can also edit the **Figured Bass Tasto Solo** paragraph style, which is used for *tasto solo* indications.

You can hide or show figured bass in each layout independently and only above the staves of specific players. You can also change whether figured bass appears above or below staves by default in each layout independently. Figures appear as signposts if Dorico Elements either does not normally show them, such as third intervals, or cannot identify the bass note for them, such as on a rest.

NOTE

Figured bass does not yet include notations commonly used for harmonic analysis, such as Roman numerals. This is planned for future versions.

RELATED LINKS

Inputting figured bass on page 385
Figured bass hold lines on page 942
Showing figured bass on rests on page 940
Showing single brackets on figured bass on page 941
Changing the staff-relative placement of figured bass on page 946

Hiding/Showing figured bass in layouts

Appearance of figured bass on page 948

You can hide/show figured bass in each layout independently and only above the staves of specific players. For example, you can show figured bass in the full score and bass part layouts but hide figured bass in the other part layouts.

Any player on whose staff you input figured bass is automatically set to show figured bass in the current layout.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- 2. In the Layouts list, select the layouts in which you want to hide/show figured bass. By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, Shift-clicking adjacent layouts, and Ctrl/Cmd -clicking individual layouts.
- 3. In the category list, click **Players**.
- **4.** In the **Figured Bass** section, activate/deactivate each player above/below which you want to show figured bass.
- 5. Click Apply, then Close.

RESULT

Figured bass is shown above/below all instruments belonging to the corresponding players in the selected layouts when their checkboxes are activated, and hidden when their checkboxes are deactivated. Figured bass is hidden completely when no checkboxes are activated.

AFTER COMPLETING THIS TASK

- You can change the staff-relative placement of figured bass.
- You can hide figured bass figures individually in layouts where figured bass is shown.

RELATED LINKS

Inputting figured bass on page 385 Changing the staff-relative placement of figured bass on page 946 Figured bass hold lines on page 942

Hiding/Showing figured bass figures individually

You can hide/show individual figured bass figures in layouts in which figured bass is shown. You can do this for the current layout and frame chain only, or for all layouts and frame chains. However, you cannot show individual figures in layouts where figured bass is hidden.

PREREQUISITE

• The lower zone is shown.

- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** Is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** Select the figured bass figures you want to hide, or the signposts of figures you want to show. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate/deactivate **Hidden** in the **Figured Bass** group.

RESULT

The selected figured bass figures are hidden when **Hidden** is activated, and shown when it is deactivated. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

Signposts are shown at the position of each hidden figure. However, signposts are not printed by default.

TIP

- You can hide/show figured bass signposts by choosing **View** > **Signposts** > **Figured Bass**.
- You can assign a key command for Hide/Show Item on the Key Commands page in Preferences.

RELATED LINKS

Properties panel on page 646
Changing the property scope on page 648
Engrave toolbox on page 490
Signposts on page 438
Key Commands page in the Preferences dialog on page 58

Showing figured bass on rests

By default, figured bass is hidden on rests because figures typically indicate harmony in relation to a bass note. You can show figured bass on individual rests; for example, if the harmony changes while the bass is resting. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- You have input figured bass at the positions of the rests.
- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing 1** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** Select the rests on which you want to show figured bass. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Show figured bass** in the **Notes and Rests** group.

RESULT

Figured bass is shown on the selected rests. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

Deactivating **Show figured bass** hides figured bass on selected rests again.

Showing single brackets on figured bass

You can show only a single left or right bracket on individual bracketed figured bass figures. For example, if you want to indicate that all figures between two bracketed figures are optional. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- You have input figured bass figures with brackets.
- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** 3 is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** Select the bracketed figures on which you want to show a single bracket. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Hide single bracket** in the **Figured Bass** group.
- **3.** Choose one of the following options:
 - Start
 - End

RESULT

Brackets are hidden on the corresponding side of the selected figures, leaving a single bracket on the other side. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

EXAMPLE





Brackets shown on both sides of all figures

Brackets shown at the start of the first figure and the end of the last figure only

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Showing brackets on figured bass hold lines on page 944 Bracketed noteheads on page 1047

Figured bass hold lines

Figured bass hold lines indicate that chords remain the same over changing notes in the bass.

By default, Dorico Elements shows hold lines for figures that have duration, but hides lines between suspensions and resolutions or after resolutions. You can hide/show hold and suspension lines for individual suspension figures.





Figure (selected) with no duration

Figure (selected) with duration and hold line

TIP

You can move figures graphically in Engrave mode, including changing the graphical length of hold lines.

RELATED LINKS

Inputting figured bass on page 385 Figured bass in Engrave mode on page 945 Grace notes on page 983

Hiding/Showing figured bass hold/suspension lines

You can hide/show suspension lines between suspension and resolution figures and hold lines after resolution figures, independently of each other.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing 3** is selected in the Engrave toolbox.

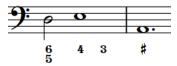
PROCEDURE

- **1.** Select the figured bass suspensions whose hold/suspension lines you want to hide/show. You can do this in Write mode and Engrave mode.
- **2.** In the Properties panel, activate the following properties, individually or together, in the **Figured Bass** group:
 - Line between susp. and resolution
 - Continue line after resolution
- 3. Activate/Deactivate the corresponding checkboxes.

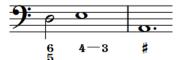
RESULT

Hold lines are shown between suspension and resolution figures and/or after resolutions in the selected figured bass suspensions when the corresponding checkboxes are activated, and hidden when the checkboxes are deactivated.

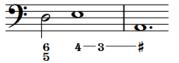
EXAMPLE



Suspension and hold lines both hidden



Suspension line between suspension and resolution shown



Suspension line between suspension and resolution and hold line after resolution both shown

RELATED LINKS

Properties panel on page 646 Engrave toolbox on page 490 Showing figured bass on rests on page 940 Moving figured bass resolutions on page 947

Lengthening/Shortening figured bass hold lines

You can change the duration of figured bass figures after they have been input, which changes the length of their hold lines. Lengthening a figure that was input without duration gives it duration and shows a hold line. You can also change the end positions of figured bass hold lines relative to notes.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** 3 is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the figured bass figures you want to lengthen/shorten. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Duration** in the **Figured Bass** group.
- **3.** Lengthen/Shorten the selected figured bass figures in any of the following ways:
 - To lengthen them, increase the value in the left value field.
 - To shorten them, decrease the value in the left value field.
 - To move their end to the left to a grace note at the rhythmic position set by the left value field, decrease the value in the right value field.

TIP

1 represents a quarter note.

- **4.** Do one of the following:
 - To position the end of hold lines to the right of noteheads and across grace notes, activate **Draw line through figures at end**.
 - To position the ends of hold lines to the left of noteheads and before grace notes, deactivate **Draw line through figures at end**.

RESULT

The duration of the selected figured bass figures, and the length of their hold lines, is changed.

TIP

You can also lengthen/shorten figured bass figures in the same ways as for other items.

EXAMPLE

These examples all have an overall duration of a half note; that is, 2 entered into the left value field.



deactivated

Draw line through figures at end Draw line through figures at end -1 1/4 entered into the right activated

value field and **Draw line through** figures at end activated

RELATED LINKS

Properties panel on page 646 Engrave toolbox on page 490 Figured bass in Engrave mode on page 945 Lengthening/Shortening items on page 419

Showing brackets on figured bass hold lines

You can show brackets on individual figured bass hold and suspension lines; for example, to indicate editorial hold lines.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.

PROCEDURE

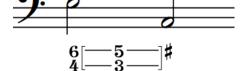
- 1. Select the figured bass hold/suspension lines on which you want to show brackets. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate the following properties, individually or together as appropriate for your selection, in the **Figured Bass** group:
 - **Bracket sus. lines**
 - **Bracket hold lines**
- **3.** Select one of the following options from each menu:
 - **Both ends**
 - **Start**
 - Fnd

RESULT

Brackets are shown at the corresponding ends of the selected figured bass hold/suspension lines.

EXAMPLE





Both ends brackets on hold lines

Start bracket on suspension lines and **End** bracket on hold lines

RELATED LINKS

Properties panel on page 646 Engrave toolbox on page 490 Inputting figured bass on page 385

Positions of figured bass

Figured bass is automatically organized into rows according to the number of rows required in each system independently. By default, rows are aligned at the top when below the staff and at the bottom when above the staff to minimize the gap between figured bass and the staff.

The vertical position of figured bass is determined by the staves above which they are set to appear and your per-layout setting for their staff-relative placement.

You can move individual figured bass figures to different rhythmic positions in Write mode. They are automatically positioned to avoid collisions. This includes Dorico Elements's kerning, which applies across whole systems to ensure all figures and alterations are legible.

You can move figures and hold lines graphically in Engrave mode, but this does not change the rhythmic positions to which they apply.

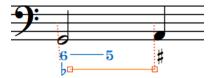
RELATED LINKS

Inputting figured bass on page 385
Hiding/Showing figured bass in layouts on page 939
Hiding/Showing figured bass hold/suspension lines on page 942
Lengthening/Shortening figured bass hold lines on page 943

Figured bass in Engrave mode

In Engrave mode, each figured bass hold line has two square handles, one at the start and one at the end. You can move these handles to adjust the graphical position and length of figured bass hold lines.

You can also move whole figured bass hold lines graphically.



Handles on a hold line in Engrave mode

Moving figures with hold lines moves them both together. Moving hold lines or hold line handles moves the hold lines independently of the figure. Dorico Elements automatically lengthens hold lines between suspensions and resolutions when you move resolution figures.

NOTE

- A single figure includes all numbers at that position. For example, you cannot select and move the **6** in a **6,4** figure independently of the **4**.
- If you want to move handles at the start/end of figured bass hold lines because you want to change their length, we recommend that you lengthen/shorten them rhythmically first before refining their graphical length.
- Multiple different properties in the **Figured Bass** group of the Properties panel are activated automatically when you move the corresponding figure, hold line, or hold line handle.
 - Main figure offset moves figures. X moves them horizontally, Y moves them vertically.
 - **Resolution offset** moves the resolution figure in suspensions. **X** moves them horizontally, **Y** moves them vertically.
 - **Line [n] offset** moves the start and end handles of hold lines in the corresponding figured bass row horizontally. **L** moves start (left) handles, **R** moves end (right) handles.
 - **Line [n] Y offset** moves whole hold lines in the corresponding figured bass row vertically.

Changing the staff-relative placement of figured bass

You can change the default staff-relative placement of all figured bass figures in each layout independently.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- **2.** In the **Layouts** list, select the layouts in which you want to change the staff-relative placement of figured bass.

By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, **Shift** -clicking adjacent layouts, and **Ctrl/Cmd** -clicking individual layouts.

- 3. In the category list, click **Players**.
- **4.** In the **Figured Bass** section, choose one of the following options for **Default placement**:
 - Above staff
 - Below staff
- 5. Click Apply, then Close.

RESULT

The default staff-relative placement of all figured bass figures in the selected layouts is changed.

TIP

You can also change the staff-relative placement of individual figured bass figures by selecting them and pressing **F**. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

EXAMPLE





Figured bass below the staff

Figured bass above the staff

RELATED LINKS

Changing the property scope on page 648

Moving figured bass resolutions

You can move resolution figures rhythmically, without affecting the position of the suspension figure or the overall duration of the figured bass suspension; for example, if you want a suspension to resolve on a different note.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** 3 is selected in the Engrave toolbox.

PROCEDURE

- 1. Select the resolution figures you want to move. You can do this in Write mode and Engrave mode
- 2. In the Properties panel, activate **Resolution pos.** in the **Figured Bass** group.
- **3.** Move the selected resolution figures in any of the following ways:
 - To move them to the right, increase the value in the left value field.
 - To move them to the left, decrease the value in the left value field.
 - To move them to the left to grace notes at the rhythmic position set by the left value field, decrease the value in the right value field.

TIP

1 represents a quarter note.

RESULT

The selected resolution figures are moved rhythmically.

TIP

In Write mode, you can also click and drag resolution figure handles to the right/left according to the current rhythmic grid resolution.

EXAMPLE

For example, entering **1** into the left value field and **-1/2** into the right value field moves resolution figures a quarter note to the right of suspension figures, and to the first of two sixteenth grace notes at that rhythmic position.



RELATED LINKS

Properties panel on page 646 Engrave toolbox on page 490 Figured bass hold lines on page 942 Figured bass in Engrave mode on page 945 Changing the rhythmic grid resolution on page 213

Appearance of figured bass

The appearance of individual figures is determined either by the default settings in Dorico Elements or your popover entry, depending on whether you instructed Dorico Elements to follow your entry literally when you input each figure.

When inputting figured bass, by default Dorico Elements interprets your entries and applies its default settings for the appearance of figured bass to them. You can specify that you want Dorico Elements to follow your entries exactly for individual figures; for example, if you are reproducing a piece of music and know in advance exactly how you want figures to appear.

You can reset individual figures that you input with the figured bass input setting **Follow input literally** so they follow the default settings, and you can fix the current appearance of individual figures.

Figured bass in Dorico Elements uses a bold roman font by default. You can edit the formatting of figured bass font styles. You can also edit the **Figured Bass Tasto Solo** paragraph style, which is used for *tasto solo* indications.

Figures appear as signposts if Dorico Elements either does not normally show them, such as third intervals, or cannot identify the bass note for them, such as on a rest.

RELATED LINKS

Figured bass hold lines on page 942 Inputting figured bass on page 385 Showing figured bass on rests on page 940 Showing single brackets on figured bass on page 941

Editing the figured bass font styles

You can edit the formatting of the font styles used for all figured bass figures project-wide; for example, if you want them to appear larger by default.

NOTE

These steps do not apply to *tasto solo* indications, which use the **Figured Bass Tasto Solo** paragraph style.

PROCEDURE

- 1. Choose **Library** > **Font Styles** to open the **Edit Font Styles** dialog.
- **2.** In the font styles list, select one of the following font styles:
 - Figured Bass Font: Used for bold figured bass figures
 - Figured Bass Text Font: Used for plain figured bass figures
- **3.** Activate the following options, individually or together, to change the corresponding aspect of the font:
 - Font family
 - Size
 - Style
 - Underlined

NOTE

You must choose a SMuFL-compliant font family for the Figured Bass Font font style.

- **4.** Optional: If you selected **Figured Bass Font**, activate **Substitutes** and change its substitute fonts as required.
- **5.** Click **OK** to save your changes and close the dialog.

RESULT

The formatting of the selected figured bass font style is changed project-wide.

RELATED LINKS

Edit Font Styles dialog on page 737 Paragraph Styles dialog on page 739

Simplifying figured bass compound intervals

You can simplify compound intervals in individual figured bass figures; that is, figures 9 and above. Some editions prefer to simplify compound intervals so figures reflect the first octave and appear out of order in the stack.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing 3** is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the compound figured bass figures you want to simplify. You can do this in Write mode and Engrave mode.
- **2.** In the Properties panel, activate **Show compound intervals as simple** in the **Figured Bass** group.

RESULT

The selected compound figures are simplified. Deactivating the property returns the selected figures to their default octave.

EXAMPLE





Figure with compound intervals

Figure with simplified compound intervals

RELATED LINKS

Properties panel on page 646 Engrave toolbox on page 490 Inputting figured bass on page 385

Fixing the current appearance of figured bass

You can fix the current appearance of individual figured bass figures; for example, if you input them with the input setting **Follow Engraving Options** but want to keep their current appearance, regardless of future changes you make to figured bass engraving options.

PREREQUISITE

If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the figured bass figures whose current appearance you want to fix. You can do this in Write mode and Engrave mode.
- 2. Choose Edit > Notations > Figured Bass > Force Current Appearance.

RESULT

The current appearance of the selected figures is fixed, meaning they are not affected by any future changes to figured bass engraving options.

NOTE

- You cannot access the Engraving Options dialog in Dorico Elements, as it is only available in Dorico Pro. However, fixing figures maintains their appearance if you share the project with other users who later change figured bass engraving options.
- You can assign a key command for **Force Current Appearance** on the **Key Commands** page in **Preferences**.

Resetting figured bass

You can reset individual figured bass figures; for example, if they were input with the figured bass input setting **Follow input literally**. Reset figures follow the default settings in Dorico Elements.

PREREQUISITE

If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the figured bass figures you want to reset. You can do this in Write mode and Engrave mode.
- 2. Choose Edit > Notations > Figured Bass > Reset Figured Bass.

RFSIIIT

The selected figured bass figures are reset to follow the default settings. This can affect their appearance and suspension duration.

TIP

You can assign a key command for **Reset Figured Bass** on the **Key Commands** page in **Preferences**.

RELATED LINKS

Engrave toolbox on page 490 Inputting figured bass on page 385 Key Commands page in the Preferences dialog on page 58

Fingering

Fingerings use numbers and letters to recommend which fingers players should use for notes. This can be useful for music aimed at players learning the instrument and for difficult musical passages where certain fingering patterns make the notes much easier to play.

Fingerings are often used in keyboard music, as players can use all ten fingers to play notes, and in guitar music, where fingerings are often used alongside fret positions. However, fingerings can also be useful for other instruments; for example, to indicate that string players should change the finger used to stop the string while holding the note, or to instruct wind players to use uncommon fingerings for particular notes in order to create a special sonic effect.



Piano music containing multiple fingerings, including a substitution fingering and alternative fingerings

Dorico Elements also provides fingerings for brass and fretted instruments. For example, you can specify which valves players should depress for instruments such as trumpet and horn, and you can specify the horn branch you want players to use for double horns. For fretted instruments, you can input fingerings for both hands.

Fingerings in Dorico Elements use a bold roman font by default, following accepted conventions for the appearance of fingerings.

RELATED LINKS

Inputting fingerings on page 269

Hiding/Showing fingering on page 959

Fingerings for fretted instruments on page 962

Fingerings for valved brass instruments on page 970

Fingering slides on page 967

Fingering font styles on page 960

String indicators on page 974

Hiding/Showing fingerings in chord diagrams on page 882

General placement conventions for fingering

Fingerings are placed as close as possible to the notes to which they apply, so the performer can read them easily and clearly.

In music for grand staff instruments, such as the piano and harp, it is accepted to place fingerings for the right hand above the top staff, and fingerings for the left hand below the

bottom staff. However, in dense contrapuntal music for these instruments, fingerings can be placed between the staves to follow the direction of the voices to which they apply.

Different conventions apply to fingerings for fretted instruments, as they require fingerings for both the right and left hands.

Right-hand fingering placement

By default, all right-hand fingerings are placed outside the staff and on the notehead side of notes, which can be above or below the staff depending on the stem direction. When shown beside notes inside the staff, Dorico Elements automatically joins adjacent notes with the same right-hand fingering with a bracket.

Left-hand fingering placement

Left-hand fingerings are usually positioned inside the staff and to the left of the notes to which they apply. However, they also must not collide with other items, such as accidentals and rhythm dots. Dorico Elements automatically calculates the most appropriate positions for left-hand fingerings and erases their backgrounds by default, which improves their readability when placed on staff lines.

RELATED LINKS

Fingerings for fretted instruments on page 962

Changing fingerings to substitution fingerings

Substitution fingerings indicate where players should change the finger used for the note. You can change existing fingerings to substitution fingerings.

PREREOUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing ?** is selected in the Engrave toolbox.

PROCEDURE

- 1. Select the fingerings you want to change to substitution fingerings. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Substitution** in the **Fingering and Positions** group.
- 3. Enter the fingering you want for the substitution into the value field.
- 4. Press Return.

RESULT

The selected fingerings are now shown as substitution fingerings. The deferred position of the substitution is the same as the original fingering by default, but you can change the rhythmic position of substitution fingerings.

RELATED LINKS

Properties panel on page 646 Engrave toolbox on page 490 Inputting fingerings on page 269

Changing the rhythmic position of substitution fingerings

Substitution fingerings are shown as immediate by default, meaning that the substitution takes place on the same note, but you can change the rhythmic position at which individual substitutions take place.

PREREQUISITE

If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the substitution fingering whose deferred rhythmic position you want to change. You can do this in Write mode and Engrave mode.
- 2. Change the rhythmic position of the substitution fingering in any of the following ways:
 - In Write mode, click and drag the circular handle to the right/left.
 - In Write mode and Engrave mode, activate **Substitution offset** in the **Fingering and Positions** group of the Properties panel.

Change the rhythmic position of substitutions as fractions of a quarter note (crotchet) by entering a value into the left value field, or by clicking the arrows beside the value field. Increasing the value moves substitutions to later positions, decreasing the value moves them to earlier positions.

NOTE

The right value field is for the grace note position at which substitutions occur, if applicable.

RESULT

The rhythmic position of the substitution fingering is changed.

Dorico Elements automatically arranges deferred substitutions so they are ordered appropriately alongside any fingerings that coincide with the substitution.

NOTE

You can only change the position of single substitution fingerings when dragging their handles with the mouse. However, you can change the positions of multiple substitution fingerings with **Substitution offset** in the **Fingering and Positions** group of the Properties panel.

Deferred substitutions are always shown with horizontal lines.

Changing existing fingerings

You can change fingerings after you have input them; for example, if you decide a different fingering would be better.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.

PROCEDURE

- 1. Select the fingerings you want to change. You can do this in Write mode and Engrave mode.
- **2.** In the Properties panel, enter the new fingering you want into the **Finger or position** value field in the **Fingering and Positions** group.
- 3. Press Return.

RESULT

The selected fingerings are changed.

TIP

You can also change existing fingerings in Write mode by opening the fingerings popover. Any existing fingerings on the selected note are shown in the popover.

RELATED LINKS

Properties panel on page 646 Engrave toolbox on page 490 Fingerings popover on page 270

Changing the staff-relative placement of fingerings

Dorico Elements automatically follows conventions for fingering placement, but you can show individual fingerings belonging to non-fretted instruments either above or below the staff. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

According to convention, keyboard instrument fingering is positioned above the right-hand staff, and below the left-hand staff. String and brass instrument fingering is always positioned above the staff.

NOTE

These steps only apply to non-fretted instruments.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing 1** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** Select the fingerings whose staff-relative placement you want to change. You can do this in Write mode and Engrave mode.
- **2.** In the Properties panel, activate **Staff-relative position** in the **Fingering and Positions** group.
- **3.** Choose one of the following options:
 - Above
 - Below

RESULT

The selected fingerings appear above/below the staff. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

TIP

You can also change the staff-relative placement of fingerings by selecting them in Engrave mode and pressing **F**.

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490 Fingerings for fretted instruments on page 962

Showing fingerings inside the staff

You can show individual fingerings belonging to non-fretted instruments beside noteheads inside the staff.

NOTE

- These steps only apply to non-fretted instruments. Left-hand fingerings for fretted instruments are shown inside the staff by default.
- These steps do not apply to substitution fingerings.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing 3** is selected in the Engrave toolbox.

PROCEDURE

- **1.** Do one of the following:
 - In Write mode, select the notes whose fingerings you want to show inside the staff.
 - In Engrave mode, select the fingerings you want to show inside the staff.
- **2.** In the Properties panel, activate **Position left of notehead** in the **Fingering and Positions** group.

RESULT

Fingerings belonging to the selected notes are shown inside the staff, directly beside the noteheads. By default, if they belong to a note on a staff line, they erase part of the staff line to ensure legibility.

EXAMPLE



Changing the position of individual fingerings relative to slurs, octave lines, and tuplet brackets

By default, fingerings are positioned inside the arcs of slurs, but outside the start/end of slurs. You can change the position of individual fingerings relative to slurs. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing 3** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- 1. In Engrave mode, select the fingerings whose position relative to slurs you want to change.
- **2.** In the Properties panel, activate **Slur-relative position** in the **Fingering and Positions** group.
- **3.** Choose one of the following options:
 - Inside
 - Outside

RESULT

The position of the selected fingerings relative to slurs, octave lines, and tuplet brackets is changed. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

NOTE

If fingerings also coincide with the first note or last note of slurs, fingerings are positioned outside all of these notations.

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490

Changing the size of fingerings

You can change the size of fingerings individually without changing the size of the noteheads to which they apply. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- Graphic Editing is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- 1. In Engrave mode, select the fingerings whose size you want to change.
- 2. In the Properties panel, activate **Scale** in the **Fingering and Positions** group.
- **3.** Change the value in the value field.
- 4. Press Return.

RESULT

The scale size of the selected fingerings is changed. For example, changing the value to **50** scales the selected fingerings to half their normal size.

If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

TIP

You can change the default size of all fingerings project-wide by changing the size of the **Fingering Font** in the **Edit Font Styles** dialog.

RELATED LINKS

Fingering font styles on page 960

Showing enclosures/underlines on fingerings

You can show individual fingerings belonging to non-fretted instruments with either a circle enclosure or an underline.

NOTE

These steps only apply to non-fretted instruments. For fretted instruments, you can instead show string indicators inside the staff, which are shown in a circle enclosure.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing 1** is selected in the Engrave toolbox.

PROCEDURE

- 1. In Engrave mode, select the fingerings on which you want to show an enclosure/underline.
- 2. In the Properties panel, activate **Decoration** in the **Fingering and Positions** group.
- **3.** Choose one of the following options:
 - Circle
 - Underline

RESULT

The selected fingerings are shown with the chosen decoration.

EXAMPLE



3

Fingering with circle

Fingering with underline

RELATED LINKS

Properties panel on page 646 Engrave toolbox on page 490 String indicators on page 974

Hiding/Showing fingering

You can hide/show fingering in each layout independently. For example, you can show fingering in part layouts but hide fingering in full score layouts as conductors rarely require fingering information.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- 2. In the Layouts list, select the layouts in which you want to hide/show fingering.
 By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, Shift-clicking adjacent layouts, and Ctrl/Cmd -clicking individual layouts.
- 3. In the category list, click Players.
- **4.** In the **Fingering** section, activate/deactivate **Show fingering**.
- 5. Click Apply, then Close.

RESULT

All fingerings are shown in the selected layouts when the checkbox is activated, and hidden when the checkbox is deactivated.

RELATED LINKS

Changing the appearance of cautionary fingerings on page 962 Hiding/Showing fingerings in chord diagrams on page 882

Deleting fingerings

You can remove fingerings from notes after you have input them. However, because fingerings are properties of notes rather than separate items in Dorico Elements, you cannot select and delete them as you would for other items.

PREREOUISITE

If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the notes from which you want to remove fingerings. You can do this in Write mode and Engrave mode.
- 2. Choose Edit > Notations > Fingering > Reset Fingering.

RFSULT

All fingerings are removed from the selected notes.

TIP

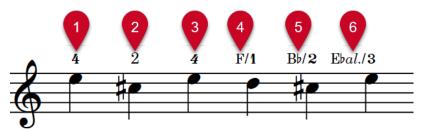
You can assign a key command for **Reset Fingering** on the **Key Commands** page in **Preferences**.

RELATED LINKS

Large selections on page 410 Assigning key commands on page 62 Engrave toolbox on page 490

Fingering font styles

There are different font styles for different types of fingerings. You can change different aspects of these fonts in the **Edit Font Styles** dialog, such as changing their font size to make fingerings appear larger.



The following font styles are used for fingering:

- **Fingering Font**: Used for bold fingerings, including bold italic fingerings. Must be SMuFL-compliant.
- **2** Fingering Text Font: Used for plain fingerings.
- 3 Fingering Text Italic Font: Used for italic fingerings.
- 4 Fingering Horn Branch Text Font: Used for note names in horn branch indicators.
- **5 Fingering Horn Branch Accidental Font**: Used for accidentals in horn branch indicators. Must be SMuFL-compliant.
- **Fingering Horn Branch Alto Text Font**: Used for the alto abbreviation in triple horn branch indicators.

NOTE

Changes made to font styles apply to the entire project, including part layouts.

RELATED LINKS

Edit Font Styles dialog on page 737 Changing the size of fingerings on page 957 Changing the default font family on page 743 String indicators on page 974

Showing individual fingerings in italics

Fingerings are normally shown in a bold, non-italic font, but you can show individual fingerings in italics.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing 3** is selected in the Engrave toolbox.

PROCEDURE

- 1. In Engrave mode, select the fingerings you want to show in italics.
- 2. In the Properties panel, activate **Italic** in the **Fingering and Positions** group.

RESULT

The selected fingerings are shown in a bold italic font if your project-wide setting for fingerings is a bold font, and in a plain italic font if your project-wide setting for fingerings is a plain font.

NOTE

Bold italic fingerings look very similar to tuplet numbers, which can be confusing.

Cautionary fingerings

Cautionary fingerings remind players that fingerings specified at previous rhythmic positions continue to apply to notes that are still sounding. Dorico Elements automatically shows cautionary fingerings when you add other fingerings at rhythmic positions where notes with existing fingerings are still sounding.

By default, cautionary fingerings are shown enclosed in parentheses. You can change the appearance of cautionary fingerings individually; for example, if you want to show cautionary fingerings manually on tied notes that cross system or frame breaks.



Cautionary fingering shown in parentheses (default)

Changing the appearance of cautionary fingerings

You can change the appearance of cautionary fingerings individually; for example, if you want particular fingerings to appear without parentheses or to hide specific cautionary fingerings. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

NOTE

These steps only apply to cautionary fingerings.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing I** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

1. In Engrave mode, select the noteheads whose cautionary fingering appearance you want to change.

NOTE

You must select the specific noteheads to which the cautionary fingerings apply, not the fingerings themselves.

- 2. In the Properties panel, activate **Cautionary** in the **Fingering and Positions** group.
- **3.** Select one of the following options from the menu:
 - Default
 - With parentheses
 - Without parentheses
 - Suppress

RESULT

The appearance of cautionary fingerings on the selected notes is changed. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

RELATED LINKS

Inputting fingerings on page 269

Properties panel on page 646

Changing the property scope on page 648

Engrave toolbox on page 490

Hiding/Showing or parenthesizing cautionary accidentals on page 784

Fingerings for fretted instruments

Fretted instruments, such as the classical guitar, require additional fingering instructions for both hands due to the complex nature of the music.

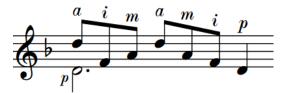
Fingerings for fretted instruments use the same fonts as normal fingerings.



A passage for guitar with right-hand and left-hand fingerings

Right-hand fingering

Right-hand fingerings tell the performer which finger to use to pluck the string, which is usually the right hand. By default, all right-hand fingerings are placed outside the staff, on the notehead side of notes, and follow the stem directions of voices in multiple-voice contexts. When the same finger plays multiple notes in a chord, you can show a single fingering with a bracket for the notes plucked by that finger.



Dorico Elements shows "p" for right-hand thumb fingerings and "e" for right-hand fingerings for the pinky finger.

NOTE

In Dorico Elements, we use "pinky" to refer to the smallest finger, but it can also be called "little" or "fifth digit".

Left-hand fingering

Left-hand fingerings tell the performer which finger to use to stop the string, which is usually the left hand. In Dorico Elements, left-hand fingerings are placed inside the staff and to the left of the notes to which they apply.



When shown inside the staff next to notes, left-hand fingering appears smaller than fingering shown outside the staff.

RELATED LINKS

Inputting fingerings on page 269
Fingering font styles on page 960
Fingering slides on page 967
String indicators on page 974
Tapping on page 1119
Hammer-ons and pull-offs on page 1120

Hiding/Showing brackets for right-hand fingerings

When multiple notes in the same chord are plucked by the same right-hand finger, you can show the same fingering multiple times, once for each note, or show a single fingering for all notes with a bracket spanning the notes plucked by that finger. When showing a separate fingering for each note, you can also choose to place each fingering either above or below the staff. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

NOTE

These steps only apply to right-hand fingerings belonging to fretted instruments.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing 3** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** Select all the notes for which you want to hide/show brackets for right-hand fingerings. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Vertical position** in the **Plucked Fingering** group.
- **3.** Select one of the following options from the menu:
 - To hide brackets and show a separate fingering for each selected note, select Above staff or Below staff.
 - To show brackets and a single fingering for all notes in each bracket, select Next to note.

RESULT

Brackets on the selected right-hand fingerings are hidden/shown. If you selected **Above staff** or **Below staff**, their staff-relative placement is changed accordingly. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

EXAMPLE







Right-hand fingerings shown next to notes with a bracket

Right-hand fingerings shown above the staff

Right-hand fingerings shown below the staff

RELATED LINKS

Properties panel on page 646

Changing the property scope on page 648 Engrave toolbox on page 490

Changing the position of left-hand fingerings

You can change the position of individual left-hand fingerings. You can do this for the current layout and frame chain only, or for all layouts and frame chains. By default, they are positioned inside the staff and to the left of the notes to which they apply.

NOTE

These steps only apply to left-hand fingerings belonging to fretted instruments.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** Select the left-hand fingerings whose position you want to change. You can do this in Write mode and Engrave mode.
- **2.** In the Properties panel, activate **Stopping finger position** in the **Fingering and Positions** group.
- **3.** Select one of the following options from the menu:
 - Outside staff
 - Left of note
 - Right of note

RESULT

The position of the selected left-hand fingerings is changed. When shown outside the staff, they are placed above the staff by default. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

EXAMPLE



RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490

Erasing the background of left-hand fingerings inside the staff

By default in Dorico Elements, left-hand fingerings have erased backgrounds because they are often placed in the staff on staff lines. You can change whether individual left-hand fingerings have erased backgrounds or not. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

NOTE

These steps only apply to left-hand fingerings belonging to fretted instruments positioned inside the staff

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing !** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** In Engrave mode, select the left-hand fingerings whose background erasure you want to change.
- 2. In the Properties panel, activate **Erase background** in the **Fingering and Positions** group.
- 3. Activate/Deactivate the corresponding checkbox.

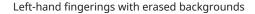
RESULT

The backgrounds of the selected left-hand fingerings are erased when the checkbox is activated, and not erased when the checkbox is deactivated. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

When the property is deactivated, left-hand fingerings have erased backgrounds by default.

EXAMPLE







Left-hand fingerings without erased backgrounds

Adding fingerings to arpeggio signs

You can add fingerings to arpeggio signs to indicate which right-hand finger should be used to strum a chord. By default, fingerings are placed at the bottom of arpeggio signs.

NOTE

These steps only apply to arpeggio signs belonging to fretted instruments.

PREREQUISITE

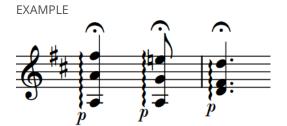
- You have input the arpeggio signs to which you want to add fingerings.
- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the arpeggio signs belonging to fretted instruments to which you to add fingerings. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Finger** in the **Plucked Fingering** group.
- **3.** Enter the fingering you want into the value field. For example, for the thumb, enter **p**.

RESULT

The specified fingering is added to the selected arpeggio signs. It is positioned at the bottom of the arpeggio signs by default.



Arpeggio signs played with the thumb

RELATED LINKS

Properties panel on page 646

Engrave toolbox on page 490

Input methods for ornaments, arpeggio signs, glissando lines, and jazz articulations on page 332

Fingering slides

Fingering slides indicate that the performer should slide their finger up/down the neck of the instrument. They are notated as an angled line between fingerings.

The note at the start of a fingering slide is known as a source note. The note at the end of a fingering slide is known as the destination note.



A passage with fingering slides

When the source and destination notes are sufficiently close horizontally, fingering slides are shown between the fingerings, joining them directly in their existing positions without moving them. When the source and destination notes are far apart horizontally, fingering slides appear with a fixed length to the left of the destination note. You can change the length of individual fingering slides.

Fingering slides automatically avoid obstructions, such as noteheads, accidentals, and other fingerings.

NOTE

- Dorico Elements automatically adjusts the length/angle of fingering slides when you move the fingerings at the start/end.
- In Dorico Elements, you can only show fingering slides on staves belonging to fretted instruments, and between notes up to three noteheads apart by default. You can show string fingering shift indicators on staves belonging to other string instruments.

RELATED LINKS

Hiding/Showing string fingering shift indicators on page 971 Glissando lines on page 1096 Jazz articulations on page 1125

Fingering slides in Engrave mode

In Engrave mode, each join fingering slide has two square handles, one at the start and one at the end. You can move these handles to adjust the graphical position, length, and angle of join fingering slides.



Handles on a slide joining two notes in Engrave mode

NOTE

- If you want to change the length of fingering slides, we recommend that you do so by first changing their **Slide type** property or by moving the fingerings. Dorico Elements automatically adjusts the length/angle of fingering slides when you move the fingerings at the start/end.
- You cannot move fingering slides rhythmically. If you want to change the notes to which fingering slides apply, you must hide them between their original notes and show new fingering slides between the new notes.
- Fingering slides shown only before the destination note have a fixed length, and so do not have handles at the start/end.
- You cannot move whole fingering slides that join notes. You can only move their handles.

Hiding/Showing fingering slides

You can hide/show slides between notes played by the same left-hand finger on the same string on fretted instruments.

NOTE

These steps only apply to fingerings belonging to fretted instruments, and on notes up to three noteheads apart by default.

PREREQUISITE

- You have input the same left-hand fingering for the notes at the start and end of the slides.
- You have specified the same string for the notes at the start and end of the slides.
- The lower zone is shown.
- Properties is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.

PROCEDURE

- 1. Select the destination notes before which you want to hide/show fingering slides. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate/deactivate Slide in in the Fingering and Positions group.

RESULT

Fingering slides are shown before the selected notes when **Slide in** is activated, and hidden when it is deactivated.

- If the gap between the source and destination notes is small enough, fingering slides appear as an angled line joining the fingerings.
- If the gap is large, fingering slides appear as a fixed length angled line to the left of the destination notes.

TIP

If you want to adjust the placement or angle of the slide, you can move either the fingerings or the slide itself graphically in Engrave mode. Dorico Elements automatically adjusts the length/ angle of fingering slides when you move the fingerings at the start/end.

RELATED LINKS

Properties panel on page 646 Engrave toolbox on page 490 Inputting fingerings on page 269 Assigning notes to strings on page 1040

Changing the length of fingering slides

You can change the length of individual fingering slides and show them either joining the source and destination fingerings or with a fixed length before the destination note. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

NOTE

These steps only apply to fingerings belonging to fretted instruments.

PREREOUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing ?** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- 1. In Engrave mode, select the fingering slides whose length you want to change.
- 2. In the Properties panel, activate **Slide type** in the **Fingering and Positions** group.
- **3.** Choose one of the following options:
 - To show fingering slides between the fingerings at the start/end, choose **Join**.
 - To show fixed length fingering slides before the destination fingerings, choose **Destination only**.

RESULT

The length of the selected fingering slides is changed. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

EXAMPLE







Destination only

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490 Fingerings for fretted instruments on page 962

Fingerings for valved brass instruments

For instruments like trumpet and horn, fingering is used to show which valves must be depressed to produce a specific note.

You can enter fingerings for valved brass instruments into the fingerings popover as numbers without any separation. For example, enter **12** for a C# on a trumpet to indicate that the first two valves must be depressed.

By default, Dorico Elements automatically stacks fingerings added to notes on brass instrument staves vertically. They are shown with no separator by default.

RELATED LINKS

Inputting fingerings on page 269 Fingering font styles on page 960

Showing horn branch indicators

You can indicate the branch on which notes are played for double horns and triple horns by adding branch indicators as prefixes to horn fingerings. Some publications simply indicate "T" for thumb, while others more explicitly indicate which branch is to be used by specifying its pitch.

NOTE

You can only add branch indicators to notes belonging to horns in F.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing !** is selected in the Engrave toolbox.

PROCEDURE

- 1. Select the horn fingerings to which you want to add branch indicators. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate Horn branch in the Fingering and Positions group.
- **3.** Select one of the following horn branches from the menu:
 - F
 - B flat
 - F alto
 - E flat alto
 - Thumb trigger

RESULT

Branch indicators are added to the selected fingerings.

Hiding/Showing string fingering shift indicators

You can hide/show shift indicators after individual fingerings belonging to string instruments. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

Shift indicators are angled lines that indicate the direction of movement when string players must shift their finger position on the fingerboard to play a higher/lower note with the same finger as the previous note.

NOTE

These steps do not apply to fingerings belonging to fretted instruments, which can show fingering slides instead.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** Is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** Select the notes or fingerings on string instrument staves from which you want to indicate a fingering shift. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate/deactivate **Indicate shift to next note** in the **Fingering and Positions** group.

RESULT

Shift indicators are shown when the property is activated, even if neither of the notes at each end have explicit fingerings, and hidden when the property is deactivated. They are positioned between the selected notes and the notes that immediately follow them. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

TIP

You can specify that fingerings should show shift indicators when inputting fingerings for string instruments.

EXAMPLE



RELATED LINKS

Properties panel on page 646
Changing the property scope on page 648
Engrave toolbox on page 490
Inputting fingerings on page 269
Assigning notes to strings on page 1040
Fingering slides on page 967
String indicators on page 974

Changing the direction of string fingering shift indicators

You can change the direction of individual string fingering shift indicators if they do not point in the direction required.

PREREQUISITE

- The lower zone is shown.
- **Properties is** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** 3 is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the shift indicators whose direction you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Shift direction** in the **Fingering and Positions** group.
- **3.** Choose one of the following options:
 - Up
 - Down

RESULT

The selected shift indicators are angled up/down.

NOTE

You can also affect the direction of string shift indicators by specifying the strings on which notes are played.

Fingerings imported from MusicXML files

Dorico Elements imports fingerings that are specified using the fingering element in MusicXML files.

MusicXML files exported from Finale typically represent fingerings in the correct way. However, because Sibelius does not use the fingering element, Dorico Elements cannot import fingerings from MusicXML files exported by Sibelius.

String indicators

String indicators are commonly used in guitar music to tell performers the string on which they should play a note, particularly for pitches that are possible on multiple strings.

String indicators show the string number inside a circle enclosure, optionally with a dashed line to indicate they apply to a range of notes. Open pitches commonly appear as a zero without an enclosure.

In Dorico Elements, string indicators for stopped pitches appear in a plain font while string indicators for open strings use the fingering font.



A phrase with string indicators and left-hand fingerings

There are two types of string indicators in Dorico Elements, which you input in different ways.

String indicators outside the staff

String indicators outside the staff always appear inside circle enclosures. They automatically show dashed duration lines when they have duration to indicate that multiple notes are played on that string.

In Dorico Elements, string indicators outside the staff are considered playing techniques. You can select and delete them independently of the notes to which they apply. You can also change the duration line style of string indicators outside the staff in the same ways as for playing technique continuation lines.



String indicator outside the staff with duration line

String indicators inside the staff

String indicators inside the staff appear inside circle enclosures, except when they show open strings, which appear as a bold number zero without an enclosure. They automatically erase their backgrounds so they do not collide with staff lines. They appear to the left of noteheads by default but automatically appear to the right if left-hand fingerings are present.

The string number shown in string indicators inside the staff is calculated automatically, but you can also specify the string manually.

String indicators inside the staff for stopped pitches are scaled-down versions of string indicators outside the staff.

In Dorico Elements, string indicators inside the staff are considered properties of the corresponding notes. You can only select them independently of their corresponding notes in Engrave mode.

NOTE

You can only show string indicators inside the staff on notes belonging to fretted instruments.



String indicators inside the staff, with the last one for an open string

RELATED LINKS

Input methods for playing techniques, pedal lines, string indicators, and harp pedal diagrams on page 358

Playing technique continuation lines on page 1166 Fingerings for fretted instruments on page 962 Fingering font styles on page 960

Assigning notes to strings on page 1040

Deleting string indicators

You can remove string indicators inside the staff from notes after you have input them. You can do this for the current layout and frame chain only, or for all layouts and frame chains. However, because string indicators inside the staff are properties of notes rather than separate items, you cannot select and delete them as you would for other items.

NOTE

These steps only apply to string indicators inside the staff. You can delete string indicators outside the staff in the same ways as for other items.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing 1** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** Select the notes from which you want to remove string indicators inside the staff. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, deactivate **Show** in the **String Indicators** group.

RESULT

String indicators inside the staff are removed from the selected notes. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

RELATED LINKS

Properties panel on page 646
Changing the property scope on page 648
Engrave toolbox on page 490
Deleting notes/items on page 443
Inputting string indicators inside the staff on page 374

Positions of string indicators

String indicators outside the staff are placed above it by default. In multiple-voice contexts, string indicators for the up-stem voices are placed above the staff and string indicators for the down-stem voices are placed below the staff.

String indicators inside the staff automatically erase their backgrounds so they do not collide with staff lines. They appear to the left of noteheads by default but automatically appear to the right if left-hand fingerings are present. You can change the notehead-relative position of string indicators individually.

You can move string indicators outside the staff to different rhythmic positions in Write mode. They are automatically positioned to avoid collisions. You can also change the staff-relative placement of string indicators outside the staff individually, in the same ways as for playing techniques.

You can move string indicators graphically in Engrave mode, but this does not change the rhythmic positions to which they are attached.

RELATED LINKS

Lengthening/Shortening items on page 419
Moving notes/items rhythmically on page 448
Moving items graphically on page 501
Playing technique continuation lines on page 1166

Changing the notehead-relative position of string indicators

By default, string indicators inside the staff appear to the left of noteheads when there are no left-hand fingerings and to the right of noteheads when there are left-hand fingerings. You can change the side of noteheads on which string indicators inside the staff appear individually. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** Select the string indicators inside the staff whose notehead-relative position you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Notehead-relative pos.** in the **String Indicators** group.
- **3.** Choose one of the following options:
 - Left

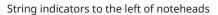
• Right

RESULT

The notehead-relative position of the selected string indicators is changed. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

EXAMPLE







String indicators to the right of noteheads

Front matter

Front matter in Dorico Elements is a broad term that covers all information included before the first bar of music in scores.

Front matter includes musical information often added on pages before the first pages of scores, such as a title page, instrumentation list, program note, and performance instructions.

Front matter also includes information above the music on the first page of scores and parts, such as the dedication, title, subtitle, composer, and lyricist.

TIP

An efficient way of keeping information consistent across all layouts is to use tokens that refer to fields in the **Project Info** dialog. The default page templates display different information according to their type.

You can use paragraph styles to keep the formatting and appearance of text consistent throughout your project; for example, if you want your title to use a specific font style wherever it appears.

RELATED LINKS

Project Info dialog on page 74
Flow names and flow titles on page 183
Frames on page 636
Tokens on page 638
Page templates on page 630
Types of page templates on page 631
Paragraph Styles dialog on page 739
Hiding/Showing flow headings on page 595
Editing layout transposition text on page 981

Adding titles

You can enter a title for the project and for each flow, independently of each other. For example, you might add the title "Sechs Lieder" for the project, then "Schwanenlied" for the first flow, "Wanderlied" for the second flow, and so on.

Dorico Elements displays titles on pages automatically using tokens on page templates.

In projects that only contain a single flow, you can enter information for either the project or flow. However, you must then ensure that you use the appropriate tokens.

PROCEDURE

- 1. Press Ctrl/Cmd-I to open the Project Info dialog.
- 2. In the list on the left, select **Project**.
- 3. On the right, enter the title for the whole project in the **Title** field.
- **4.** In the list on the left, select a flow for which you want to add a title.
- 5. In the action bar at the bottom of the list, click **Rename Flow 1**.

- **6.** Enter the title into the flow name field.
- 7. Press Return.
- **8.** At the bottom right of the dialog, click **Apply**.

TIP

- This updates the flow title in the **Title** field to match the flow name. Flow names and flow
 titles can be different and are used in different places. Titles can be referenced using
 tokens, whereas flow names are used when exporting audio, for example.
- You can also enter flow titles directly into their **Title** fields; however, this removes the link between flow titles and flow names.
- 9. Optional: Repeat steps 4 to 8 for other flows in the project.

TIP

You can copy project information that you have already entered by selecting the source from the **Copy info from** menu at the bottom of the dialog, then clicking **Copy**.

10. Click Close.

RESULT

Titles for the project and each flow are updated. They automatically appear on pages that use the corresponding tokens, such as the first page and in flow headings.

By default, project titles on first pages use the **Title** paragraph style and flow headings use the **Flow Title** paragraph style for text formatting and alignment.

RELATED LINKS

Project Info dialog on page 74
Types of page templates on page 631
Flow names and flow titles on page 183
Flow headings on page 634
Tokens on page 638
Paragraph Styles dialog on page 739

Adding composers

You can enter a composer name for the project and for each flow, independently of each other; for example, when compiling songbooks with different composers.

In projects that only contain a single flow, you can enter information for either the project or flow. However, you must then ensure that you use the appropriate tokens.

Dorico Elements displays the project composer on first pages automatically, using a token on the **First** page template.

PROCEDURE

- 1. Press Ctrl/Cmd-I to open the Project Info dialog.
- 2. In the list on the left, select **Project**.
- **3.** On the right, enter the composer for the whole project in the **Composer** field.
- 4. Optional: Repeat steps 2 to 3 for each flow in the project.

TIP

You can copy project information that you have already entered by selecting the source from the **Copy info from** menu at the bottom of the dialog, then clicking **Copy**.

5. Click Apply, then Close.

RESULT

Composer names for the project and each flow are updated. They automatically appear on pages that use the corresponding tokens, such as the first page.

By default, composer names on first pages use the **Composer** paragraph style for text formatting and alignment.

Adding lyricists

You can enter a lyricist for the project and for each flow, independently of each other; for example, when compiling songbooks with different lyricists.

In projects that only contain a single flow, you can enter information for either the project or flow. However, you must then ensure that you use the appropriate tokens.

Dorico Elements displays the project lyricist on first pages automatically, using a token on the **First** page template.

PROCEDURE

- 1. Press Ctrl/Cmd-I to open the Project Info dialog.
- 2. In the list on the left, select **Project**.
- **3.** On the right, enter the lyricist for the whole project in the **Lyricist** field.
- 4. Optional: Repeat steps 2 to 3 for each flow in the project.

TIP

You can copy project information that you have already entered by selecting the source from the **Copy info from** menu at the bottom of the dialog, then clicking **Copy**.

5. Click Apply, then Close.

RESULT

Lyricist names for the project and each flow are updated. They automatically appear on pages that use the corresponding tokens, such as the first page.

By default, lyricist names on first pages use the **Lyricist** paragraph style for text formatting and alignment.

Adding copyright information

You can enter copyright information for the project and for each flow, independently of each other; for example, when compiling books of songs composed at different times.

In projects that only contain a single flow, you can enter information for either the project or flow. However, you must then ensure that you use the appropriate tokens.

Dorico Elements displays the project copyright on first pages automatically, using a token on the **First** page template.

PROCEDURE

- 1. Press Ctrl/Cmd-I to open the Project Info dialog.
- 2. In the list on the left, select **Project**.
- 3. On the right, enter copyright information for the whole project in the Copyright field.
- **4.** Optional: Repeat steps 2 to 3 for each flow in the project.

TIP

You can copy project information that you have already entered by selecting the source from the **Copy info from** menu at the bottom of the dialog, then clicking **Copy**.

5. Click Apply, then Close.

RESULT

Copyright information for the project and each flow is updated. It automatically appears on pages that use the corresponding tokens, such as the first page.

By default, copyright information on first pages uses the **Copyright** paragraph style for text formatting and alignment.

RELATED LINKS

Project Info dialog on page 74
Types of page templates on page 631
Tokens on page 638
Paragraph Styles dialog on page 739

Editing layout transposition text

You can override layout transposition token text in each layout independently; for example, if you want some layouts to display "Concert Pitch" but others to display "Full Score in C".

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- 2. In the **Layouts** list, select the layouts whose layout transposition text you want to edit. By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
- 3. In the category list, click Page Setup.
- 4. In the **Text Tokens** section, activate the following options, individually or together:
 - Custom text for concert layout
 - Custom text for transposed layout
- **5.** Enter the text you want into the corresponding value fields.
- 6. Click Apply, then Close.

RELATED LINKS
Tokens on page 638
Concert vs. transposed pitch on page 174

Hiding/Showing borders on layout names

You can hide/show borders on all layout names project-wide. By default, layout names appear with borders at the top of pages in part layouts that use the **First** page template.

PROCEDURE

- 1. Choose Library > Paragraph Styles to open the Paragraph Styles dialog.
- 2. In the paragraph styles list, select Layout name.
- **3.** Activate/Deactivate the checkbox for **Border**.
- **4.** Optional: If you activated the checkbox, activate and change the available border options as required.
 - For example, you can change the border style and border thickness.
- **5.** Click **OK** to save your changes and close the dialog.

RELATED LINKS

Paragraph Styles dialog on page 739
Player, layout, and instrument names on page 176
Types of page templates on page 631
Adding borders to text items on page 1335

Grace notes

Grace notes are notes without a fixed duration, which are intended to be played quickly. They are scaled-down versions of normal notes, and are commonly shown with a slash through their stem.

Grace notes with slashed stems are known as "acciaccaturas" and are often played very fast. Grace notes without slashed stems are known as "appoggiaturas" and are often played slower than acciaccaturas. In Baroque music, appoggiaturas are often understood to last for a specific duration, based on the prevailing meter and the rhythmic value of the notehead to which they are attached. Therefore in Dorico Elements, slashed and unslashed grace notes are handled differently in playback.

Grace notes do not take up space rhythmically, as they are intended to be fitted into the space before the note to which they are attached, which is the note immediately to their right.

There can be multiple grace notes before a notehead. If there are two or more grace notes attached to the same notehead, and they have a rhythmic value that shows a flag on the stem, such as eighth notes (quavers) and 16th notes (semiquavers), they are automatically beamed together.



Multiple grace notes before notes

In Dorico Elements, grace notes are scaled to 3/5 the size of a normal notehead by default and are affected by your note spacing settings. There is a separate option specifically for grace note spacing.

You can add notations, such as slurs and articulations, to grace notes in the same ways as to normal notes, and you can transpose grace notes after they have been input.

RELATED LINKS

Inputting grace notes on page 244
Changing the pitch of individual notes on page 455
Inputting articulations on page 266
Inputting slurs on page 267

General placement conventions for grace notes

Grace notes function like normal notes in many ways, but there are some specific conventions about their stem direction, position relative to noteheads, and the placement of stem slashes.

Grace notes are always positioned before a notehead, even if they are intended to be played on the beat rather than before the beat. They are normally placed after a barline, so they can be positioned directly before the notehead to which they are attached. You can show grace notes

before barlines instead; for example, if you have a group of three or more grace notes and want to reduce the gap between the barline and the first beat in the bar.

Grace note stem slashes appear at the beginning of grace note beams. If there is a single grace note, the slash appears across its stem and flag, if applicable, and extends either side of the stem.





Adding accidentals causes their spacing to readjust so that the accidentals are clearly legible, similar to normal notes.

Articulations can be added to grace notes wherever they are most clearly legible, which is most likely outside the staff. Dorico Elements automatically places articulations on the stem-side of grace notes, and outside the staff if the stem or beam is within the staff.

Grace notes in multiple-voice contexts

According to accepted notation convention, grace notes appear stem up by default when there is only one voice on a staff, even if the notehead to which they are attached is stem down.

However, when there are multiple voices on the staff, all notes in the upper voices appear stem up and all notes in the lower voices appear stem down, including grace notes. This also affects the curvature direction of slurs.

This adjustment happens automatically in Dorico Elements, but you can also change the stem direction of grace notes manually.



Slurs relative to grace notes

By default, slurs starting on grace notes and ending on tie chains end on the first note of the tie chain. You can change the position of individual slurs relative to tie chains, including those starting from grace notes.

TIP

You can change the note spacing scale factor for grace notes in each layout independently on the **Note Spacing** page in **Layout Options**.

RELATED LINKS

Slur placement relative to grace notes on page 1263 Slur position relative to tie chains on page 1262 Changing the stem direction of notes on page 1057 Note spacing on page 494 Layout Options dialog on page 728

Turning existing notes into grace notes

You can turn any existing notes into grace notes; for example, if you want to edit music you input using MIDI recording.

PROCEDURE

- 1. In Write mode, select the notes that you want to turn into grace notes.
- 2. Optional: Change the grace note type to slashed/unslashed in any of the following ways:
 - Press Alt/Opt-/.
- **3.** Do one of the following:
 - Press /.
 - In the Notes toolbox, click Grace Notes ...

RESULT

The selected notes are turned into grace notes with the same notated duration. However, any rhythm dots are removed.

By default, slashed grace notes attach to the rhythmic position following the last selected note in each range, while unslashed grace notes attach to the rhythmic position of the first selected note in each range.

TIP

You can change the default direction when turning existing notes into grace notes in **Preferences > Note Input and Editing > Editing**.

AFTER COMPLETING THIS TASK

You can change the duration of grace notes.

RELATED LINKS

Notes toolbox on page 192

Inputting grace notes on page 244

Changing the duration of notes on page 255

Changing the type of grace notes on page 987

Turning existing notes into tuplets on page 1388

Preferences dialog on page 57

Turning grace notes into normal notes

You can turn any existing grace notes into normal notes starting from their original rhythmic position; for example, if you want to turn a run of grace notes at the start of a flow into standard notes in a pick-up bar.

PROCEDURE

- 1. In Write mode, select the grace notes you want to turn into normal notes.
- **2.** Optional: If you want the selected grace notes to push subsequent notes to later rhythmic positions if required, press **I** to activate Insert mode.
- **3.** Optional: If you activated Insert mode, choose the appropriate Insert mode scope.

- **4.** Do one of the following:
 - Press /.
 - In the Notes toolbox, click Grace Notes ...

RESULT

The selected grace notes are turned into normal notes with the same notated duration. For example, an eighth grace note becomes a standard eighth note.

If Insert mode was activated, subsequent existing notes are pushed to later rhythmic positions to accommodate the extra rhythmic durations if required. If Insert mode was deactivated, the grace notes expand and overwrite subsequent notes.

RELATED LINKS

Turning tuplets into normal notes on page 1388 Pick-up bars on page 1364 Insert mode on page 439

Showing grace notes before/after barlines

By default, grace notes are positioned after barlines and directly before the notehead to which they apply, including for the first note in a bar. You can position individual grace notes before barlines; for example, so the first normal note in the bar is not pushed too far from the barline, or to indicate that grace notes are played before the beat.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing 3** is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the grace notes whose position relative to barlines you want to change. You can do this in Write mode and Engrave mode.
- **2.** In the Properties panel, activate/deactivate **Grace note before barline** in the **Grace Notes** group.

RESULT

Grace notes at the selected rhythmic positions are positioned before barlines when the property is activated, and after barlines when the property is deactivated.

NOTE

This affects all grace notes at the selected rhythmic positions.

RELATED LINKS

Engrave toolbox on page 490 Barlines on page 798

Grace note size

Grace notes are smaller versions of normal notes, and are scaled down by a ratio that is set by default to 3/5 of a normal note.

You can change the size of grace notes individually in the same way as for normal notes.

RELATED LINKS

Changing the size of notes/items on page 422 Inputting grace notes on page 244

Grace note slashes

Slashes shown diagonally across grace note stems are often used to distinguish different types of grace notes. Grace notes with slashed stems are known as acciaccaturas and are often played very fast. Grace notes without slashed stems are known as appoggiaturas and are often played slower than acciaccaturas.

In Dorico Elements, grace notes appear with slashed stems by default. You can change whether grace notes are slashed or unslashed during note input as well as by changing the type of existing grace notes.

Changing the type of grace notes

You can change the type of individual grace notes after they have been input. Grace notes have slashed stems by default, but you can change them to have unslashed stems.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing 1** is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the grace notes whose type you want to change. You can do this in Write mode and Engrave mode.
- **2.** In the Properties panel, choose one of the following options for **Grace note type** in the **Grace Notes** group:
 - Slashed stem
 - Unslashed stem

RESULT

The selected grace notes are shown with slashed/unslashed stems.

TIP

You can also change the type of selected grace notes by pressing **Alt/Opt-/** or clicking and holding **Grace Notes** in the Notes toolbox, then clicking **Unslashed Grace Notes** or **Slashed Grace Notes**.

RELATED LINKS

Properties panel on page 646

Engrave toolbox on page 490
Inputting grace notes on page 244
Turning existing notes into grace notes on page 985
Turning grace notes into normal notes on page 985

Moving slashes on grace note stems

You can change the vertical position of individual grace note slashes. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing I** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- 1. In Engrave mode, select the grace notes whose slash positions you want to change.
- **2.** In the Properties panel, activate the following properties, individually or together, in the **Grace Notes** group:
 - Slash inset from stem tip
 - Slash offset to right
- **3.** Change the values in the value fields.

RESULT

Increasing **Slash inset from stem tip** moves grace note slashes further from the tips of stems and closer to the noteheads. Decreasing the value moves them closer to the tips of stems and further from the noteheads.

Increasing **Slash offset to right** moves grace note slashes to the right, decreasing the value moves them to the left.

If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490

Changing the length of grace note slashes

You can change the length of slashes on grace note stems individually. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties is** is selected in the lower zone toolbar.
- **Graphic Editing ?** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- 1. In Engrave mode, select the grace notes whose slash length you want to change.
- **2.** In the Properties panel, activate the following properties, individually or together, in the **Grace Notes** group:
 - Slash length
 - Slash protrusion from beam (beamed grace notes only)

NOTE

Grace note slashes seem to disappear when you activate **Slash length** because activating the property resets the value to **0**.

3. Change the length and/or protrusion of the selected slashes by changing the values in the corresponding value fields.

RESULT

Increasing **Slash length** lengthens grace note slashes on both single grace notes and grace note beams, decreasing the value shortens grace note slashes.

Increasing **Slash protrusion from beam** increases how far slashes extend beyond grace note beams, decreasing the value decreases how far slashes extend beyond grace note beams.

If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

Grace note stems

Grace notes are scaled-down notes, so the length of grace note stems is determined by the default settings for the stem length of all notes.

Following accepted conventions, grace notes in Dorico Elements are stem up by default in any clef, regardless of the stem direction of the note to which they apply. The stem directions of grace notes are changed automatically when there are multiple voices on a staff, but you can change the stem direction of individual grace notes manually. You can also lengthen/shorten grace note stems in the same ways as for normal stems.

RELATED LINKS

Stems on page 1055

Grace note beams

Dorico Elements automatically beams multiple adjacent grace notes together if they are an eighth note (quaver) or shorter in duration.

Like all beams, grace note beams ideally follow the accepted standards for beam placement relative to staff lines, in order to avoid wedges. However, because grace notes are smaller than normal notes, this can lead to extreme slants in grace note beams.

You can adjust the slants of individual grace note beams in the same ways as for normal beams.

RELATED LINKS

Beaming on page 821

Grace notes in playback

Slashed and unslashed grace notes are handled differently in playback.

Slashed grace notes of any note duration, and unslashed grace notes a 16th note or shorter, play back before the beat with a single default sounding duration.

Unslashed grace notes an eighth note or longer play back on the beat. Their sounding duration is half the note duration of the note to which they are attached. For example, if an unslashed eighth note grace note is attached to a quarter note, both notes play back as if they were eighth notes.

You can change whether single unslashed grace notes play on or before the beat, the maximum note duration for unslashed grace notes to play back as short appoggiaturas, and the default sounding duration of grace notes in **Playback Options** > **Timing** > **Grace Notes**.

RELATED LINKS
Playback Options dialog on page 732
Grace note slashes on page 987

Holds and pauses

Different notations are used to show where the established rhythmic flow of the music is interrupted, either with a moment of repose or a short silence, before continuing. The most subtle effect is produced by a tenuto mark, with more significant effects denoted with holds and pauses.

The duration of the break in the music intended by the hold or pause does not need to be specified. This leaves significant room for interpretation, even though the different styles of holds and pauses normally indicate larger or smaller breaks.

In Dorico Elements, there are the following types of holds and pauses:

Fermatas

Fermatas indicate that a note is held for longer than its notated length, which applies to the whole ensemble. In Dorico Elements, fermatas exist globally at the corresponding rhythmic positions, meaning they are automatically shown on all staves and voices.

They are also known as "pauses" and informally sometimes called "birds' eyes".



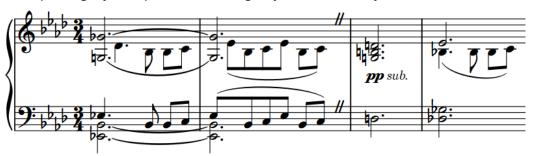
Breath marks

Breath marks show suitable places for players to breathe, or suggest how the music is phrased to create a similar effect. Breath marks apply to single staves only.



Caesuras

Caesuras indicate that a note is sustained for its full value and is followed by a break in sound before continuing. In Dorico Elements, caesuras exist globally at the corresponding rhythmic positions, meaning they are automatically shown on all staves.



RELATED LINKS

Input methods for holds and pauses on page 328 Positions of holds and pauses on page 993 Holds and pauses in playback on page 997

Types of fermatas

There are different types of fermatas available in Dorico Elements. Each fermata indicates a suggested pause duration whilst leaving room for interpretation.

In Dorico Elements, the different types of fermatas affect playback according to their intended duration. For example, long fermatas produce longer held notes and gaps than short fermatas.

Fermata	Description
Very short fermata 🔈	Indicates that a note is held only a fraction longer than the rhythm indicates.
Short fermata \Lambda	Indicates that a note is held a little bit longer than the rhythm indicates.
Short fermata (Henze) 💪	Indicates that a note is held a little bit longer than the rhythm indicates, as used by Hans Werner Henze.
Fermata 🏠	Indicates that a note is held for longer than the rhythm indicates.
Long fermata 🙃	Indicates that a note is held quite a lot longer than the rhythm indicates.
Long fermata (Henze) 🍙	Indicates that a note is held quite a lot longer than the rhythm indicates, as used by Hans Werner Henze.
Very long fermata 雨	Indicates that a note is held for much longer than the rhythm indicates.
Curlew (Britten) \sim	Indicates that a note or rest is held until the next synchronization point in asynchronous music, as used by Benjamin Britten.

Fermatas can be divided into two styles. Because their meanings overlap, it can be confusing for players if both styles are used in a single project.

Style	Very short fermata	Short fermata	Fermata	Long fermata	Very long fermata
Standard		^	\odot	\Box	

Style	Very short fermata	Short fermata	Fermata	Long fermata	Very long fermata
Henze	N/A	.	\bigcirc		N/A

RELATED LINKS

Holds and pauses in playback on page 997 Input methods for holds and pauses on page 328

Types of breath marks

There are different types of breath marks available in Dorico Elements. Breath marks indicate a suitable place for a player to take a breath, or create a musical effect like a breath.

Comma-like	Tick-like	Upbow-like	Salzedo
•	\checkmark	V	•

Types of caesuras

There are different types of caesuras available in Dorico Elements. All caesuras indicate a break in sound, but different types are often needed for different styles of musical scores.

Caesura	Thick caesura	Short caesura	Curved caesura	Single-stroke caesura
	#	#		\pm
Two diagonal slashes	Two thick diagonal slashes	Two straight, vertical slashes	Two curved diagonal slashes	One straight, vertical slash

If you intend to communicate a specific length of hold or gap with each type of caesura, we recommend that you consider adding a legend, as different players may interpret these symbols differently.

Positions of holds and pauses

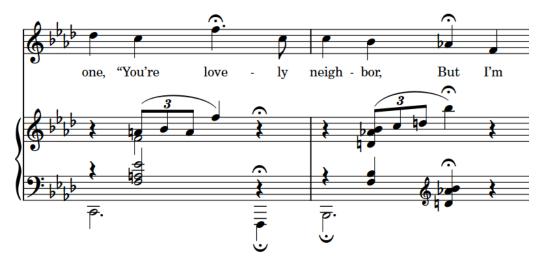
Holds and pauses are placed above the staff by default in single-voice contexts, and are shown on all staves at the closest rhythmic position available; for example, if a single staff has a fermata on the last beat in the bar, it is shown above the bar rests on the other empty staves. For staves with multiple voices, fermatas are also shown inverted below the staff.

You can move holds and pauses to different rhythmic positions in Write mode. They are automatically positioned to avoid collisions.

You can move holds and pauses graphically in Engrave mode; however, this does not change the rhythmic positions to which they are attached.

Fermatas

Fermatas are positioned horizontally so that they are centered on front noteheads in the first voice column, regardless of the stem direction of notes.



Fermatas affect the overall tempo of the piece, so all players must be able to see where they occur. Therefore, fermatas are shown on all staves at the same rhythmic position, or the rhythmic position of the note, chord, or rest that corresponds with the end of the fermata, including over a bar rest if a staff has no notes in that bar.

Breath marks

Breath marks are placed above the top line of the staff by default, at the end of the note to which they apply; that is, they appear just before the following note.

Breath marks apply only to the staff to which they were added, as they do not affect the overall tempo, but instead only indicate to a single player or group of players a suitable place to break their line in order to breathe.

Caesuras

Caesuras are positioned at the top of the staff, with the top staff line passing through the middle of the caesura and the bottom of the caesura resting on the second staff line. They are commonly placed at the end of a bar, before the barline.

Caesuras are automatically added to all staves at the same rhythmic position, immediately to the left of the notehead or barline to which they were input. They are not linked to noteheads, and adjust note spacing to create a clear gap.

RELATED LINKS

Input methods for holds and pauses on page 328 Holds and pauses in playback on page 997 Moving notes/items rhythmically on page 448 Moving items graphically on page 501

Combinations of holds and pauses

Some types of holds and pauses cannot appear at the same rhythmic position as other holds and pauses.

At a single rhythmic position, Dorico Elements can show the following:

- A single type of fermata or caesura on all staves. For example, you cannot have a short fermata on one staff and a long fermata at the same rhythmic position on another staff.
 Changing the type of fermata or caesura on one staff automatically changes the type on all staves at that rhythmic position, as a pause at one particular rhythmic position can only be of one duration.
- A single type of breath mark or a Curlew mark on each staff independently. For example, each staff can show a different type of breath mark, but you cannot show two different breath marks at the same rhythmic position on the same staff.

You can combine holds and pauses in the following ways:

- Fermatas cannot exist at the same rhythmic position as any other hold or pause. Breath/
 Curlew marks override fermatas, causing them not to appear on the corresponding staves.
 Caesuras and fermatas permanently replace each other.
- Caesuras can exist at the same rhythmic position as breath/Curlew marks, but not fermatas.
- Breath marks cannot exist at the same rhythmic position as Curlew marks. They permanently replace each other.

EXAMPLE

To show a fermata and breath mark on the same note, ensure that the breath mark exists at a different rhythmic position, as indicated by its attachment line. For example, move it rhythmically from an adjacent note, or input it when the caret is at the required position.



RELATED LINKS

Input methods for holds and pauses on page 328
Caret on page 214
Rhythmic position on page 23
Moving notes/items rhythmically on page 448
Hiding/Showing attachment lines on page 426

Changing the number of fermatas per staff

You can change the maximum number of fermatas that appear on each staff at individual positions when there are multiple voices on a staff.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing ?** is selected in the Engrave toolbox.

PROCEDURE

- 1. Select the fermatas whose maximum number per staff you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate Max. fermatas per staff in the Holds and Pauses group.
- **3.** Select one of the following options from the menu:

- One per voice
- One per each side of staff
- One per staff

RESULT

The number of fermatas shown at the selected positions is changed.

RELATED LINKS

Properties panel on page 646 Engrave toolbox on page 490

Positioning fermatas on barlines

You can position individual fermatas over a barline instead of over a note to indicate a gap before the start of the following bar.

NOTE

Fermatas cannot be positioned on barlines if Max. fermatas per staff is also activated.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, Graphic Editing 3 is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the fermatas you want to position over barlines. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate Attach to barline in the Holds and Pauses group.

RESULT

The selected fermatas are positioned above the barline at the end of the bars they were in originally, appearing only above staves that are not joined by the barline. Depending on the instrumentation, this may mean they only appear at the top of the system.

Deactivating **Attach to barline** returns the selected fermatas to their default positions.

EXAMPLE



Fermata input on last quarter note in the bar



Fermata positioned on barline

Holds and pauses in playback

Dorico Elements uses a combination of changing note durations and inserting gaps to reflect all types of fermatas, breath marks, and caesuras in playback.

Fermatas in playback

Fermatas both lengthen the duration of notes at their positions, and insert gaps after them. The durations of holds and gaps depends on the type of fermata, with long fermatas producing longer held notes and gaps than short fermatas.

Breath marks in playback

Breath marks shorten the duration of the notes that precede them. By default, they shorten notes by 50% of a quarter note at 120 bpm, up to a maximum of half the duration of affected notes.

Breath marks do not insert time in playback.

Caesuras in playback

Caesuras insert gaps after notes at their positions, before notes at the next rhythmic position. By default, they insert gaps equivalent to 50% of the beat duration at their positions.

Caesuras do not extend the duration of notes at their positions.

You can change the gap/hold durations of individual fermatas and caesuras, including editing them in the Tempo editor.

You can also change the default gap/hold durations of all holds and pauses project-wide in **Playback Options** > **Timing** > **Pauses**.

NOTE

Fermatas and caesuras do not affect playback if they overlap with gradual tempo changes. We recommend that you position gradual tempo changes to end rhythmically before fermatas/caesuras. You can lengthen gradual tempo changes graphically in Engrave mode if you want to show them extending beyond fermatas/caesuras.

RELATED LINKS

Playing back music on page 525 Changing the played duration of notes on page 672 Gradual tempo changes on page 1323 Tempo editor on page 689

Including/Excluding pauses in playback

By default, Dorico Elements plays back all holds and pauses. You can include/exclude all holds and pauses project-wide in playback; for example, to hear your music at a consistent speed and without gaps.

NOTE

Fermatas and caesuras never affect playback in fixed tempo mode.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-P to open Playback Options.
- 2. In the category list, click **Timing**.

- 3. In the Pauses section, activate/deactivate Play back pauses.
- 4. Click Apply, then Close.

RELATED LINKS

Playing back music on page 525
Changing the tempo mode on page 528
Playback Options dialog on page 732
Including/Excluding slash voices in playback on page 1238
Including/Excluding repeats in playback on page 535
Input methods for holds and pauses on page 328

Changing the gap/hold durations of fermatas in playback

You can change the gap and hold durations of individual fermatas in playback, independently of your project-wide settings. For example, to make a single fermata last longer without changing its notated type.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing ?** is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the fermatas whose playback gap/hold durations you want to change. You can do this in Write mode and Engrave mode.
- **2.** In the Properties panel, activate/deactivate the following properties, individually or together, in the **Holds and Pauses** group:
 - Hold duration %
 - Gap duration %
- 3. Change the values in the value fields.
- **4.** Optional: To make the selected fermatas play back without gaps, activate **Hold only**.

RESULT

The gap and/or hold durations of the selected fermatas in playback are changed.

TIP

- You can also edit the playback of individual fermatas in the Tempo editor.
- You can change the default playback gap/hold durations of all fermatas project-wide, including setting different values for each type of fermata, in Playback Options > Timing > Pauses.

RELATED LINKS

Properties panel on page 646 Engrave toolbox on page 490 Types of fermatas on page 992 Tempo editor on page 689

Changing the gap duration of caesuras in playback

You can change the gap duration of individual caesuras in playback, independently of your project-wide settings. For example, if your music requires some caesuras to have larger gaps than others.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the caesuras whose playback gap duration you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate/deactivate Gap duration % in the Holds and Pauses group.
- **3.** Change the value in the value field.

RESULT

The gap duration of the selected caesuras in playback is changed.

TIP

- You can also edit the playback of individual caesuras in the Tempo editor.
- You can change the default playback gap duration of all caesuras project-wide in Playback
 Options > Timing > Pauses.

Key signatures

Key signatures are the markings that show the current key of music by indicating which notes in the scale for that key are sharpened or flattened. They are shown at the start of each system on every applicable staff.

Traditionally, accidentals are organized following the pattern of the circle of fifths, which is different for sharp keys and flat keys.

Using key signatures saves space, as by indicating which notes are generally going to be sharp or flat in the music in one group at the start of each system, these notes do not need an accidental beside them every time they occur.



Once you have input a key signature, all notes you subsequently input follow the key signature; for example, if you input an **F** after inputting a G major key signature, an F# is input automatically.

Key signatures that do not show accidentals, such as A minor or open key signatures, are indicated by signposts.

Instruments that do not usually have key signatures, such as timpani or horn, have a **No key sig** variant in Dorico Elements which never show key signatures. You can select the appropriate instrument variant from the instrument picker when adding or changing instruments.

Flows without any key signatures are treated as if there were an open/atonal key signature rather than A minor or C major.

By default, key signatures apply to all staves. However, there are certain situations, such as in polytonal music, where some parts require their own key signature, independently of the rest of the ensemble. You can input key signatures that apply to all staves or only apply to single staves in Dorico Elements.

In Dorico Elements, key signatures exist within the overarching tonality system for your project. The only tonality system that comes as standard in Dorico Elements is 12-EDO.

NOTE

- You cannot hide key signatures, as they provide crucial information about the pitch of notes. If you do not want to see a key signature, you can input an open key signature or delete all key signatures from the flow or project.
- You do not have to input multiple simultaneous key signatures if you have transposing instruments in your score. Dorico Elements handles instrument transpositions automatically.

RELATED LINKS

Input methods for key signatures on page 273

Tonality systems on page 1009
Instrument picker on page 110
Note input on page 219
Transposing instruments on page 130
Concert vs. transposed pitch on page 174
MIDI Import Options dialog on page 84

Key signature arrangements

Dorico Elements automatically follows conventions for the placement and appearance of key signatures, such as showing accidentals in the accepted circle of fifths order and positioning key signatures between clefs and time signatures.

The order in which accidentals are shown in key signatures is different for sharp keys and flat keys.

- For sharps: F#, C#, G#, D#, A#, E#, B#
- For flats: Bb, Eb, Ab, Db, Gb, Cb, Fb

Accidentals are arranged automatically in these orders in Dorico Elements for all standard Western key signatures. There is an accepted pattern for the placement of accidentals in a key signature, so that they fit inside the staff according to the current clef. The pattern of accidentals is the same in all clefs, apart from the tenor clef, which requires sharp key signatures to follow a different, ascending pattern to ensure the accidentals fit on the staff.

Clef	Arrangement of sharps	Arrangement of flats
Treble		
Bass	9: #######	9:
Alto	13 ####################################	
Tenor	13 ####	

Types of key signatures

There are multiple types of key signatures in Dorico Elements, which can all be input, moved, and deleted in the same ways.

Major and minor key signatures

The key signature for a major key appears the same as the key signature for its relative minor, and vice versa. For example, Bb major has two flats in its key signature. This is the same number of flats as for G minor, which is the relative minor key to Bb major. The difference is that music in G minor usually has sharpened Fs, as the seventh degree of the scale is raised in minor keys. Therefore, if you input an F#/Gb after a G minor key signature, Dorico Elements prefers to spell it as F# in most cases, in order to follow the convention of harmonic minor keys.





A B flat major scale following a B flat major key signature

A G minor scale following a G minor key signature $\,$

Open key signature

Although open, or atonal, key signatures appear the same as C major or A minor key signatures because none shows any accidentals, open key signatures behave differently.

In an open key signature, the spelling of accidentals is based on the current direction of the music. If the music is rising, sharps are preferred, whereas if the music is falling, flats are preferred. There is no hierarchy of pitches in an open key signature, so the same pitch might be spelled differently each time it appears depending on its context, even within a few bars.

In a C major or A minor key signature, accidentals are spelled based on the context of the major or minor tonality implied. For example, in C major, sharps in general are preferred, whether the music is going up or going down. Similarly, in A minor, G# in particular is preferred, whether the music is going up or going down, as G# is the leading note in A minor.

No key signature

Some instruments are accustomed to seeing no key signatures in their parts, no matter the overall key of the piece. These instruments include timpani, percussion, horn, trumpet, and sometimes the harp.

If you have added the **No key sig** version of these instruments, then no key signature is shown in their parts, even if they are a transposing instrument, such as horn or trumpet.

Any pitch can be input into these instruments, and they show accidentals if needed.

RELATED LINKS
Input methods for key signatures on page 273
Instrument picker on page 110

Hiding/Showing key signatures at the start of systems

By default, key signatures are shown at the start of all systems. You can hide/show key signatures at the start of single-staff systems from the second system onwards in each flow independently.

Hiding key signatures on single-staff systems after the first system is a convention used in hand-copied lead sheets, usually in combination with hiding clefs and showing systemic barlines.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-N to open Notation Options.
- **2.** In the **Flows** list, select the flows in which you want to hide/show key signatures after the first system.

By default, only the current flow is selected when you open the dialog. You can select other flows by clicking **Select All** in the action bar, clicking and dragging across multiple flows, **Shift** -clicking adjacent flows, and **Ctrl/Cmd** -clicking individual flows.

- 3. In the category list, click **Key Signatures**.
- **4.** Choose one of the following options for **Key signatures at start of systems following first system**:
 - Show key signatures
 - Hide key signatures
- 5. Click Apply, then Close.

RESULT

Key signatures are hidden or shown at the start of single-staff systems from the second system onwards in the selected flows.

NOTE

- Key signature changes that occur at system breaks after the first system are always shown.
- Key signatures are always shown at the start of systems that contain more than one staff.

RELATED LINKS

Hiding/Showing systemic barlines on single-staff systems on page 803 Hiding/Showing clefs at the start of systems on page 893

Positions of key signatures

Key signatures are positioned between clefs and time signatures by default, and are shown on every staff that requires a key signature. They are not shown on staves for unpitched instruments.

Key signatures are shown at the start of a piece and at the start of subsequent movements, even if the music carries straight on and in the same key. Unlike time signatures, key signatures appear at the start of every system, even if the key signature has not changed. They apply until the end of the flow or until the next key signature change, whichever comes first.



The correct position for key signatures is between clefs and time signatures.

If a key signature change occurs during a piece or movement, it should be placed immediately after a barline. It is customary to have a double barline where a key signature change takes place, which is the default setting in Dorico Elements.



Examples of key signatures positioned after double barlines

You can move key signatures to new rhythmic positions in Write mode. They are automatically positioned correctly.

RELATED LINKS

Cautionary key signatures on page 1005 Key signature arrangements on page 1001 Moving notes/items rhythmically on page 448 Moving key signatures graphically on page 1004

Moving key signatures graphically

You can make individual changes to the graphical position of key signatures without affecting the positions of any other items.

PREREOUISITE

Note Spacing is selected in the Engrave toolbox.

PROCEDURE

1. In Engrave mode, select the square note spacing handle above the key signature you want to move.



A smaller circular handle appears beside the key signature.

2. Press **Tab** to select the circular handle.



- **3.** Move the handle in any of the following ways:
 - To move it a standard amount to the right or left, press Alt/Opt plus the corresponding arrow key. For example, press Alt/Opt-Left Arrow to move handles to the left.
 - To move it a large amount, press Ctrl/Cmd plus the standard key command; for example, Ctrl/Cmd-Alt/Opt-Left Arrow.

- To move it a moderate amount, press Shift plus the standard key command; for example, Shift-Alt/Opt-Left Arrow.
- To move it a small amount, press **Ctrl/Cmd Shift** plus the standard key command; for example, **Ctrl/Cmd-Shift-Alt/Opt-Left Arrow** .

NOTE

You cannot move note spacing handles with the mouse, you can only move them using the keyboard.

RESULT

The key signature is moved graphically to the right/left.

TIP

When **Graphic Editing** is selected in the Engrave toolbox, you can also change **Spacing offset** in the **Key Signatures** group of the Properties panel to move key signatures horizontally. However, this also affects global note spacing at the rhythmic position of the key signature, including moving cancellation naturals.

You can also move cancellation naturals graphically, independently of the subsequent key signature and without affecting the spacing of any other item using the **Cancellation naturals X offset** property.

RELATED LINKS

Engrave toolbox on page 490 Note spacing on page 494

Cautionary key signatures

When a key signature change occurs at a system break, either in the score or in a part, the new key signature is shown at the end of the first system as well as at the start of the new system.

This is sometimes considered a "cautionary key signature", as players become used to seeing the key signature at the start of the system and therefore may miss a change of key signature if it is not conspicuously shown at the end of systems. It is also known as a "courtesy key signature".

In Dorico Elements, the key signatures shown at the end of one system and at the start of the next system are the same item, not separate items. You can hide cautionary key signatures, either individually or by default in each flow.

TIP

We recommend using flows for separate spans of music. Dorico Elements does not show cautionary key signatures or time signatures between flows.

RELATED LINKS

Splitting flows on page 487
Hiding/Showing key signatures at the start of systems on page 1003
System breaks on page 617
Cautionary time signatures on page 1362
Repeat markers on page 1216
Clefs on page 889

Hiding/Showing cautionary key signatures

You can hide/show individual cautionary key signatures shown at the ends of systems when key signature changes occur at system breaks, independently of your per-flow setting. For example, to save horizontal space when using key signatures with many accidentals. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing 1** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** Select the cautionary key signatures that you want to hide/show. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate Cautionary at end of system in the Key Signatures group.
- **3.** Choose one of the following options:
 - Hide
 - Show

RESULT

The selected cautionary key signatures are hidden/shown at the ends of systems. This does not affect key signatures shown at the start of systems.

If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

TIP

You can hide/show cautionary key signatures by default in each flow independently on the **Key Signatures** page in **Notation Options**.

RELATED LINKS

Properties panel on page 646
Changing the property scope on page 648
Engrave toolbox on page 490
Cautionary time signatures on page 1362
Hiding/Showing key signatures at the start of systems on page 1003
Notation Options dialog on page 730

Enharmonic equivalent key signatures

Enharmonic equivalent key signatures are keys with different names that include the same pitches, such as C# major and Db major. Dorico Elements follows the convention for transposing to keys with the same type of accidental as the previous key, except where the enharmonic equivalent key signature has fewer accidentals.

When transposing selections of notes, Dorico Elements prefers keys with the same type of accidental as the previous key signature. When choosing key signatures for transposing

instruments, Dorico Elements prefers key signatures with the same type of accidental as the current concert pitch key.

However, there are some instances where you might prefer to transpose to a key with a different type of accidental as it has fewer accidentals than the enharmonic equivalent key. For example, C# major has seven sharps, whereas the enharmonic equivalent key of Db major only has five flats. This means the player has to remember the accidentals for fewer notes.

Transposing to an enharmonic equivalent key with fewer accidentals can have the added benefit of improving readability by avoiding double sharps or double flats. For example, transposing music from F# to G# requires the leading note to be spelled as an F*, but transposing to Ab instead means the leading note is G4.





G# major requires a double sharp leading note

Ab major, the enharmonic equivalent to G#, does not require a double sharp leading note

By default, Dorico Elements selects an enharmonic equivalent key signature if it has fewer accidentals. You can change this setting in each flow independently.

How key signatures affect transposing instruments

If there is a key signature in the full score, it is transposed for a transposing instrument by the same degree as the transposing interval for the instrument. For example, in a project in E major, a Bb clarinet part has a key of F# major, as a Bb clarinet sounds a whole step (tone) below its notated pitch.

Instruments that do not show a key signature

Some instruments are accustomed to seeing no key signatures in their parts, no matter the overall key of the piece. These instruments include timpani, percussion, horn, trumpet, and sometimes the harp. If you have input the **No key sig** version of these instruments, then no key signature is shown in their parts, even if they are a transposing instrument, such as horn or trumpet.

You can still transpose music in the staves of these instruments, but they show accidentals as necessary, instead of showing a key signature.

RELATED LINKS

Notation Options dialog on page 730
Transposing tools on page 454
Adding instruments to players on page 131
Concert vs. transposed pitch on page 174
Transposing instruments on page 130

Allowing/Disallowing enharmonic equivalent key signatures

By default, Dorico Elements selects enharmonic equivalent key signatures if they have fewer accidentals when transposing selections that include a key signature and in transposing layouts. You can change this setting in each flow independently; for example, if you want all layouts to have flats in their key signatures, regardless of the number of accidentals.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-N to open Notation Options.
- **2.** In the **Flows** list, select the flows in which you want to allow/disallow enharmonic equivalent key signatures.
 - By default, only the current flow is selected when you open the dialog. You can select other flows by clicking **Select All** in the action bar, clicking and dragging across multiple flows, **Shift** -clicking adjacent flows, and **Ctrl/Cmd** -clicking individual flows.
- **3.** In the category list, click **Accidentals**.
- **4.** In the **Transposition** section, activate/deactivate **Prefer enharmonic equivalent key signatures with fewer accidentals**.
- 5. Click Apply, then Close.

RESULT

Enharmonic equivalent key signatures with fewer accidentals are allowed when the option is activated, and disallowed when the option is deactivated. This affects resulting key signatures when transposing selections that include a key signature and in transposing layouts.

Tonality systems

The term "tonality system" is used in Dorico Elements to encompass three crucial elements that together make up the concept of tonality.

The three elements that make up tonality systems are:

- A number of equal divisions of the octave, or EDO. For example, standard Western scales with half-step (semitone) steps have 12-EDO.
- A set of accidentals. This allows you to notate how much a note is raised or lowered.
- A key signature. In Dorico Elements, you can use any traditional Western key signature.

In Dorico Elements, you cannot change the tonality system; this is only available in Dorico Pro.

Equal Division of the Octave (EDO)

EDO stands for Equal Division of the Octave: the number of equal pieces, or intervals, into which an octave is divided.

Traditional Western harmony is based on equal temperament, another method used to describe tonality systems, or 12-EDO, as the traditional scale from C-C is made up of twelve steps spread across the seven notes in the scale.

For example, between the notes A and B there are two steps, but between B and C there is one step. This is because in 12-EDO, each step represents a half-step (semitone), and there are two half-steps between A and B according to standard equal temperament, but only one half-step between B and C.

Other tonality systems can have different equal divisions of the octave; for example, in 24-EDO each octave division is a quarter tone. However, the only tonality system in Dorico Elements is 12-EDO.

Lyrics

In Dorico Elements, the term "lyrics" is used for all text that is sung by singers.



Lyrics for a soprano duet with basso continuo accompaniment

Lyrics are organized into lyric lines to ensure consistent horizontal alignment and to make showing verse numbers simple and accurate. There are different types of lyric lines for lyrics with different purposes, and the appearance of lyrics changes depending on their line type. For example, lyrics in chorus and translation lines are shown in an italic font by default.

In Dorico Elements, lyrics were designed so that it is simple to make changes to existing lyrics without having to re-input new lyrics each time. For example, you can change the syllable type of lyrics so that they are either followed or not followed by a hyphen.

When inputting lyrics, you can use key commands to switch between lyric lines, to change on which side of the staff lyrics are input, and to switch the lyric style between normal lyrics, chorus lyrics, and translation lyrics. You can also change the type of lyrics after they have been input.

You can input multiple lines of lyrics, chorus lyrics, and translations, both above or below staves. You can filter existing lyrics according to their type and lyric line.

RELATED LINKS

Inputting lyrics on page 382
Lyric line numbers on page 1028
Lyric hyphens and lyric extender lines on page 1026
Changing the syllable type of existing lyrics on page 1012
Lyrics paragraph styles on page 1022
Exporting lyrics on page 1015

Types of lyrics

Lyrics are divided into different lyric types in Dorico Elements.

Lyric lines

Lyric lines contain normal lyrics and can be shown with verse numbers. They can be both below and above the staff.

Chorus lines

Chorus lines contain lyrics in an italic font and are placed between lyric lines. For example, if there are two lyric lines, the chorus line appears between Line 1 and Line 2. Chorus lines do not have verse numbers.

Lyric line translations

Lyric line translations show the text in lyric lines or chorus lines in different languages. They are placed directly below the lyric line or chorus line of which they are a translation. They are shown in an italic font.

Each lyric line can have its own lyric line translation, including chorus lines.

Lyric line translations do not have verse numbers, as they are part of the line of which they are a translation.

You can input all types of lyrics using the lyrics popover. The icon shown on the left-hand side of the popover indicates the type of lyric currently being input.

RELATED LINKS

Lyric line numbers on page 1028
Inputting lyrics on page 382
Changing the line number and type of lyric lines on page 1029

Changing the type of individual lyrics

You can change the type of individual lyrics after they have been input. For example, you can change lyrics into chorus lyrics or translation lyrics.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** 3 is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the individual lyrics whose type you want to change. You can do this in Write mode and Engrave mode.
- **2.** In the Properties panel, activate/deactivate the following properties, individually or together, in the **Lyrics** group:
 - Chorus
 - Is translation

RESULT

- Activating **Chorus** changes the selected individual lyrics to chorus lyrics.
- Activating Is translation changes the selected lyrics to translation lyrics of the same lyric line number. For example, selecting lyrics in Line 2 and activating Is translation turns them into translation lyrics for Line 2.
- Activating both properties changes the selected lyrics to translation lyrics of the chorus.
- Deactivating both properties changes the selected lyrics to normal lyrics. Their line number is indicated by the number in **Line number** in the **Lyrics** group of the Properties panel.

NOTE

If other chorus lines exist at the same position on the side of the staff where you want to change your current selection to chorus lines, the two lines collide. To avoid this, change the type of the whole lyric line, which automatically avoids collisions.

RELATED LINKS

Properties panel on page 646
Engrave toolbox on page 490
Showing lyrics in italics on page 1022
Changing the line number and type of lyric lines on page 1029

Types of syllables in lyrics

There are different types of syllables in lyrics, depending on their position in words. The key you press to advance the popover indicates the syllable type for each lyric.

Dorico Elements defines lyrics as different syllables depending on how you advance the popover when inputting lyrics.

Whole word

Lyrics are considered a whole word if the lyric comes after a gap and is followed by a gap or a period.

No hyphens are shown either side of whole word lyrics. Extender lines can be shown after lyrics.

Start

Lyrics are considered the start syllable in a multi-syllabic word if the lyric comes after a gap, but is followed by a hyphen.

Hyphens are shown after start lyrics, which can be continuation hyphens depending on the distance before the next lyric in the same lyric line.

Middle

Lyrics are considered the middle syllable in a multi-syllabic word if the lyric comes after a hyphen, and is followed by a hyphen.

Hyphens are shown after middle lyrics, which can be continuation hyphens depending on the distance before the next lyric in the same lyric line.

Fnd

Lyrics are considered the end syllable in a multi-syllabic word if the lyric comes after a hyphen but is followed by a gap or a period.

Extender lines can be shown after end lyrics.

RELATED LINKS

Inputting lyrics on page 382 Lyric hyphens and lyric extender lines on page 1026 Changing the alignment of lyrics relative to notes on page 1018

Changing the syllable type of existing lyrics

You can change the syllable type of lyrics after they have been input.

For example, if you advanced the lyrics popover to the next note by pressing **Space** but you later want it to be followed by a hyphen, you can change its syllable type.

NOTE

Changing the syllable type changes whether a hyphen is shown after the selected lyrics, not before them. Therefore, if you want to show a hyphen before lyrics, you must change the syllable type of the lyrics immediately preceding them.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** Is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the lyrics whose syllable type you want to change. You can do this in Write mode and Engrave mode.
- **2.** In the Properties panel, select one of the following options from the **Syllable type** menu in the **Lyrics** group:
 - Whole word
 - Start
 - Middle
 - End

RESULT

Lyrics with a syllable type of **Whole word** or **End** are followed by a space.

Lyrics with a syllable type of **Start** or **Middle** are followed by a hyphen.

Copying and pasting lyrics

You can copy and paste lyrics from both existing lyric lines in Dorico Elements and from external text editors; for example, if you want to copy a lyric line to a player who has different rhythms to the source but uses the same lyrics.

When copying text from outside Dorico Elements, you must format the text so it is suitably separated into syllables; for example, by adding hyphens in multi-syllabic words. This ensures Dorico Elements can correctly identify the characters required for each word/syllable and therefore format the resulting lyrics appropriately. There are automatic hyphenation tools that you can use, but results from these are not always reliable. Dorico Elements checks text you have copied to your clipboard to make sure it contains only single spaces and single hyphens for correct syllable input.

NOTE

You cannot currently copy and paste lyrics containing Chinese, Japanese, or Korean characters. This is planned for future versions.

PROCEDURE

1. Select the lyrics/text you want to copy. You can do this within Dorico Elements or externally.

NOTE

• If you are copying existing lyrics/text in Dorico Elements, you must be in Write mode.

- If you want to select many existing lyrics in Dorico Elements, you can use filters for lyric lines or you can select a single lyric and press **Ctrl/Cmd-Shift-A** multiple times to select the rest of the lyrics in the lyric line.
- **2.** Press **Ctrl/Cmd-C** to copy the selected lyrics/text.
- 3. In Write mode, select the first note in the voice to which you want to copy lyrics.
- **4.** Open the lyrics popover in any of the following ways:
 - Press Shift-L.
 - In the Notations toolbox, click Popovers , then Lyrics ...
- 5. Optional: Change the lyric type into which you will paste lyrics in one of the following ways:
 - To change the lyric line number, press Down Arrow.
 - To change to a lyric line above the staff, press **Shift Up Arrow**.
 - To change to a chorus line, press **Up Arrow**.
 - To change to a translation lyric line, press **Alt/Opt-Down Arrow**.
- **6.** Press **Ctrl/Cmd-V** to paste the first word/syllable of the copied lyrics/text.

The lyrics popover automatically advances to the next note in the selected voice according to the source text. For example, for syllables followed by hyphens in the source, the popover advances as if you had pressed - (hyphen), which automatically shows hyphens after those syllables.

- **7.** Optional: For words/syllables that you want to apply to two or more notes, you must advance the popover manually in one of the following ways:
 - After complete words or the final syllable in multi-syllabic words, press **Space**.
 - After syllables that are not the final syllable in multi-syllabic words, press (hyphen).
 - After syllables that you do not want to be followed by an extension line or hyphen, press **Right Arrow**.
- 8. Continue pressing Ctrl/Cmd-V for each word/syllable you want to paste.

RESULT

The selected lyrics/text is pasted into the selected lyric line belonging to the voice in which you selected a note.

NOTE

Words/syllables are removed from your clipboard as you paste them. If you want to paste the same lyrics/text into another lyric line or staff, you must copy the source again.

RELATED LINKS

Lyrics popover on page 383
Edit Lyrics dialog on page 1024
Large selections on page 410
Copying and pasting notes/items on page 445

Exporting lyrics

You can export all lyrics from all flows in the project to a plain text file; for example, if you want to create a libretto of all the text sung in a project.

PROCEDURE

- 1. Choose File > Export > Lyrics to open the File Explorer/macOS Finder.
- 2. Specify a name and location for the text file.
- 3. Click Save.

RESULT

All lyrics from all flows in the project are exported to a plain text file, which opens automatically in your default text editor.

Dorico Elements automatically removes hyphens between syllables, and adds contextual information for lyrics, such as their line number and the instrument to which they belong.

RELATED LINKS

File import and export on page 77
Lyric hyphens and lyric extender lines on page 1026
Exporting comments on page 486
Exporting text on page 101

Filters for lyrics

In Dorico Elements, lyrics filters allow you to select all lyrics of a specified type across your project or across a specific selection.

The following lyrics filters are available:

All Lyrics

Selects all types of lyrics in the current selection, with any lyric line number and placement above/below the staff.

l ine 1

Selects only Line 1 lyrics and translation lyrics for Line 1 in the current selection, including Line 1 below the staff and Line 1 above the staff.

Line 2

Selects only Line 2 lyrics and translation lyrics for Line 2 in the current selection, including Line 2 below the staff and Line 2 above the staff.

Line 3

Selects only Line 3 lyrics and translation lyrics for Line 3 in the current selection, including Line 3 below the staff and Line 3 above the staff.

Line 4

Selects only Line 4 lyrics and translation lyrics for Line 4 in the current selection, including Line 4 below the staff and Line 4 above the staff.

Line 5

Selects only Line 5 lyrics and translation lyrics for Line 5 in the current selection, including Line 5 below the staff and Line 5 above the staff.

Above Staff

Selects all lyrics above the staff in the current selection. You can use this filter in addition to the other filters. For example, you can filter first by line number, and then filter again by staff-relative placement.

Below Staff

Selects all lyrics below the staff in the current selection. You can use this filter in addition to the other filters. For example, you can filter first by line number, and then filter again by staff-relative placement.

Chorus

Selects all chorus lyrics in the current selection.

Translations

Selects all translation lyrics in the current selection.

RELATED LINKS

Filters on page 417

Large selections on page 410

Selecting lyrics using filters

You can use lyric filters to select all lyrics of a specified type across your project or across a specific selection.

PREREQUISITE

You filter setting is set to **Select Only**.

PROCEDURE

- In the music area, make a selection that includes all the lyrics you want to select.
 For example, press Ctrl/Cmd-A to select the whole flow.
- 2. Choose Edit > Filter > Lyrics > [Lyrics type].

RESULT

All lyrics of the selected type in your selection are selected. For example, if you choose **Edit** > **Filter** > **Lyrics** > **Chorus**, all chorus lyrics in your selection are selected.

Positions of lyrics

Dorico Elements automatically positions lyrics and makes adjustments to accommodate variations in the length of lyrics, including adjusting the horizontal alignment of lyrics in melismatic music. However, you can also move lyrics manually.

You can move lyrics to different rhythmic positions in Write mode.

You can move individual lyrics graphically in Engrave mode, but this does not change the rhythmic positions to which they are attached.

Positions of syllables

Lyrics typically coincide with notes. The number of notes sung on syllables or words determines the alignment of lyrics relative to notes:

- Single syllables, which are whole words or parts of longer words that are sung on only one note, are centered on their corresponding note, provided it is notated using a single notehead. Single syllables on tie chains are left-aligned with the left side of the first note in the tie chain.
- Melismata, which are syllables or words that are sung on more than one note, are leftaligned with the left side of the first note to which they apply.

The horizontal spacing of lyrics must be wide enough so that words or syllables do not overlap with the words or syllables on either side. For this reason, note spacing must sometimes be adjusted to accommodate lyrics.

To reduce how severely the note spacing is changed to accommodate lyrics, which can distort the appearance of rhythms, Dorico Elements allows the alignment of some lyrics to be adjusted relative to their corresponding notes. For example, if a long, single-syllable word on a long note follows another long, single-syllable word on a short note, the second word is moved a little to the right to give both words enough space.



In this musical phrase, the lyric "breeze" has been moved to the right to accommodate the lyric "spring" on the previous note.

NOTE

Moving lyrics graphically in Engrave mode overrides the automatic spacing for the selected lyrics. If you move a lyric whose position was automatically readjusted, the note spacing at that rhythmic position might change.

You can prevent Dorico Elements from considering lyrics in note spacing calculations using the **Make space for lyrics** option on the **Note Spacing** page in **Layout Options**; however, we recommend using this option with caution.

Placement of lyric lines

Lyrics are generally placed below the staff to which they apply and relative to other lyric lines according to their line number. For example, lyrics in Line 1 are placed at the top, including when there are multiple lyric lines above the staff.

If a line of lyrics is missing across the width of a whole system, no additional gap is left between the remaining lines of lyrics.

You can also move individual lyric lines vertically. In Engrave mode, when you select any lyric in a lyric line, a square handle appears on the bottom left of the first lyric in the line on that system. This allows you to adjust the vertical position of lyric lines independently of other lyric lines.



Square handle selected at the start of a lyric line in Engrave mode

EXAMPLE

You have three lines of lyrics, but one system does not have a second line of lyrics. On this system, the third line of lyrics is moved upwards, closer to the first line of lyrics.

If a subsequent system does not have a first line, but does have the second and third lines, then the second and third lines of lyrics are moved upwards. The second line of lyrics takes the place of the first line.

RELATED LINKS

Lyric hyphens and lyric extender lines on page 1026 Moving notes/items rhythmically on page 448 Moving items graphically on page 501 Changing the line number and type of lyric lines on page 1029 Note spacing on page 494

Changing the alignment of lyrics relative to notes

You can change the horizontal alignment of individual lyrics relative to notes; for example, if you want to force lyrics at the same position on multiple staves with different default alignments to have the same alignment. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

There is no default setting for the alignment of lyrics relative to notes, as Dorico Elements automatically adjusts the horizontal position of lyrics to minimize note spacing changes. By default, lyrics on single noteheads are center-aligned, and lyrics spanning multiple noteheads are left-aligned.

NOTE

Changing the alignment of lyrics manually overrides Dorico Elements's automatic spacing for the selected lyrics, meaning that note spacing at the affected rhythmic positions might change.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing ?** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** Select the lyrics whose alignment you want to change. You can do this in Write mode and Engrave mode.
- **2.** In the Properties panel, activate **Lyric text alignment** in the **Lyrics** group.
- **3.** Select one of the following alignment options from the menu:
 - Left
 - Center
 - Right

RESULT

The alignment of the selected lyrics is changed. Note spacing is automatically adjusted to avoid collisions with adjacent lyrics.

If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

EXAMPLE



Left-aligned lyric "l'aube"

Center-aligned lyric "l'aube"

Right-aligned lyric "l'aube"

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490 Types of syllables in lyrics on page 1012

Changing the staff-relative placement of lyric lines

You can show whole lyric lines either above or below the staff after they have been input.

PROCEDURE

1. In Write mode, select a lyric in each line whose staff-relative placement you want to change.

TIP

You can also make a selection and use the lyric filters to select different lyric lines according to their line numbers and staff-relative placement.

- **2.** Choose one of the following staff-relative placements:
 - Choose Edit > Notations > Lyrics > Placement > Above.
 - Choose Edit > Notations > Lyrics > Placement > Below.

TIP

You can also choose these options from the context menu.

RESULT

The staff-relative placement of the whole lyric lines in which you selected lyrics is changed.

NOTE

If other lyric lines with the same lyric line number exist at the same position on the side of the staff to which you want to change your current selection, the two lines switch sides. For example, if there is already a Line 2 above the staff at the position where you want to change the placement of Line 2 below the staff, then the existing Line 2 above the staff is placed below the staff to accommodate your most recent preference.

RELATED LINKS

Lyric line numbers on page 1028 Filters for lyrics on page 1015

Changing the staff-relative placement of individual lyrics

You can show individual lyrics either above or below the staff, independently of the staff-relative placement of their lyric line. For example, to clarify the lyrics for each part when two voices on the same staff have different rhythms.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, Graphic Editing I is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the lyrics whose staff-relative placement you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, choose one of the following options for **Line placement** in the **Lyrics** group:
 - Above
 - Below

RESULT

The staff-relative placement of the selected lyrics is changed.

NOTE

If other lyric lines with the same lyric line number already exist at the same position on the same side of the staff, the two lines collide. To avoid this, you can change the lyric line number of one of the lyric lines, for example.

Moving lyric lines vertically

You can move lyric lines graphically upwards/downwards on a per-system basis, independently of other layouts and your project-wide settings. For example, if the shapes of phrases on certain systems make lyric lines appear unevenly centered between staves.

NOTE

- You cannot move individual lyrics upwards/downwards; instead, you can change their lyric line number or staff-relative placement.
- We recommend that you add extra pages and finish laying out your pages before moving
 individual lyric lines vertically, as lyric line offsets are automatically deleted if the frame in
 which they occur changes. For example, if you move lyric lines individually and then add a
 blank page at the start of the layout, all of the individual lyric line offsets in the layout are
 deleted.

PREREQUISITE

Graphic Editing Is selected in the Engrave toolbox.

PROCEDURE

1. In Engrave mode, select any of the following in each system where you want to move lyric lines vertically:

- Any lyric in each lyric line you want to move vertically.
- The handles on the bottom left of the first lyric on each lyric line you want to move vertically.

NOTE

When using the mouse, you must only select handles at the start of each lyric line.

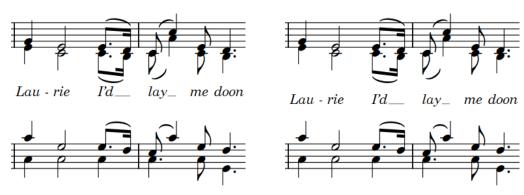
- 2. Move the selected lyric lines upwards/downwards in any of the following ways:
 - To move them a standard amount, press Alt/Opt-Up Arrow / Alt/Opt-Down Arrow.
 This moves lyric lines by 1/4 space per press.
 - To move them a large amount, press Ctrl/Cmd-Alt/Opt-Up Arrow / Ctrl/Cmd-Alt/Opt-Down Arrow. This moves lyric lines by 1 space per press.
 - To move them a moderate amount, press Shift-Alt/Opt-Up Arrow/Shift-Alt/Opt-Down Arrow. This moves lyric lines by 1/2 space per press.
 - To move them a small amount, press **Ctrl/Cmd-Shift-Alt/Opt-Up Arrow / Ctrl/Cmd-Shift-Alt/Opt-Down Arrow**. This moves lyric lines by 1/32 space per press.
 - Click and drag the handles upwards/downwards.

RESULT

The selected lyric lines are moved upwards/downwards on the selected systems. This does not affect the vertical offset of any other lyric lines on those systems or the same lyric lines in other layouts.

EXAMPLE

Because of the shape of the music in this example, the default vertical alignment of the chorus in the middle of the three lyric lines for the verses in the previous bar causes the chorus to appear much closer to notes on the top staff than the bottom staff. Moving the chorus line downwards makes it appear more evenly distributed between the staves.



Default chorus placement

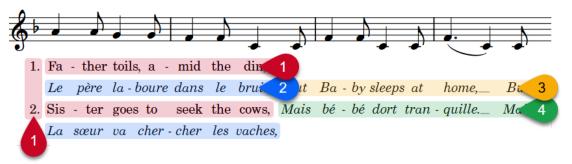
Chorus line moved downwards

RELATED LINKS

Changing the line number of individual lyrics on page 1030 Changing the type of individual lyrics on page 1011 Engrave toolbox on page 490

Lyrics paragraph styles

There are different paragraph styles for different types of lyrics. You can change different aspects of these paragraph styles in the **Paragraph Styles** dialog, such as changing their font size to make lyrics appear larger.



The following paragraph styles are used for lyrics:

- 1 Lyrics: Used for lyric lines and verse numbers
- **2 Lyrics (Translation)**: Used for lyric line translations
- 3 Lyrics (Chorus): Used for chorus lines
- 4 Lyrics (Chorus Translation): Used for chorus line translations

RELATED LINKS

Paragraph Styles dialog on page 739 Types of lyrics on page 1010 Verse numbers on page 1030 Inputting lyrics on page 382

Showing lyrics in italics

You can show individual lyrics in an italic font without changing their paragraph style, lyric type, or staff-relative placement. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

TIP

- If you want to show lyrics in an italic font because they are intended to be either chorus lyrics or translation lyrics, you can change their lyric type instead.
- You can use the **Edit Lyric** dialog to show individual characters in lyrics in italics.
- If you want all normal lyric lines to appear in an italic font project-wide, you can change the Lyrics paragraph style.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, Graphic Editing 3 is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

1. Select the lyrics you want to show in an italic font. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate **Italic** in the **Lyrics** group.

RESULT

The selected lyrics are shown in an italic font. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

RELATED LINKS

Changing the type of individual lyrics on page 1011 Changing the line number and type of lyric lines on page 1029 Edit Lyric dialog on page 1025

Changing the paragraph style used for lyrics

You can change the paragraph style used for individual lyrics; for example, if you want to use narrower paragraph styles for lyrics on tightly spaced systems. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing ?** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** Select the lyrics whose paragraph style you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Paragraph style** in the **Lyrics** group.
- **3.** Select a paragraph style from the menu.

RESULT

The paragraph style used for the selected lyrics is changed. This also affects hyphens shown after and verse numbers shown before selected lyrics.

If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

TIP

You can edit the formatting of the paragraph styles used for lyrics in the **Paragraph Styles** dialog.

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490

Lyric text editing

Proofreading lyrics can be challenging, because lyrics are spaced more widely than regular text and individual words are often split up over large horizontal distances. In Dorico Elements, you

can change the text and formatting of individual lyrics, including viewing entire lyric lines in a single dialog.

Changing the text of existing lyrics

You can change the text of lyrics after they have been input; for example, to correct misspellings.

NOTE

- You can only change one lyric at a time when following these steps. To edit multiple lyrics at once, you can use the **Edit Lyrics** dialog.
- If you want to edit the formatting of individual lyrics, you can use the **Edit Lyric** dialog. However, any edits you have made to the formatting of individual lyrics are removed when you change their text using the popover.

PROCEDURE

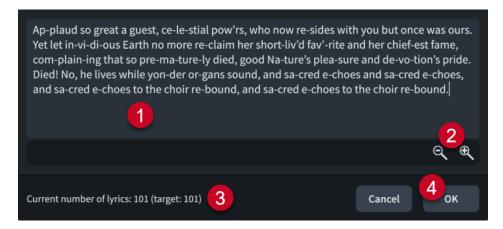
- **1.** In Write mode, select the lyric whose text you want to change.
- 2. Press Return or Shift-L to open the lyrics popover.
- **3.** Change the existing text in the lyrics popover.
- **4.** Optional: If you want to change other existing lyrics, advance the popover in one of the following ways:
 - To advance the popover to the next note if you entered a complete word, or the final syllable in a multi-syllabic word, press **Space**.
 - Existing lyrics are automatically selected in the popover when you press **Space**.
 - To advance the popover to the next note if you entered one syllable of a multi-syllabic word, press -.
 - To move the cursor one character to the right, press **Right Arrow**.
 - To move the cursor one character to the left, press Left Arrow.
 The cursor automatically moves to the next/previous lyric/note if you keep pressing the arrow keys.
- **5.** Press **Return** or **Esc** to close the popover when you have finished changing lyrics. The popover closes automatically when you reach the last note on the staff.

Edit Lyrics dialog

The **Edit Lyrics** dialog allows you to view and edit entire lyric lines in one place and with the text displayed with consistent spacing. This is more convenient than changing each word/syllable individually alongside the music, where lyrics can be split up over large horizontal distances.

You can open the Edit Lyrics dialog by selecting at least one lyric and choosing Edit >
 Notations > Lyrics > Edit Line of Lyrics. You can also choose this option from the context menu.

The dialog shows all lyrics in the same lyric line as the selected lyric and allows you to edit the lyrics, such as fixing misspellings, adding commas, or changing where in a word the hyphen is placed. If you selected multiple lyrics to open the dialog, Dorico Elements populates the dialog with the lyric line of the earliest lyric on the highest staff you selected.



The **Edit Lyrics** dialog comprises the following:

1 Text editor

Allows you to edit all the lyrics in the selected lyric line in the current flow, with hyphens and spaces as appropriate. For example, you can add a comma after the final syllable in a line for a poem setting or replace a hyphen with a space.

Non-breaking spaces appear as mid-dot characters. You can enter non-breaking spaces by pressing **Shift-Alt/Opt-Space**.

NOTE

You cannot add, delete, or change the duration/rhythmic position of lyrics, such as the number of notes to which each lyric applies.

2 Zoom controls

Allow you to increase/decrease the size of text in the dialog.

3 Current number of lyrics

Displays the number of lyrics currently shown in the text editor and the target number of lyrics in the lyric line. The target number is the number of lyrics that already exists in the selected lyric line in the flow.

The current number of lyrics updates automatically as you work in the dialog. Dorico Elements requires the current number and target number of lyrics to match before you can confirm the dialog.

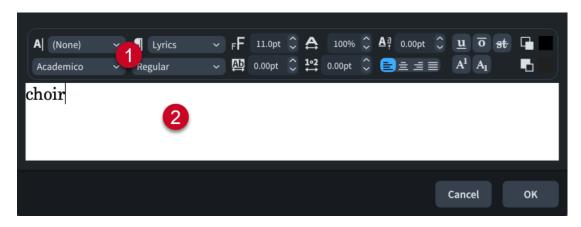
4 OK button

Allows you to confirm your changes and close the dialog. You can only confirm the dialog when the current number and target number of lyrics match.

Edit Lyric dialog

The **Edit Lyric** dialog allows you to edit the formatting of individual lyrics, such as making single characters underlined.

You can open the Edit Lyric dialog by selecting a lyric and choosing Edit > Notations >
 Lyrics > Edit Single Lyric. You can also choose this option from the context menu.



The **Edit Lyric** dialog comprises the following:

1 Text editor options

Allows you to customize the font, size, and formatting of the selected part of the lyric.

2 Text editing area

Shows the current text for the lyric. You can select any part of the lyric and edit it independently of other parts; for example, if you want some characters to appear underlined.

RELATED LINKS

Lyrics paragraph styles on page 1022
Text editor options in Write mode on page 379
Changing the paragraph style used for lyrics on page 1023
Resetting the appearance of items on page 424

Lyric hyphens and lyric extender lines

Lyric hyphens indicate that individual lyrics are syllables within multi-syllabic words; for example, "Hal-le-lu-jah". Lyric extender lines indicate that individual lyrics, either whole words or the last syllables in multi-syllabic words, extend across multiple notes.



A phrase containing hyphens and an extender line

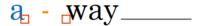
Dorico Elements automatically shows lyric hyphens when you advance the lyrics popover by pressing - between syllables. Lyric hyphens use the paragraph style of the preceding lyric.

Dorico Elements automatically shows lyric extender lines when you advance the lyrics popover by pressing **Space**, either once for tied notes or multiple times for multiple separate notes, provided there is sufficient horizontal space between the end of the lyric and the end position of the extender line. Lyric extender lines end at the right edge of the last notehead to which they apply.

In Engrave mode, lyric hyphens and lyric extender lines have two square handles, one at the start and one at the end. You can move whole lyric hyphens and lyric extenders lines, and you can also move their handles independently of each other. This allows you to lengthen/shorten lyric hyphens and extender lines.

For lyric hyphens, this increases/decreases the space in which lyric hyphens are shown and can result in more/fewer hyphens appearing. You can change the gaps between lyrics/hyphens to control how many hyphens appear.





Lyric extender line with handles shown

Lyric hyphen with handles shown

The start handles of lyric extender lines are attached to the lyrics from which they extend, and the start handles and end handles of lyric hyphens are attached to the lyrics on each side. If you move either of those lyrics, the corresponding lyric extender line or hyphen handles also move.

NOTE

You cannot move lyric extender lines or hyphens upwards/downwards, as their vertical position is determined by their lyric line number and the vertical position of their lyric line.

RELATED LINKS

Inputting lyrics on page 382
Navigation during lyric input on page 384
Positions of lyrics on page 1016
Moving lyric lines vertically on page 1020
Moving items graphically on page 501

Changing the gaps between lyrics/hyphens

You can change the gaps between hyphens, and between lyrics and hyphens, independently of each other. For example, to show more or fewer hyphens in specific bars.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing 3** is selected in the Engrave toolbox.

PROCEDURE

1. In Engrave mode, select the lyrics whose lyric/hyphen gaps you want to change.

TIP

You only need to select one lyric before/after each hyphen, as hyphens are always centered between lyrics.

- **2.** In the Properties panel, activate the following properties, individually or together, in the **Lyrics** group:
 - Gap between lyrics and hyphens
 - Gap between hyphens
- 3. Change the values in the value fields.

RESULT

The gaps between hyphens and/or between lyrics and hyphens for the selected lyrics are changed.

EXAMPLE





Two hyphens shown between "plan" and "tes"

Increasing both gaps results in one hyphen

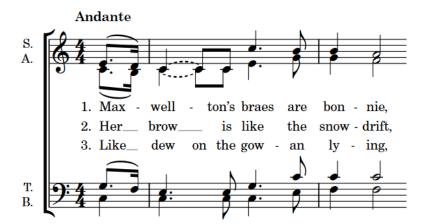
RELATED LINKS

Properties panel on page 646 Engrave toolbox on page 490 Note spacing on page 494

Lyric line numbers

Lyric line numbers are used to organize lyrics when a single musical passage can have different lyrics sung to it, such as music that contains multiple verses. In Dorico Elements, you can specify the line number of lyrics as you input them and by changing the line number of existing lyrics.

For example, if you input lyrics in Line 3 but later want to change those lyrics to Line 4 because you want to input different lyrics as Line 3, you can change your current Line 3 into Line 4, and then input a new line of lyrics as Line 3. The spacing is automatically adjusted to show lyric lines in the correct order.



The start of a choral piece with three lyric lines for its three verses

In Dorico Elements, you can have multiple lines of lyrics both above and below the same staff. Turning lyric lines into chorus lyric lines or lyric line translations changes both their placement and appearance as chorus lyrics generally use an italic font.

RELATED LINKS

Verse numbers on page 1030 Positions of lyrics on page 1016

Changing the line number and type of lyric lines

You can change the lyric line number of whole lyric lines after they have been input. You can also change whole lyric lines to chorus lines and lyric line translations.

For example, you can change the existing Line 1 into a lyric translation of Line 4, or change Line 2 into a chorus line.

TIP

To identify which line you are working on, select a syllable in the line of lyrics and check the number in the **Line number** value field in the **Lyrics** group of the Properties panel.

PROCEDURE

1. In Write mode, select a lyric in the line whose lyric line type you want to change. The lyric line can be above or below the staff.

TIP

You can also make a selection and use the lyric filters to select different lyric lines according to their line numbers.

- 2. Change the line number and/or type of the selected lyric line in one of the following ways:
 - Choose Edit > Notations > Lyrics > Line > [Line number].
 - Choose Edit > Notations > Lyrics > Line > Chorus.
 - Choose Edit > Notations > Lyrics > Translations > [Line number Translation].
 - Choose Edit > Notations > Lyrics > Translations > Chorus Translation.

TIP

You can also choose these options from the context menu.

RESULT

The line number or type of the whole lyric line of the selected lyric is changed.

NOTE

The position of the selected lyric line relative to other lyric lines at the same position might be changed. For example, if there were two lyric lines and you changed Line 1 to Line 3, it now appears below Line 2.

If a lyric line with the same number already exists at the same position on the same side of the staff, the two lines switch. For example, if there is already a Line 1 at the rhythmic position where you want to change Line 2 to Line 1, then the existing Line 1 becomes Line 2 to accommodate your most recent preference. The same applies to chorus lines and lyric line translations.

RELATED LINKS

Types of lyrics on page 1010 Filters for lyrics on page 1015

Changing the line number of individual lyrics

You can change the lyric line number of individually selected lyrics after they have been input.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** Is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the individual lyrics whose line number you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, change the value for Lyric number in the Lyrics group.

RESULT

The line number of the selected lyrics is changed to match the value in the value field.

NOTE

The position of the selected lyrics relative to other lyric lines might be changed. For example, if there were two lyric lines and you changed lyrics in Line 1 to Line 3, they now appear below Line 2.

Verse numbers

Verse numbers indicate the order in which lyrics are sung when multiple lines of lyrics share the same musical passage. They are commonly used in hymns and song sheets.

Depending on the type of music you are writing, verse numbers might not be appropriate. Therefore, hiding/showing verse numbers in Dorico Elements is optional. By default, verse numbers are not shown. You can hide/show verse numbers on individually selected lyrics.

Verse numbers use the same paragraph style as the following lyric.

NOTE

Lyric line translations are part of the lyric line of which they are a translation, so they do not have their own verse number.

RELATED LINKS

Lyrics paragraph styles on page 1022

Hiding/Showing verse numbers

You can hide/show verse numbers on individual lyrics; for example, if you want to show the verse number at the start of every system.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing ?** is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the lyrics before which you want to hide/show verse numbers. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate/deactivate Show verse number in the Lyrics group.
- **3.** Activate/Deactivate the corresponding checkbox.

RESULT

Verse numbers are shown before the selected lyrics when the checkbox is activated, and hidden when the checkbox is deactivated.

RELATED LINKS

Properties panel on page 646 Engrave toolbox on page 490

Elision slurs

Elision slurs are used to show that two or more syllables or characters are part of the same lyric. Elision slurs are also sometimes used to tell singers not to breathe between the joined lyrics.



A soprano part containing multiple elision slurs

Dorico Elements automatically shows elision slurs in lyrics that contain the underscore character.

RELATED LINKS

Inputting lyrics on page 382 Slurs on page 1261

Hiding/Showing East Asian elision slurs

You can hide/show East Asian elision slurs for individual lyrics. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** Select the lyrics on which you want to show East Asian elision slurs. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate/deactivate **Show East Asian elision slur** in the **Lyrics** group.
- **3.** Activate/Deactivate the corresponding checkbox.

RESULT

East Asian elision slurs are shown on the selected lyrics when the checkbox is activated, and hidden when the checkbox is deactivated. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

EXAMPLE







East Asian elision slur hidden

Notes

Notes are shapes that are positioned on staves to indicate musical pitches. Notes are most commonly shown with oval-shaped, round noteheads that are either filled or void depending on their duration, but there are many different designs of noteheads that you can use.

Depending on their duration, notes can have stems that help indicate their duration.

In Dorico Elements, a sequence of adjacent notes joined with ties is considered a single note of the total duration of the tie chain, rather than separate notes. Note grouping is automatically adjusted according to the prevailing beat grouping, which is normally set by the time signature.

RELATED LINKS
Inputting notes on page 219
Note spacing on page 494
Stems on page 1055
Ties on page 1341
Note and rest grouping on page 841
Beam grouping according to meters on page 822
Changing the notehead design of individual noteheads on page 1038
Adding notes above/below existing notes on page 253
Bracketed noteheads on page 1047

Notehead sets

A notehead set is a collection of related noteheads that together allow you to represent all the different noteheads required for the different durations used in music notation.

A typical notehead set contains at least four noteheads:

- A black notehead for quarter notes (crotchets) and shorter
- A white notehead for half notes (minims)
- A wider white notehead for whole notes (semibreves)
- A wider white notehead with one or two vertical strokes on either side, or a square white notehead, for double whole notes (breves)

Pitch-dependent notehead sets contain noteheads that vary according to the pitch of notes rather than their duration.

- In pitched notehead sets, there are different noteheads for different pitches.
 For example, the Pitch Names notehead set shows the letter name and any applicable accidental of each note within its notehead.
- In *scale degree* notehead sets, there is a different notehead for each scale degree, relative to the current key signature.
 - For example, the Aikin 7-shape notehead set uses a different notehead shape for each pitch.

NOTE

A single notehead can appear in multiple notehead sets. If you edit a notehead within one
notehead set, your changes affect the appearance of that notehead in all notehead sets that
contain it.

- Notehead sets can only contain noteheads of the same type. For example, you cannot use a normal notehead in a pitched notehead set.
- You cannot change the type of an existing notehead set or an existing notehead.

RELATED LINKS

Pitch-dependent notehead set designs on page 1037

Notehead set designs

There are a number of different notehead set designs that you can use for individual noteheads in Dorico Elements.

You can find the available notehead designs by selecting at least one note and choosing
 Edit > Notations > Notehead > [Notehead type or design] > [Notehead design]. You can also choose these options from the context menu.

NOTE

Dorico Elements does not offer stemless noteheads. Instead, you can hide the stems of notes with any notehead design.

General noteheads

Notehead set design	Notehead set name
	Larger Noteheads
	Default Noteheads
	Large Circled Noteheads
	Circled Noteheads
	Slashed Noteheads (Bottom Left to Top Right)
	Slashed Noteheads (Top Left to Bottom Right)

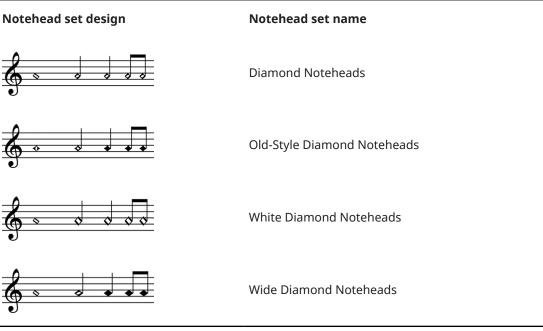
Cross noteheads

Notehead set design Notehead set name Circle X Noteheads Large X and Diamond Noteheads Ornate X Noteheads Plus Noteheads With X Noteheads X Noteheads X and Circle X Noteheads X and Diamond Noteheads

Triangular noteheads

Notehead set design	Notehead set name
	Large Arrow Down Noteheads
	Large Arrow Up Noteheads

Notehead set design Triangle Down Noteheads Triangle Left Noteheads Triangle Right Noteheads Triangle Up Noteheads Diamond noteheads



Notehead set design Notehead set name Muted Slash Noteheads

Slash noteheads

Notehead set design	Notehead set name
	Oversized Slash Noteheads
	Slash Noteheads
	Small Slash Noteheads

Round and square noteheads

Notehead set design	Notehead set name
	Moon Noteheads
	Rectangular Noteheads
	Round White with Dot Noteheads

RELATED LINKS

Changing the notehead design of individual noteheads on page 1038 Hiding/Showing stems on page 1060 Hiding/Showing noteheads on page 1041

Pitch-dependent notehead set designs

Pitch-dependent notehead sets use different notehead designs or different notehead colors depending on the pitch of notes. There are a number of different pitch-dependent notehead sets available in Dorico Elements.

You can find the available notehead designs by selecting at least one note and choosing
 Edit > Notations > Notehead > [Notehead type or design] > [Notehead design]. You can also choose these options from the context menu.

Scale degree noteheads

Notehead set design

Notehead set name



Aikin 7-shape Noteheads



Funk 7-shape Noteheads



Walker 4-shape Noteheads



Walker 7-shape Noteheads

Pitched noteheads

Notehead set design

Notehead set name



Figurenotes© Noteheads



Pitch Name Noteheads

RELATED LINKS

Hiding/Showing stems on page 1060 Hiding/Showing noteheads on page 1041

Changing the notehead design of individual noteheads

You can change the notehead design of individual noteheads, including trill auxiliary notes. For example, cross noteheads might be used to indicate where players should produce pitchless sounds, such as air sounds on wind instruments.

NOTE

- These steps do not apply to notes in slash voices.
- To represent different playing techniques for notes belonging to unpitched percussion instruments, you can instead change their playing technique.
- To represent harmonics or rhythm slashes, you can instead turn notes into harmonics or change them to a slash voice. You can also input slash regions.

PREREQUISITE

If you are in Engrave mode, **Graphic Editing** Is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the noteheads whose design you want to change. You can do this in Write mode and Engrave mode.
- 2. Choose Edit > Notations > Notehead > [Notehead type] > [Notehead design].
 For example, to change the notehead design of the selected notes to X noteheads, choose
 Edit > Notations > Notehead > Crosses > X Noteheads.

TIP

You can also choose these options from the context menu.

RESULT

The notehead design of the selected notes is changed.

TIP

You can assign a key command for each factory default notehead design on the **Key Commands** page in **Preferences**.

RELATED LINKS

Engrave toolbox on page 490

Rhythm slashes on page 1236

Changing the voice of existing notes on page 453

Harmonics on page 1062

Playing technique-specific noteheads on page 1399

Hiding/Showing stems on page 1060

Hiding/Showing noteheads on page 1041

Key Commands page in the Preferences dialog on page 58

Changing the size of accidentals on page 777

Resetting notehead designs

You can reset the notehead design of individual notes and return them to using the default notehead design.

PREREQUISITE

If you are in Engrave mode, **Graphic Editing** 3 is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the noteheads whose design you want to reset. You can do this in Write mode and Engrave mode.
- 2. Choose **Edit** > **Notations** > **Notehead** > **Reset to Default Notehead**. You can also choose this option from the context menu.

Assigning notes to strings

You can change the string on which individual notes belonging to string instruments are played; for example, to allow you to specify the correct harmonic. Many notes can be played on multiple strings, depending on where along its length the string is stopped.

Assigning notes to strings can be useful for glissando lines or fingering shifts, as the string and finger position required to play the note affects the direction of these changes. However, the string number is not shown in the music. You can instead input string indicators and/or fingerings, which can help string players understand the string on which they should play.

NOTE

You can only change the assigned string of notes belonging to string instruments, such as violin, cello, or guitar.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.

PROCEDURE

1. Select the notes whose assigned string you want to change. You can do this in Write mode and Engrave mode.

NOTE

If selecting multiple notes at once, select notes only in staves of the same instrument type. For example, select multiple Cs in Violin 1 and Violin 2 staves.

- 2. In the Properties panel, activate **String** in the **Notes and Rests** group.
- **3.** Select the string you want from the menu.

The string number for the instrument is shown, followed by the fundamental pitch and the octave number of that string in parentheses. For example, the lowest cello string is expressed as **4 (C2)**.

NOTE

The options available in the menu depend on the selected pitches and the instrument type.

RESULT

The string to which the selected notes are assigned is changed.

NOTE

If you subsequently change the pitches of notes, **String** is automatically deactivated for all notes that can no longer be played on their assigned string.

RELATED LINKS

Properties panel on page 646

Engrave toolbox on page 490

Glissando lines on page 1096

Changing the direction of string fingering shift indicators on page 972

Fingerings for fretted instruments on page 962
String indicators on page 974
Changing the harmonic partial on page 1064
Changing the middle C numbering convention on page 50

Hiding/Showing noteheads

You can hide/show the noteheads of individual notes with any notehead design; for example, if you want to indicate the exact durations of glissando lines using stems without noteheads.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing 3** is selected in the Engrave toolbox.

PROCEDURE

- 1. In Engrave mode, select the notes whose noteheads you want to hide.
- 2. In the Properties panel, activate/deactivate Hide notehead in the Notes and Rests group.

RESULT

The selected noteheads are hidden when **Hide notehead** is activated, and shown when it is deactivated.

This also hides rhythm dots, provided all noteheads represented by consolidated rhythm dots are hidden, but does not affect the visibility of accidentals or ledger lines.

Hidden noteheads are included in note spacing calculations as if they were shown.

EXAMPLE







Middle noteheads hidden

RELATED LINKS

Hiding/Showing hidden noteheads on page 1045 Hiding/Showing stems on page 1060 Hiding/Showing or parenthesizing accidentals on page 776 Changing the consolidation of rhythm dots on page 1043 Note spacing on page 494

MIDI trigger regions on page 559

Hiding/Showing ledger lines

You can hide/show ledger lines on individual notes; for example, if you want to indicate approximate pitches using the relative vertical positions of notes. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing !** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

1. In Engrave mode, select the noteheads whose ledger lines you want to hide/show.

NOTE

If you want to hide ledger lines, you must also select all other noteheads in the same voice and voice column index.

2. In the Properties panel, activate/deactivate **Hide ledger lines** in the **Notes and Rests** group of the Properties panel.

RESULT

Ledger lines are hidden/shown for the selected notes. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

If you deactivated **Hide ledger lines** for only some notes in a chord, ledger lines are also shown on all notes between the selected notes and the staff in the same voice and voice column index.

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490 Voice column index on page 1419

Changing the width of ledger lines

You can change the width of ledger lines on individual notes; for example, to allow notes with short durations to be spaced more tightly and still be legible. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREOUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing ?** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- 1. In Engrave mode, select the noteheads whose ledger line width you want to change.
- 2. In the Properties panel, activate Ledger line in the Notes and Rests group.

3. Change the values for L and R.

RESULT

Increasing **Ledger line L** makes the left side of ledger lines longer, decreasing the value makes the left side of ledger lines shorter.

Increasing **Ledger line R** makes the right side of ledger lines longer, decreasing the value makes the right side of ledger lines shorter.

If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490

Changing the consolidation of rhythm dots

You can change how rhythm dots in multiple voices are consolidated at individual rhythmic positions. For example, if you want to show fewer rhythm dots for a very dense chord. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing]** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- 1. In Engrave mode, select the notes whose rhythm dot consolidation you want to change.
- 2. In the Properties panel, activate **Rhythm dot consolidation** in the **Notes and Rests** group.
- **3.** Activate/Deactivate the corresponding checkbox.

RESULT

Rhythm dots for notes of any duration are consolidated when the checkbox is activated, and no rhythm dots are consolidated when the checkbox is deactivated. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

EXAMPLE



Notes of any duration have rhythm dots consolidated



No rhythm dot consolidation

RELATED LINKS

Properties panel on page 646

Changing the property scope on page 648

Engrave toolbox on page 490

Voice column index on page 1419

Allowing/Disallowing noteheads in opposing voices to overlap on page 1418

Moving rhythm dots

You can move rhythm dots horizontally. You can do this for the current layout and frame chain only, or for all layouts and frame chains. However, you cannot move an individual rhythm dot independently of other rhythm dots at the same rhythmic position.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing !** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** In Engrave mode, select a notehead at each rhythmic position where you want to move rhythm dots.
- 2. In the Properties panel, activate **Rhythm dot X** in the **Notes and Rests** group.
- **3.** Change the value in the value field.

RESULT

Increasing the **Rhythm dot X** value moves all rhythm dots at the selected rhythmic positions to the right, decreasing the value moves them to the left. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

View options for notes and rests

You can show notes and rests in different colors in various contexts, which can help you identify them more easily as you are working. For example, showing voice colors makes notes and rests appear in different colors according to their voice.

RELATED LINKS

Color setup on page 51

Hiding/Showing rest colors on page 1253

Hiding/Showing voice colors on page 1417

Hiding/Showing colors for muted notes/items on page 534

Hiding/Showing colors for accidentals on page 778

Hiding/Showing colors for notes out of range

You can show colors for notes that are considered out of range, such as notes too high/low for the instrument to play or the voice type to sing, or pitches that do not fit with the current harp pedal settings. When colors for notes out of range are hidden, all notes appear black by default.

Colors for notes out of range are considered annotations and are not printed by default.

NOTE

You cannot show colors for voices and notes out of range simultaneously.

PROCEDURE

- Do one of the following:
 - To show colors for notes out of range, choose View > Note And Rest Colors > Notes
 Out Of Range.
 - To hide colors for notes out of range, choose **View** > **Note And Rest Colors** > **None**.

RESULT

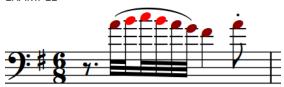
Colors for notes out of range are hidden/shown.

Notes that are considered challenging are shown in a darker red, while notes that are impossible or virtually impossible are shown in a bright red.

NOTE

Notes out of the fret range of the corresponding string on tablature are always shown as question marks, even if you do not show colors for notes out of range.

EXAMPLE



Colors for notes out of range shown. Three notes in the middle of the phrase are bright red, while the rest are the darker red.

AFTER COMPLETING THIS TASK

If showing colors for notes out of range reveals some notes do not fit with the current harp pedal settings, you can input a new pedal diagram for that passage or calculate a suitable harp pedal diagram.

RELATED LINKS

Inputting harp pedal diagrams with the panel on page 370 Annotations on page 581 Changing music area colors on page 53

Hiding/Showing hidden noteheads

You can show hidden noteheads in translucent gray, so you can identify and select them more easily.

PROCEDURE

Choose View > Note And Rest Colors > Hidden Noteheads.

RESULT

Hidden noteheads are hidden/shown.

EXAMPLE





Hidden noteheads shown

Hidden noteheads hidden

RELATED LINKS

Hiding/Showing noteheads on page 1041

Bracketed noteheads

Bracketed noteheads are often used to indicate that notes are optional, editorial, not played in all playthroughs in music with repeats, or pressed down but not fully struck on the piano. In Dorico Elements, you can show brackets on any notehead.

Notehead brackets extend slightly above and below noteheads so it is clear which notes are included in each bracket.



A phrase containing round and square notehead brackets

You can also show brackets on noteheads on notation staves and tablature independently of each other.

By default, bracketed notes have reduced velocity, causing them to sound quieter in playback than normal notes.

The following types of notehead brackets are available in Dorico Elements:

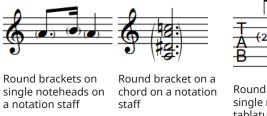
Round notehead brackets

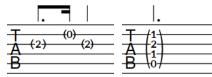
Round notehead brackets have a similar appearance to slurs, but vertical.

By default, round brackets on single noteheads use the font glyph on notation staves and the drawn curve on tablature. In Engrave mode, round notehead brackets that use the drawn curve have handles that allow you to change their shape. Round notehead brackets that use the font glyph do not have handles in Engrave mode.

NOTE

On tablature, round brackets are automatically shown around the second note/chord and all subsequent notes/chords in tie chains. If you show brackets around all noteheads in tie chains on tablature, these automatic notehead brackets are included.



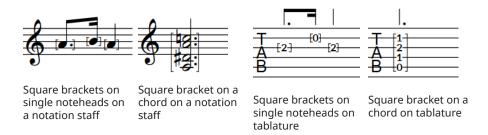


Round brackets on single noteheads on chord on tablature tablature

Round bracket on a

Square notehead brackets

Square notehead brackets comprise a straight vertical line with horizontal hooks at the top and bottom. Dorico Elements automatically adjusts the length of square brackets to ensure they do not end on staff lines and their hooks remain visible.



RELATED LINKS

Notehead brackets in Engrave mode on page 1054
Inputting notes on page 219
Ties on page 1341
Guitar bends on page 1103
Guitar pre-bends and pre-dives on page 1105
Vibrato bar dives and returns on page 1108
Showing notes as dead notes on page 1122
Parenthesized chord symbols on page 870

Showing brackets on noteheads

You can show round or square brackets on individual noteheads, on single notes within chords, and on whole chords. For example, if you want to indicate that specific notes are optional or an editorial change, or to show notes belonging to unpitched percussion instruments as ghost notes.

NOTE

If you want to show brackets on noteheads to represent dead notes, you can instead show notes belonging to fretted instruments as dead notes.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing !** is selected in the Engrave toolbox.

PROCEDURE

1. Select the noteheads on which you want to show brackets. You can do this in Write mode and Engrave mode.

NOTE

- If you want to show brackets on individual noteheads in tie chains that are not the first notehead, you must select them in Engrave mode.
- If you want to show brackets on whole chords, you must select all notes in those chords.

- If you want to show brackets on both notation staves and tablature, you must select notes on both.
- 2. In the Properties panel, activate **Bracket style** in the **Bracketed Noteheads** group.
- **3.** Choose one of the following options:
 - Round
 - Square

RESULT

The corresponding type of notehead brackets is shown on the selected notes. If you only selected notes on tablature, brackets are not shown on the corresponding notes on the notation staff, and vice versa.

In Write mode, only the first noteheads in tie chains are bracketed. In Engrave mode, only the selected noteheads are bracketed, including in tie chains.

If you selected all notes in chords, Dorico Elements shows a single bracket for each chord unless they contain very large gaps, in which case Dorico Elements automatically splits brackets. If you selected individual notes within chords, they are each shown with separate brackets.

By default, bracketed notes have reduced velocity, causing them to sound quieter in playback than normal notes.

TIP

- Deactivating **Bracket style** hides brackets on the selected notes.
- You can also hide/show brackets on noteheads by choosing Edit > Notations > Notehead >
 Toggle Round Brackets or Edit > Notations > Notehead > Toggle Square Brackets. You
 can also choose these options from the context menu.

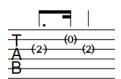
You can assign key commands for these options on the **Key Commands** page in **Preferences**.

• You can change the volume reduction of bracketed unpitched percussion notes in playback in **Playback Options** > **Dynamics** > **Note Dynamics**.

EXAMPLE



Round brackets on single noteheads on a notation staff



Round brackets on single noteheads on tablature



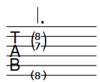
Round bracket on a chord on a notation staff



Round bracket on a chord on tablature



Split round bracket on a chord on a notation staff



Split round bracket on a chord on tablature

RELATED LINKS

Properties panel on page 646
Engrave toolbox on page 490
Showing notes as dead notes on page 1122
Inputting notes on page 219
Velocity editor on page 674
Parenthesized chord symbols on page 870
Playback Options dialog on page 732

Showing brackets around one/all noteheads in tie chains

You can change whether brackets appear only on the first notehead in tie chains or span the entire duration of the tie chain; that is, with the left bracket on the first notehead and the right bracket on the last notehead in the tie chain. By default, brackets appear only on the first notehead in tie chains.

PREREQUISITE

- You have shown brackets on the required notes.
- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the notes whose notehead bracket positions relative to tie chains you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate/deactivate **Bracket until end of tie chain** in the **Bracketed Noteheads** group.

RESULT

Brackets appear at the start and end of the selected tie chains when **Bracket until end of tie chain** is activated, and only around the first note/chord when it is deactivated.

If you activated **Bracket until end of tie chain** for a single note in a bracketed chord, the bracket on the first chord is not split but an additional bracket appears at the end of the tie chain for the selected note only. If you deactivated **Bracket until end of tie chain** for a single note in a bracketed chord whose other notes are bracketed to the end of the tie chain, the bracket at the end of the tie chain is split.

If you selected notes on tablature, the automatic brackets shown around the second note/chord and all subsequent notes/chords in tie chains are updated to follow your property setting.

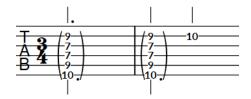
EXAMPLE

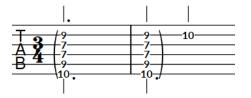




Brackets around only the first chords in tie chains on a notation staff

Brackets at the start and end of whole tie chains on a notation staff





Brackets around only the first chord in a tie chain, with automatic brackets shown on the second chord on tablature

Brackets around the start and end of the whole tie chain on tablature

RELATED LINKS

Ties on page 1341

Showing single brackets on figured bass on page 941

Splitting brackets on chords

You can split brackets on any notehead within a chord. By default, Dorico Elements automatically shows a single bracket for all notes in a chord unless it contains very large gaps, in which case Dorico Elements automatically splits brackets.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** 3 is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the individual notes in chords immediately above where you want to split brackets. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Break bracket** in the **Bracketed Noteheads** group.

RESULT

Brackets are split immediately below the selected notes.

EXAMPLE



Chord with single round bracket



Chord with split round bracket

RELATED LINKS

Properties panel on page 646 Inputting chords on page 247

Changing the shape of round notehead brackets

You can change the shape of individual round notehead brackets; for example, if you want some notehead brackets to appear wider or to change their curvature, so that their endpoints approach noteheads at a sharper angle. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

NOTE

You can only change the shape of round notehead brackets on single noteheads if they use the drawn curve, rather than the font glyph.

PREREQUISITE

- **Graphic Editing 3** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** In Engrave mode, select the middle handles of each round notehead bracket whose shape you want to change.
- **2.** Change the shape of the selected round notehead brackets in any of the following ways:
 - To widen right notehead brackets or narrow left notehead brackets, press Alt/Opt-Right Arrow.
 - To narrow right notehead brackets or widen left notehead brackets, press Alt/Opt-Left Arrow.
 - To increase the angle of notehead bracket endpoints, press Alt/Opt-Up Arrow.
 - To decrease the angle of notehead bracket endpoints, press Alt/Opt-Down Arrow.

TIP

To move handles by large increments, press **Ctrl/Cmd** plus the standard key command; for example, **Ctrl/Cmd-Alt/Opt-Left Arrow**.

- To move handles by moderate increments, press **Shift** plus the standard key command; for example, Shift-Alt/Opt-Left Arrow.
- To move handles by small increments, press Ctrl/Cmd Shift plus the standard key command; for example, Ctrl/Cmd-Shift-Alt/Opt-Left Arrow.
- You can also click and drag middle handles in the corresponding directions.

RESULT

The shape of the selected notehead brackets is changed. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

If necessary, other nearby items, such as ties and slurs, automatically move to avoid collisions. This might affect note spacing and casting off.

TIP

The following properties in the **Bracketed Noteheads** group of the Properties panel are activated automatically when you move the middle handle of notehead brackets.

- L round br. middle moves left notehead bracket middle handles. X moves them horizontally, changing the width of notehead brackets, and Y moves them vertically, changing the curvature of notehead brackets.
- R round br. middle moves right notehead bracket middle handles. X moves them horizontally, changing the width of notehead brackets, and Y moves them vertically, changing the curvature of notehead brackets.

You can also use these properties to change the width and shape of round notehead brackets by changing the values in the value fields.

Deactivating the properties resets the selected notehead brackets to their default shape.

EXAMPLE



Widened round notehead bracket



Narrowed round notehead bracket



Endpoint angle increased Endpoint angle



decreased

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490 Slur shoulder offset on page 1284

Notehead brackets in Engrave mode

In Engrave mode, each round notehead bracket has multiple handles that you can move independently to adjust their graphical position, length, and shape.

Round notehead brackets that use the drawn curve have three square handles that you can move independently. When you move either of the top/bottom handles, the middle handle also moves to retain its position relative to the start/end handles.

NOTE

Round brackets on single noteheads that use the font glyph do not show handles in Engrave mode, meaning you cannot lengthen/shorten them or change their shape/width.

Square notehead brackets have two handles, one at the top and one at the bottom.





Round notehead bracket handles in Engrave mode

Square notehead bracket handles in Engrave mode

- Top and bottom handles move the corresponding end of the notehead bracket, controlling its graphical length.
- Middle handles control the shape of round notehead brackets. Moving them vertically
 adjusts their curve by changing the angle at which notehead bracket endpoints approach
 noteheads, while moving them horizontally changes the width of round notehead brackets.

You can move these handles to change the graphical length of notehead brackets and the shape of round notehead brackets. If necessary, other nearby items, such as ties and slurs, automatically move to avoid collisions.

TIP

The following properties in the **Bracketed Noteheads** group of the Properties panel are activated automatically when you move the corresponding notehead bracket or handle:

- **L bracket body** moves left notehead brackets. **X** moves them horizontally, **Y** moves them vertically.
- **R bracket body** moves right notehead brackets. **X** moves them horizontally, **Y** moves them vertically.
- L bracket extents controls the height of left notehead brackets. T moves their top handles,
 B moves their bottom handles.
- **R bracket extents** controls the height of right notehead brackets. **T** moves their top handles, **B** moves their bottom handles.

Stems

Stems are vertical lines that extend from noteheads that are a half note or shorter in duration. In combination with notehead design, they allow the duration of each note to be clearly identified.

For example, quarter notes (crotchets) and eighth notes (quavers) both have solid black noteheads and stems, but eighth notes also have flags on their stems. 16th notes have two flags, 32nd notes have three flags, and so on. The length of stems is determined by default in Dorico Elements, so stems automatically adjust their length to accommodate more/fewer flags.



The stems of notes and chords can point upwards/downwards, depending on the conventions of music engraving and the context of the music. For example, in choral music on two staves, stems in the soprano and tenor lines point up, and stems in the alto and bass lines point down.

RELATED LINKS

Note and rest grouping on page 841 Beam grouping according to meters on page 822 Altered unisons on page 781 Voices on page 1416 Inputting notes on page 219

Stem direction

In Dorico Elements, the stem direction of notes and chords follows rules that are based on the conventions of music engraving.

Stem direction is determined automatically, but you can manually change the stem direction of individual notes, chords, or of an entire voice. The rules that are applied depend on the following:

- How many voices are active on the staff.
- Whether notes, chords, or beamed groups of notes are affected.
- Whether notes in the same chord or notes in the same beamed group are split between staves.

Single notes in single voices

On a five-line staff with only a single voice active, the default stem direction of a single note is determined by its staff position.

- If the note is above the middle line, its stem points downwards.
- If the note is below the middle line, its stem points upwards.
- If the note is on the middle line of the staff, its stem direction is determined by the stem directions of any adjacent notes, beam groups, or chords. If they both have the same stem direction, the note matches them. If the adjacent notes, beam groups, or chords have

different stem directions, or if there are no adjacent notes, beam groups, or chords, the note follows the default stem direction.

The default stem direction depends on the instrument type. By default, the stems of notes on the middle lines of staves point downwards on instrumental staves and upwards on vocal staves, to avoid lyrics.





Notes on the middle line are stem up because the fourth note is stem up

Notes on the middle line are stem down because the fourth note is stem down

By default, notes are first input into an up-stem voice, and Dorico Elements treats notes as the only voice on the staff until you input more voices.

Single notes in multiple voices

When there are multiple voices on a staff and all voices contain notes, the stem direction of notes is determined by the stem direction of their voice. Notes in up-stem voices have up stems, and notes in down-stem voices have down stems. This applies even when the stems of notes would normally point in the other direction, based on their position on the staff.

NOTE

The order in which notes appear between different up-stem voices and different down-stem voices depends on their pitch and your settings on the **Voices** page in **Notation Options**. You can also change the voice column index of notes individually.

When there are only notes in one voice for at least a whole bar, Dorico Elements automatically changes the directions of stems so they point in the default direction for their pitch. For example, if a staff contains a single up-stem voice and a single down-stem voice but only the down-stem voice contains notes or rests, then the stems of notes in the down-stem voice may point upwards, depending on the position of the notes on the staff. However, showing rests or implicit rests in empty voices forces the stem direction of notes to follow the stem direction of their voice.







Notes in an up-stem voice shown in blue.

Notes in a down-stem voice shown in orange.

When notes in up-stem and downstem voices are in the same bar, the stem direction is automatically changed.

Chords in single voices

The stem direction for a chord in a single voice is determined by the balance of notes above/below the middle line of the staff.

- If the note furthest from the middle line is above the middle line, the stem of the chord points downwards.
- If the note furthest from the middle line is below the middle line, the stem of the chord points upwards.

• If the chord is equally balanced on either side of the middle line of the staff, the stem direction is determined by the stem directions of any adjacent notes, beam groups, or chords. If they both have the same stem direction, the chord matches them. If the adjacent notes, beam groups, or chords have different stem directions, equally balanced chords follow the default stem direction.

The default stem direction depends on the instrument type. By default, the stems of notes on the middle lines of staves point downwards on instrumental staves and upwards on vocal staves, to avoid lyrics.

Beam groups in single voices

The stem direction within beam groups is determined by the balance of notes within the beam group that are above/below the middle line of the staff.

- If the majority of notes in the beam group are above the middle line, stems in the beam group point downwards.
- If the majority of notes in the beam group are below the middle line, stems in the beam group point upwards.
- If the beam group contains an equal number of notes either side of the middle line of the staff, the stem direction is determined by the stem directions of any adjacent notes, beam groups, or chords. If they both have the same stem direction, the beam group matches them. If the adjacent notes, beam groups, or chords have different stem directions, equally balanced beam groups follow the default stem direction.

The default stem direction depends on the instrument type. By default, the stems of notes on the middle lines of staves point downwards on instrumental staves and upwards on vocal staves, to avoid lyrics.

RELATED LINKS

Voice column index on page 1419
Note positions in multiple-voice contexts on page 1418
Implicit rests in multiple-voice contexts on page 1251
Altered unisons on page 781
Notation Options dialog on page 730

Changing the stem direction of notes

You can manually change the stem direction of any note. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- If you are in Engrave mode, **Graphic Editing 3** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

1. Select the notes whose stem direction you want to change. You can do this in Write mode and Engrave mode.

NOTE

In Write mode, you can only select whole tie chains. In Engrave mode, you can select individual notes within tie chains.

2. Change the stem direction in one of the following ways:

- Choose Edit > Notations > Stem > Force Stem Up.
- Choose Edit > Notations > Stem > Force Stem Down.

TIP

You can also choose these options from the context menu.

RESULT

The stem direction of the selected notes is changed. The selected notes follow this stem direction, even if you later change their pitch to one that usually requires a different stem direction. If the property scope was set to Locally, this change only takes effect in the current layout and frame chain.

NOTE

- This does not change the voice to which notes belong.
- You can also change the stem direction of notes by selecting them and pressing **F**.

EXAMPLE





voices

Stems pointing in the same direction but in different Stems in the same direction and in the same voice

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490 Changing the voice of existing notes on page 453

Changing the default stem direction of voices

You can change the default stem direction of voices after they have been input, including slash voices.

NOTE

This changes the implicit stem direction of the voice, but may not change the stem direction of all notes in single-voice contexts. Stem directions are automatically changed in Dorico Elements when only one voice contains notes.

PREREQUISITE

If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select a note or chord in the voice whose stem direction you want to change. You can do this in Write mode and Engrave mode.
- **2.** Change the default stem direction of the selected voice in one of the following ways:
 - Choose Edit > Notations > Voices > Default Stems Up.
 - Choose Edit > Notations > Voices > Default Stems Down.

TIP

You can also choose these options from the context menu.

Resetting stem directions

You can remove changes to the directions of stems and revert stems to their default directions.

PREREQUISITE

If you are in Engrave mode, **Graphic Editing** 3 is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the notes whose stem direction changes you want to remove. You can do this in Write mode and Engrave mode.
- **2.** Choose **Edit** > **Notations** > **Stem** > **Remove Forced Stem**. You can also choose this option from the context menu.

RESULT

All stem direction changes are removed from the selected notes. The stems of the selected notes revert to their default directions.

NOTE

Alternatively, you can change the stem direction to the opposite direction. However, notes with forced stems do not change automatically if, for example, you later change their pitch.

RELATED LINKS

Resetting beam grouping on page 825 Creating cross-staff beams/tremolos on page 832 Importing MusicXML files on page 81

Stem length

The length of stems is determined by default in Dorico Elements, according to accepted standards for the appearance of stems of notes at different positions on staves.

You can lengthen/shorten individual stems in Engrave mode.

Lengthening/Shortening stems

You can lengthen/shorten the stems of individual notes. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- **Graphic Editing]** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- 1. In Engrave mode, select the stems you want to lengthen/shorten.
- **2.** Lengthen/Shorten the stems by moving the selected stem handles in any of the following ways:
 - To move them upwards/downwards a standard amount, press Alt/Opt plus the
 corresponding arrow key. For example, press Alt/Opt-Up Arrow to move handles
 upwards. This moves handles by 1/8 space per press.
 - To move them upwards/downwards a large amount, press Ctrl/Cmd plus the standard key command; for example, Ctrl/Cmd-Alt/Opt-Up Arrow. This moves handles by 1 space per press.
 - To move them upwards/downwards a moderate amount, press Shift plus the standard key command; for example, Shift-Alt/Opt-Up Arrow. This moves handles by 1/2 space per press.
 - To move them upwards/downwards a small amount, press Ctrl/Cmd Shift plus the standard key command; for example, Ctrl/Cmd-Shift-Alt/Opt-Up Arrow. This moves handles by 1/32 space per press.
 - Click and drag them upwards/downwards.

RESULT

The selected stems are lengthened/shortened. For example, moving the end of downwards-pointing stem upwards shortens the stem. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

TIP

Stem adj. in the **Notes and Rests** group of the Properties panel is activated when you lengthen/shorten stems.

You can also use this property to lengthen/shorten stems by changing the value in the value field. However, the **Notes and Rests** group is only available when the notehead is selected rather than the stem.

Deactivating the property resets the selected stems to their default length.

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490

Hiding/Showing stems

You can hide/show the stems on notes with any notehead design. For example, you might hide stems if you do not want to show exact rhythms in an unmeasured passage.

Dorico Elements allows you to hide stems rather than using a stemless notehead design as this allows you to hide the stem of any notehead design.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing 3** is selected in the Engrave toolbox.

PROCEDURE

- 1. In Engrave mode, select the notes whose stems you want to hide.
- 2. In the Properties panel, activate/deactivate **Hide stem** in the **Notes and Rests** group.

RESULT

The stems and any applicable flags of the selected notes are hidden when **Hide stem** is activated, and shown when it is deactivated.

NOTE

- Beams are only hidden when you hide the stems of all notes in beamed groups.
- You can assign a key command for Toggle Hide Stem on the Key Commands page in Preferences.

EXAMPLE





Stems shown

Stems hidden

RELATED LINKS

Properties panel on page 646 Notehead set designs on page 1034 Hiding/Showing noteheads on page 1041 MIDI trigger regions on page 559 Preferences dialog on page 57

Harmonics

Harmonics are pitches produced by touching resonating strings at specific positions along their length, allowing the corresponding harmonic partial to sound. Harmonics often have a high pitch with a glassy, purer sound than stopped pitches. There are two different types of harmonics: natural and artificial.

Harmonic partials are numbered according to their order in the harmonic series, which also correlates to the node on the string which produces them. For example, the second partial in the harmonic series is produced by the node halfway along a string; that is, the node that divides the string into two equal parts. The third partial is produced by the node that divides the string into thirds, and so on.

Natural harmonics

Natural harmonics are produced by touching an open string at one of its nodes and then bowing or plucking the string. The sounding pitch of the resulting harmonic varies according to the node and its corresponding partial in the harmonic series. For example, touching the node halfway along a string produces the second partial, which sounds an octave above the open string pitch.

Artificial harmonics

Artificial harmonics are produced by stopping a string fully (as if playing a normal note) and then touching the string at one of the nodes of its stopped length. The sounding pitch of the resulting harmonic varies according to the node and its corresponding partial in the harmonic series. For example, touching the node that is the equivalent of a fourth higher than the stopped pitch produces the fourth partial, which sounds two octaves above the stopped pitch.

To produce artificial harmonics, players must both fully stop the string and touch the string at the correct node. This can be more difficult to produce than natural harmonics.





A passage for violin alternating between artificial and natural harmonics on the A string

The sounding pitches of the same passage

Dorico Elements supports multiple conventions for the notation of harmonics on stringed and fretted instruments, including for both natural and artificial harmonics. For artificial harmonics shown using two noteheads, one normal and one diamond, Dorico Elements automatically calculates the correct pitch for the touched pitch diamond notehead for the second to sixth harmonic partials. These pitches are reflected in playback, using dedicated sounds for harmonics if the corresponding playback device includes them.

Turning notes into harmonics

You can turn existing notes into artificial and natural harmonics. Harmonics can represent the sounding, touched, or stopped pitch.

PREREQUISITE

- You have input the notes you want to turn into harmonics. However, the pitch you should input depends on the harmonic type you want to use.
 - For natural harmonics, we recommend that you input the desired sounding pitch.
 - For artificial harmonics, we recommend that you input the stopped pitch.
- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing 3** is selected in the Engrave toolbox.

PROCEDURE

- Select the notes you want to turn into harmonics. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Type** in the **Harmonics** group.
- **3.** Choose one of the following options:
 - Artificial
 - Natural

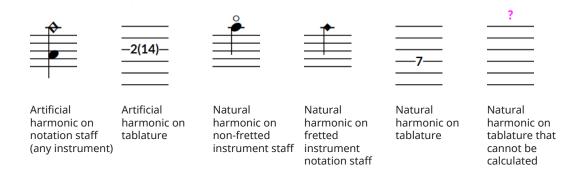
RESULT

The selected notes are turned into harmonics of the corresponding type. If the corresponding playback device has dedicated sounds for harmonics, the selected notes automatically use those sounds. The sounding pitch of artificial harmonics in playback is also changed accordingly.

- Artificial harmonics represent the second partial by default. They are shown with a diamond
 notehead indicating the touched pitch an octave above the selected notes. On tablature, the
 stopped fret is shown on the left and the touched fret is shown on the right in parentheses.
- Natural harmonics represent the sounding pitch by default. They are shown with a circle symbol above the selected notes. On fretted instrument notation staves, natural harmonics appear as black diamond noteheads. On tablature, the fret of the touched pitch is shown, if it can be calculated; if it cannot be calculated, a pink question mark is shown.

EXAMPLE

The following examples show the default appearances of natural and artificial harmonics on different staves.



AFTER COMPLETING THIS TASK

You can change the partial for harmonics. You can also change the appearance of natural harmonics and the style of artificial harmonics.

If you want to turn harmonics back into normal notes, deactivate **Type** in the **Harmonics** group.

RELATED LINKS

Inputting notes on page 219
Engrave toolbox on page 490
Changing music area colors on page 53
Assigning notes to strings on page 1040
Tablature on page 1308

Changing the harmonic partial

By default, harmonics indicate the second partial in the harmonic series, which is an octave above the fundamental. You can change the partial for individual harmonics; for example, if you want a higher partial instead.

NOTE

Dorico Elements can only correctly calculate artificial harmonic partials for nodes two to six.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the harmonics whose partial you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Partial** in the **Harmonics** group.
- **3.** Change the value in the value field to the node at which the string should be touched to produce the partial you want.

RESULT

The partial of the selected harmonics is changed. For artificial harmonics using the **Normal** type, the pitch of the white diamond notehead/parenthesized fret number is updated automatically. The sounding pitch of artificial harmonics in playback is also changed accordingly.

EXAMPLE

Artificial harmonic with default partial
(notation and tablature)

Partial changed to the fifth (notation and tablature)





-2(14)-

-2(5.8)-

Hiding/Showing or parenthesizing harmonic accidentals

You can hide/show individual harmonic accidentals, or show them in round or square brackets, independently of hiding/showing or parenthesizing accidentals of stopped pitch notes. For example, you can show cautionary accidentals on subsequent notes in tie chains that cross system/frame breaks by showing accidentals in round brackets. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing ?** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

1. Select the harmonics whose accidentals you want to hide/show or parenthesize. You can do this in Write mode and Engrave mode.

NOTE

You can only select individual noteheads within tie chains in Engrave mode.

- 2. In the Properties panel, activate **Accidental** in the **Harmonics** group.
- **3.** Select one of the following options from the menu:
 - Hide
 - Show
 - Round brackets
 - Square brackets

RESULT

Accidentals on the selected harmonics are hidden, shown, or shown in round or square brackets. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

NOTE

- Hiding accidentals does not affect the pitch of notes in playback.
- If you are hiding/showing many accidentals, we recommend that you consider changing the accidental duration rule.
- You can assign key commands for Hide Accidental, Show Accidental in Round Brackets, and Show Accidental in Square Brackets on the Key Commands page in Preferences.

AFTER COMPLETING THIS TASK

You can also hide/show or parenthesize accidentals on the normal noteheads that indicate the stopped pitch for artificial harmonics shown using diamond noteheads.

RELATED LINKS

Properties panel on page 646
Changing the property scope on page 648
Engrave toolbox on page 490
Hiding/Showing or parenthesizing accidentals on page 776
Hiding/Showing or parenthesizing cautionary accidentals on page 784

Appearances/Styles of harmonics

Both artificial and natural harmonics can be notated in different ways. In Dorico Elements, it is possible to indicate the desired sounding pitch, either the stopped or touched pitch, or both stopped and touched pitches for individual harmonics.

In this documentation we refer to "styles" of artificial harmonics, because one artificial harmonic style indicates the use of a different performance technique, and "appearances" of natural harmonics, as their different appearances do not indicate different performance techniques.

Natural harmonics

Circle above

Shows a harmonic circle symbol on the notehead side of notes. Usually indicates the desired sounding pitch of the harmonic. Used for natural harmonics on staves that do not belong to fretted instruments by default, such as violin.



Diamond notehead

Changes the notehead of notes to a diamond notehead. The diamond notehead appears black/filled when the note is a quarter note or shorter, and white/unfilled when the note is a half note or longer. Usually indicates the touched pitch required. Used for natural harmonics on fretted instrument notation staves by default.



White diamond notehead

Changes the notehead of notes to a diamond notehead that is always unfilled, regardless of the duration of notes. Usually indicates the touched pitch required.



On tablature, the touched fret is always shown for natural harmonics, regardless of the selected appearance. If the touched fret cannot be calculated, a pink question mark is shown.



Artificial harmonics

Normal

Shows two noteheads: one indicating the stopped pitch, the other the touched pitch. The touched pitch is automatically calculated based on the partial; the default partial is the second partial. On tablature, the stopped fret is shown on the left and the touched fret is shown on the right in parentheses. This is the default appearance of artificial harmonics on all staves.





Normal artificial harmonic on notation staff Normal artificial harmonic on tablature

Pinch

Shows two noteheads: one indicating the stopped pitch, the other the sounding pitch. The sounding pitch is automatically calculated based on the partial; the default partial is the second partial. On tablature, only the stopped fret is shown.

NOTE

Intended for fretted instruments only. A pinch is produced by the performer catching a resonating string at a node near the pick-ups, producing a high-pitched squeal. Also known as a "false harmonic" or "squeal".

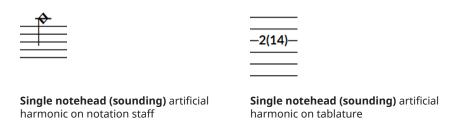


Pinch harmonic on notation staff

Pinch harmonic on tablature

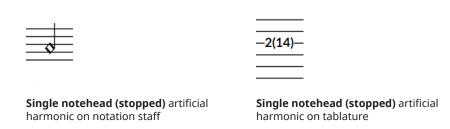
Single notehead (sounding)

Shows a single notehead indicating the sounding pitch. On tablature, the stopped fret is shown on the left and the sounding pitch is shown on the right in parentheses.



Single notehead (stopped)

Shows a single notehead indicating the stopped pitch. On tablature, the stopped fret is shown on the left and the touched fret is shown on the right in parentheses.



RELATED LINKS

Changing music area colors on page 53

Changing the appearance of natural harmonics

By default, natural harmonics appear as normal noteheads with a circle shown above, which indicates the desired sounding pitch. You can change the appearance of natural harmonics individually; for example, to show them as a white diamond notehead to indicate the touched pitch.

NOTE

These steps only apply to harmonics with the Natural type.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.

• If you are in Engrave mode, **Graphic Editing** Is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the natural harmonics whose appearance you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Style** in the **Harmonics** group.
- **3.** Select one of the following options from the menu:
 - Circle above
 - Diamond notehead
 - White diamond notehead

RESULT

The appearance of the selected natural harmonics is changed, including on fretted instrument notation staves. The touched pitch shown on tablature is not changed automatically.

NOTE

- Changing the appearance of natural harmonics does not automatically change their notated pitch. For example, if you want to change a sounding pitch Circle above harmonic to a touched pitch White diamond notehead harmonic, you must also change the pitch of the note.
- Dorico Elements automatically assigns natural harmonics with the White diamond notehead style to the lowest possible string for that harmonic. You can specify different strings if necessary.
- You can change the staff-relative placement of harmonic circle symbols by activating
 Placement in the Harmonics group of the Properties panel and choosing the option you want.

RELATED LINKS

Properties panel on page 646
Engrave toolbox on page 490
Turning notes into harmonics on page 1063
Changing the pitch of individual notes on page 455
Assigning notes to strings on page 1040
Tablature on page 1308

Changing the style of artificial harmonics

By default, artificial harmonics appear as two noteheads: one normal, which indicates the stopped pitch, and one diamond, which indicates the touched pitch. You can change the style of artificial harmonics individually; for example, to indicate pinch harmonics.

NOTE

These steps only apply to harmonics with the **Artificial** type.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing ?** is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the artificial harmonics whose style you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Style** in the **Harmonics** group.
- **3.** Select one of the following options from the menu:
 - Normal
 - Pinch
 - Single notehead (sounding)
 - Single notehead (stopped)

RESULT

The style of the selected artificial harmonics is changed.

NOTE

Pinch indicates the use of a different technique to produce the harmonic.

Ornaments

Ornaments are markings that indicate multiple notes are played in addition to the notated pitch. They are used to decorate music, such as in Baroque music, which is highly decorated with trills and other ornaments.

Over time, specific ways of notating how performers should play notes have developed and different ornament symbols indicate different patterns of decorative notes. Nonetheless, ornaments give some freedom to performers to embellish music in their own way.

In Dorico Elements, the term "ornaments" refers to ornament symbols, including mordents and turns, and trill marks.



A phrase containing a turn, short trills, and a trill with extension line

NOTE

Only trills are currently reflected in playback. Playback of other ornaments is planned for future versions.

RELATED LINKS

Input methods for ornaments, arpeggio signs, glissando lines, and jazz articulations on page 332 Grace notes on page 983

Trills on page 1075

Trills in playback on page 1085

Changing ornament intervals

You can change the intervals of ornaments, both above and below the notated pitch, to indicate which pitches are played in the ornament. The intervals of ornaments are indicated by accidentals.

For some ornaments, you can only change the interval in one direction. For example, you can only change the interval above short trills and below mordents.

NOTE

These steps do not apply to trills.

PREREQUISITE

- The lower zone is shown.
- Properties = is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing 1** is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the ornaments whose interval you want to change. You can do this in Write mode and Engrave mode.
- **2.** In the Properties panel, activate the following properties, individually or together, in the **Ornaments** group, as appropriate for the selected ornaments:
 - Interval above
 - Interval below
- 3. Change the values in the value fields to the intervals you want.
 - **0** or **4** and above shows no accidental.
 - 1 shows a flat.
 - 2 shows a natural.
 - 3 shows a sharp.

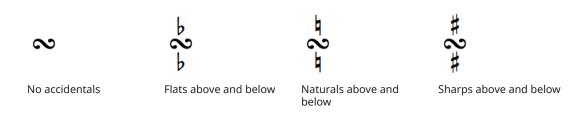
RESULT

The intervals of the selected ornaments are changed.

NOTE

Some ornaments do not show accidentals either above or below, depending on their type.

EXAMPLE



RELATED LINKS

Properties panel on page 646
Engrave toolbox on page 490
Trill intervals on page 1078
Changing vibrato bar dip intervals on page 1123

Positions of ornaments

Ornaments, including trills, are placed above the notes to which they apply. They are only placed below the staff for down-stem voices in multiple-voice contexts.

Ornaments and trills are positioned outside of slurs by default. Similarly, they are positioned further from noteheads than articulations.

The center of ornaments aligns with the center of the notehead to which they apply. Trills are aligned differently, as the left side of trill marks aligns with the left edge of the notehead to which the trill applies.

Dorico Elements automatically positions ornaments correctly according to their type, and attaches them to their notehead.

You can move ornaments to different rhythmic positions in Write mode. They are automatically positioned to avoid collisions.

You can move ornaments graphically in Engrave mode, but this does not change the rhythmic positions to which they are attached.

RELATED LINKS

Trills on page 1075

Hiding/Showing trill marks on page 1075

Moving notes/items rhythmically on page 448

Moving items graphically on page 501

Changing the position of ornaments relative to slurs

Ornaments are positioned outside of slurs by default. You can change the position of ornaments relative to slurs individually. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing 3** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- 1. In Engrave mode, select the ornaments whose slur-relative position you want to change.
- **2.** In the Properties panel, activate **Slur-relative position** in the corresponding group for the selected ornaments:
 - Ornaments
 - Trills
- **3.** Choose one of the following options:
 - Inside
 - Outside

RESULT

The selected ornaments are positioned either inside or outside of slurs. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

Changing the start position of trills

You can change whether the start position of individual trills is aligned with the notehead or with its accidental. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing 3** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** Select the trills whose start position you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Start position** in the **Trills** group.
- **3.** Choose one of the following options:
 - Notehead
 - Accidental

RESULT

The start position of the selected trills is changed. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490 Hiding/Showing trill extension lines on page 1077

Trills

Trills are fast alternations between two notes, similar to a tremolo, that were a common decoration in Baroque, Classical, and Romantic music. Trill marks are usually added to a single note, to indicate the performed notes are the notated pitch and the note either a half-step or whole step above, and can have extension lines to show the duration of the trill.



A phrase containing multiple trills with extension lines

Because of their legacy as an ornament, many performers interpret trills differently to tremolos: some players add more emphasis to the notated pitch in a trill and less on the trilled-to note but play both notes equally in tremolos.

The most common trills are to notes a major or minor second above, but it is also possible to specify other trill intervals.

In Dorico Elements, you can specify any trill interval, change their appearance on notation staves, and hear them in playback.

On tablature, the trilled-to pitch always appears as a parenthesized fret number.



Trills on a notation staff and tablature

RELATED LINKS

Input methods for ornaments, arpeggio signs, glissando lines, and jazz articulations on page 332 Trill intervals on page 1078

Changing the start position of trills on page 1073

Trills in playback on page 1085

Tablature on page 1308

MIDI Import Options dialog on page 84

Hiding/Showing trill marks

You can hide/show trill marks at the start of individual trills. This also hides/shows trill marks on all systems on which the trills extend.

PREREQUISITE

The lower zone is shown.

- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** 3 is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the trills whose trill marks you want to hide/show. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Show trill mark** in the **Trills** group.
- **3.** Activate/Deactivate the corresponding checkbox.

RESULT

Trill marks are shown when the checkbox is activated, and hidden when the checkbox is deactivated.

When the property is deactivated, trill marks are shown by default.

RELATED LINKS

Properties panel on page 646 Engrave toolbox on page 490

Hiding/Showing trill interval accidentals on page 1079

Changing the speed of trills

You can indicate different speeds for trills, including indicating a change of speed within a single trill, by changing the height and frequency of wiggles in their extension lines.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** 3 is selected in the Engrave toolbox.

PROCEDURE

- 1. Select the trills whose speed you want to change. You can do this in Write mode and Engrave mode.
- **2.** In the Properties panel, activate the following properties, individually or together, in the **Trills** group:
 - Start speed
 - End speed
- **3.** Select one of the following options from each property menu:
 - Slow
 - Normal
 - Fast

RESULT

The speed of the selected trills is changed. This affects both the frequency of wiggles in their extension lines and their playback speed.

If only **Start speed** is activated, the speed of the whole trill extension line is changed. If only **End speed** is activated, the speed of the end half of the trill extension line is changed.

EXAMPLE



fr‡......

A trill extension line starting slow and ending fast

Trill with normal speed throughout

AFTER COMPLETING THIS TASK

You can customize the playback speed of trills individually.

RELATED LINKS

Properties panel on page 646 Engrave toolbox on page 490

Changing the playback speeds of trills on page 1087

Hiding/Showing speed changes in trill extension lines

You can hide/show speed changes in the extension lines for individual trills; for example, if you want to hear different speeds in playback but show extension lines with consistent wiggles.

PREREOUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the trills whose speed changes you want to hide/show. You can do this in Write mode and Engrave mode.
- **2.** In the Properties panel, activate/deactivate **Suppress drawing speed changes** in the **Trills** group.

RESULT

Speed changes are hidden when the property is activated, and shown when it is deactivated.

Hiding/Showing trill extension lines

You can hide/show the extension lines of individual trills. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing !** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

1. Select the trills whose extension lines you want to hide/show. You can do this in Write mode and Engrave mode.

- 2. In the Properties panel, activate/deactivate **Has trill line** in the **Trills** group.
- **3.** Activate/Deactivate the corresponding checkbox.

RESULT

Trill extension lines are shown when the checkbox is activated, and hidden when the checkbox is deactivated. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

When the property is deactivated, trill extension lines are only shown on tied notes by default.

RELATED LINKS

Properties panel on page 646
Changing the property scope on page 648
Engrave toolbox on page 490
Changing the start position of trills on page 1073
Changing the playback speeds of trills on page 1087

Trill intervals

Trill intervals tell performers which notes to play and also affect the pitches used in playback in Dorico Elements. For example, a trill with a sharp accidental on an E indicates that the performer trills between E and $F\sharp$, rather than between E and F.



The different accidentals on these trills indicate changes in the trilled-to note.

If you do not specify an interval when inputting a trill, Dorico Elements calculates an appropriate interval based on the top note in the voice to which the trill belongs, the current key signature, and any accidentals earlier in the bar. For example, inputting a trill on an El in C major produces a half-step/minor second trill interval to Fl. If there were a sharp accidental on the F earlier in the bar, the trill interval produced is a whole step/major second between the El and Fl.

In open/atonal key signatures, Dorico Elements produces whole step/major second trill intervals by default.

You can specify trill intervals when inputting them with the popover, including at different noteheads in the same trill, and you can change individual trill intervals after they have been input. In 12-EDO, you can describe trill intervals based on their quality, such as major or minor.

When trill intervals do not require a trill interval indicator, they are indicated by signposts. However, trill interval signposts are hidden by default.

Trills and accidentals

If required, Dorico Elements shows accidentals to clarify trill intervals. Dorico Elements also automatically shows accidentals on other notes in the bar if they have different accidentals to any upper notes of trills.

By default, trill marks themselves show intervals, unless the upper note is modified by an accidental in the key signature. If the upper note has been modified by an accidental earlier in the bar, trills always show the interval. If trills modify pitches modified by an accidental in the key

signature, any subsequent notes of that pitch show the appropriate accidental automatically. Any cautionary accidentals required in the current and following bars are also shown automatically.

Microtonal trill intervals

When using other tonality systems than 12-EDO, such as 24-EDO, you must specify trill intervals as an interval degree, expressed as the number of staff position steps, and total number of octave divisions from the notated pitch. This is because specifying only the interval quality is insufficient in such cases.

RELATED LINKS

Input methods for ornaments, arpeggio signs, glissando lines, and jazz articulations on page 332 Trill interval appearance on page 1083 Changing ornament intervals on page 1071

Changing vibrato bar dip intervals on page 1123

Signposts on page 438

Hiding/Showing trill interval accidentals

You can hide/show accidentals for individual trill intervals; for example, if you want to show the accidental for the first note of a trill but hide the accidentals for subsequent notes. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

NOTE

- In order to show trill interval accidentals, trills must have intervals that require accidentals.
- These steps only hide the accidentals shown in trill intervals, they do not hide auxiliary notes or Hollywood-style markings.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** 3 is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

1. Select the trill intervals, or trill interval signposts whose accidentals you want to hide/show. You can do this in Write mode and Engrave mode.

NOTE

For trills that span multiple notes and have multiple trill interval accidentals, you must select each accidental or signpost individually. If you select the whole trill, only the first trill interval accidental is changed.

- **2.** In the Properties panel, activate **Accidental** in the **Trills** group.
- **3.** Choose one of the following options:
 - Hide
 - Show

RESULT

Accidentals in the selected trill intervals are hidden when you choose **Hide**, and shown when you choose **Show**. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

Signposts are shown at the position of each hidden trill interval accidental. However, trill interval signposts are hidden by default.

RELATED LINKS

Properties panel on page 646
Changing the property scope on page 648
Engrave toolbox on page 490
Changing the appearance of trill intervals on page 1083
Hiding/Showing signposts on page 438

Changing trill intervals

The default trill interval is a second, either major or minor depending on the context. In addition to specifying the interval when inputting trills with the ornaments popover, you can change the intervals of trills and existing trill intervals within their duration individually after they have been input.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, Graphic Editing 3 is selected in the Engrave toolbox.

PROCEDURE

1. Select the trills, trill intervals, or trill interval signposts whose interval you want to change. You can do this in Write mode and Engrave mode, but in Engrave mode you must select the trill intervals/trill interval signposts.

NOTE

For trills that span multiple notes and have multiple interval changes, you must select each trill interval you want to change individually. If you select the trill mark/extension line, only the first trill interval is changed.

- 2. In the Properties panel, activate **Interval** in the **Trills** group.
- **3.** Change the interval degree, expressed as the number of staff position steps, by changing the value in the value field.
- **4.** Change the interval quality or total number of octave divisions from the trilled note in one of the following ways:
 - For trills in 12-EDO, select an interval quality from the menu.
 - For trills in other tonality systems, select a total number of octave divisions from the menu.

Together, the interval degree and either interval quality or total number of octave divisions specify the desired note name and accidental for the trilled-to note.

RESULT

The interval of the selected trill intervals is changed. This applies from the selected trill intervals until the next interval change in the trill or the end of the trill, whichever comes first. For example, if you selected a trill with no interval changes within its duration, the interval is changed for the whole trill.

By default, trill intervals appear as accidentals when the interval is a second and as auxiliary notes for all other intervals. Signposts are shown at the position of each trill interval that does not require an accidental or auxiliary note. However, trill interval signposts are hidden by default.

Changing trill intervals partway through trills

You can change the intervals of existing trills at any notehead within their duration; for example, if you want a trill to change seamlessly from a minor second in one bar to a major second in the next.

PROCEDURE

- **1.** In Write mode, select one of the following:
 - The note whose trill interval you want to change.
 - An item or rest on the staff where you want to specify trill intervals.
- **2.** Start note input in any of the following ways:
 - Press Shift-N.
 - In the Notes toolbox, click Start Note Input ...
 - Double-click the staff.
- **3.** Press **Right Arrow** / **Left Arrow** to move the caret according to the current rhythmic grid resolution to the notehead where you want to change the trill interval.

NOTE

You can only change trill intervals at noteheads.

- **4.** Open the ornaments popover in any of the following ways:
 - Press Shift-O.
 - In the Notations toolbox, click **Popovers** , then **Ornaments** ...
- 5. Enter the trill interval you want into the popover. For example, enter m3 for a minor third.
- **6.** Press **Return** to close the popover.
- **7.** Optional: Repeat steps 3 to 6 to change the trill interval at other noteheads in the trill.
- **8.** Stop note input in any of the following ways:
 - Press Esc or Return.
 - In the Notes toolbox, click **Start Note Input** .

RESULT

The trill interval is changed at the corresponding noteheads. By default, all trill intervals in the trill appear as accidentals when the intervals are all seconds and as auxiliary notes when the trill contains at least one trill interval with a different interval.

Signposts are shown at the position of each trill interval that does not require an accidental or auxiliary note. However, trill interval signposts are hidden by default.

EXAMPLE





Trill with interval changes shown as accidentals

Trill with interval changes shown as auxiliary notes

RELATED LINKS

Ornaments popover on page 333 Changing the appearance of trill intervals on page 1083 Hiding/Showing signposts on page 438 Notes toolbox on page 192 Rhythmic grid on page 212

Resetting trill intervals

You can reset trill intervals to the default trill interval of a second, either major or minor depending on the context, including resetting individual trill intervals within a single trill independently.

PREREQUISITE

- The lower zone is shown.
- **Properties i** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing ?** is selected in the Engrave toolbox.

PROCEDURE

1. Select the trills, trill intervals, or trill interval signposts whose interval you want to reset. You can do this in Write mode and Engrave mode, but in Engrave mode you must select the trill intervals/trill interval signposts.

NOTE

For trills that span multiple notes and have multiple interval changes, you must select each trill interval you want to reset individually. If you select the trill mark/extension line, only the first trill interval change is reset.

2. In the Properties panel, deactivate **Interval** in the **Trills** group.

RESULT

The interval of the selected trill intervals is reset. This applies from the selected trill intervals until the next interval change in the trill or the end of the trill, whichever comes first. For example, if you selected a trill with no interval changes within its duration, the interval is reset for the whole trill.

By default, trill intervals appear as accidentals when the interval is a second and as auxiliary notes for all other intervals. Signposts are shown at the position of each trill interval that does not require an accidental or auxiliary note. However, trill interval signposts are hidden by default.

Trill interval appearance

There are different accepted ways to present trill intervals on notation staves, including accidental symbols and the Hollywood convention of showing "H.T." for a half-step (semitone) and "W.T." for a whole step (tone).

In Dorico Elements, trill intervals can appear in the following ways on notation staves:

Accidental

Indicates the trill interval using accidentals positioned above, below, or beside the **tr** mark. This is the default trill interval appearance in Dorico Elements for major or minor second trills.



Hollywood-style

Indicates the trill interval using text.

- **H.T.** for half-step/minor second trills
- W.T. for whole step/major second trills



Auxiliary note

Indicates the trill interval using a small, parenthesized, stemless notehead shown in the staff immediately to the right of the first note to which the trill applies, and at the correct staff position for the trilled-to pitch.

Auxiliary notes are used for all trill intervals that are not a major or minor second, but are automatically hidden for unison trills if the notehead design of the auxiliary note has not been overridden.



NOTE

On tablature, the trilled-to pitch always appears as a parenthesized fret number.

RELATED LINKS

Input methods for ornaments, arpeggio signs, glissando lines, and jazz articulations on page 332

Changing the appearance of trill intervals

You can change the appearance of trills with a second interval on notation staves individually; for example, if you want to show auxiliary notes on some trills to clarify a change in the trilled-to pitch.

NOTE

You can only change the trill interval appearance of trills with a major/minor second interval.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing 1** is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the trills whose trill interval appearance you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Appearance** in the **Trills** group.
- **3.** Select one of the following options from the menu:
 - Accidental
 - Hollywood style
 - Auxiliary note

RESULT

The appearance of the selected trill intervals on notation staves is changed. This does not affect their appearance on tablature.

AFTER COMPLETING THIS TASK

You can change the notehead design of individual auxiliary notes; for example, to show that the trilled-to note is a harmonic.

RELATED LINKS

Properties panel on page 646

Engrave toolbox on page 490

Changing the notehead design of individual noteheads on page 1038

Changing the position of trill interval indicators

You can change where trill interval indicators, such as an accidental or W.T. marking, are positioned relative to individual trill marks. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

NOTE

This does not affect the position of trill interval accidentals on subsequent notes over which trills extend.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, Graphic Editing 3 is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** Select the trills whose interval indicator position you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Interval position** in the **Trills** group.
- **3.** Select one of the following options from the menu:
 - Above
 - Below
 - On the right
 - Superscript

RESULT

The position of interval indicators relative to the selected trill marks is changed. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

EXAMPLE

Above Below On the right Superscript

RELATED LINKS

Changing the property scope on page 648 Trill intervals on page 1078

Trills in playback

Dorico Elements plays back trills by using a combination of sampled trills, when available, and triggering multiple notes.

You can find options for trill playback on the Trills page in Playback Options.

Dorico Elements can play back sampled half-step (semitone) and whole step (tone) trills automatically if these playing techniques are defined in the VST expression map, which is the case for a number of instruments in HALion Symphonic Orchestra. For sound libraries that do not provide sampled trills, or for intervals beyond a whole step, Dorico Elements generates trills. If your project contains some trill intervals that can only be generated, you can disable sampled trills and use generated trills throughout to produce a more consistent result.

When playing generated trills, Dorico Elements incorporates grace notes immediately before and after trills. A single unslashed grace note on the initial trill note produces an appoggiatura, while multiple grace notes on the initial trill note are included in the trill pattern. Grace notes on the note immediately following a trill are also included in the trill pattern.



A trill with grace notes at both the start and end

Variable speeds within trills are included in playback. You can determine the default playback speeds of slow, normal, and fast trills on the **Trills** page in **Playback Options**, and you can change the playback speed of individual trills. Additionally, you can hide trill speed changes in trill extension lines whilst retaining the speed changes in playback.

In contemporary performance practice, trills are usually performed starting on the written note, while in the historical performance practice of the Baroque and Classical eras, trills are usually performed starting on the upper (trilled-to) note. You can change the default starting pitch for trills individually and by changing the default setting.

Another common performance practice, in particular for Romantic piano music, is to perform all trills with an acceleration, starting slowly and getting faster during the trill. You can choose this setting on the **Trills** page in **Playback Options**. It applies to all trills whose speed has not been changed.

RELATED LINKS

Playback Options dialog on page 732

Changing the speed of trills on page 1076

Hiding/Showing speed changes in trill extension lines on page 1077

Input methods for ornaments, arpeggio signs, glissando lines, and jazz articulations on page 332

Sampled vs. generated trills

Sampled trills are recorded, looped samples, whereas generated trills are produced by manually triggering separate notes.

Because they use fixed sounds, sampled trills typically offer no parameters that allow any kind of variation in the trill interpretation, such as different trill speeds or incorporating grace notes and termination notes into the pattern of trilled notes. By contrast, generated trills can provide greater flexibility but produce a less natural and realistic sound.

If your project contains some trill intervals that can only be generated, you can disable sampled trills and use generated trills throughout to produce a more consistent result.

Enabling/Disabling trill samples in playback

You can enable/disable the use of sampled trills in your project. This can be useful if your project contains some trill intervals that can only be generated and you want to use only generated trills throughout, or if you want to incorporate grace notes immediately before/after trills.

NOTE

If you are using NotePerformer for playback, we recommend that you disable sampled trills to allow Dorico Elements to send the correct notes and controllers for NotePerformer to produce its most realistic trill playback.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-P to open Playback Options.
- 2. In the category list, click **Trills**.
- 3. Choose one of the following options for Playback approach for trills:
 - Generated trills only
 - Use samples if possible
- 4. Click Apply, then Close.

RESULT

Sampled trills are enabled when you choose **Use samples if possible**, and disabled when you choose **Generated trills only**.

Changing the playback speeds of trills

In addition to changing the speed of trills, which changes both the frequency of wiggles in their extension lines and their playback speed, you can also change the playback speed of each speed variant in individual trills; for example, if you want to make the fastest part of an individual trill faster than your default setting.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** Is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the trills whose playback speeds you want to change. You can do this in Write mode and Engrave mode.
- **2.** In the Properties panel, activate any of the following properties, as appropriate for your selected trills:
 - Slow trill speed
 - Normal trill speed
 - Fast trill speed
- 3. Change the values in the value fields.

RESULT

The playback speed of the selected trills is changed. The values in the value fields correspond to the number of notes sounding per second.

TIP

You can change the default speeds for each level on the Trills page in Playback Options.

You can also change whether the speed of generated trills follows tempo changes or remains constant.

RELATED LINKS

Properties panel on page 646 Engrave toolbox on page 490 Playback Options dialog on page 732 Changing the speed of trills on page 1076 Hiding/Showing speed changes in trill extension lines on page 1077

Changing the starting pitch of trills

By default in Dorico Elements, trills start on the lower note, which is usually the written note. However, the accepted practice in Baroque and Classical music is to start trills on the upper note. You can change the starting pitch of trills individually.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the trills whose starting note you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Start on upper note** in the **Trills** group.
- **3.** Activate/Deactivate the corresponding checkbox.

RESULT

The selected trills start on the upper note when the checkbox is activated, and on the lower note when the checkbox is deactivated.

When the property is deactivated, trills follow your project-wide setting for the starting pitch of trills.

TIP

You can change the default starting pitch of all trills project-wide on the **Trills** page in **Playback Options**.

Arpeggio signs

Arpeggio signs are vertical lines that indicate chords are to be played arpeggiated, or "spread", so that the notes in the chord are played very quickly one after another. Arpeggio signs are normally shown as vertical wavy lines.



Arpeggiated chords can be played in two directions:

- Upwards, starting from the bottom note in the chord.
- Downwards, starting from the top note in the chord.

It is most common for up arpeggio signs to have nothing at the top end, because chords are usually arpeggiated upwards, and for down arpeggio signs to have an arrow at the bottom, so these are the defaults in Dorico Elements. However, it is also accepted practice to show up arpeggio signs with an arrow at the top if down arpeggio signs are also used in the same piece of music.

Arpeggio signs in Dorico Elements automatically span the range of all notes in the voices/staves to which they apply.

RELATED LINKS

Input methods for ornaments, arpeggio signs, glissando lines, and jazz articulations on page 332 Glissando lines on page 1096 Jazz articulations on page 1125 Lines on page 1174

Types of arpeggio signs

There are different types of arpeggio signs to convey the different arpeggiation directions and techniques.

Up arpeggio



A vertical wavy line that indicates chords are to be arpeggiated from the bottom note upwards.

Down arpeggio



A vertical wavy line that indicates chords are to be arpeggiated from the top note downwards.

Non arpeggio



A bracket with straight lines that indicates all notes in the chord are to be played together, not arpeggiated.

Curved arpeggio



A curved line, similar to a slur but vertical, that some composers use to indicate gentle or partial arpeggiation.

You can show both up and down arpeggio signs with one of the following ends in Dorico Elements:

- Nothing
- Arrow
- Swash







Up arpeggio sign with an arrow at Up arpeggio sign with a swash at the end



the end

Changing the type of arpeggio signs

You can change the type of arpeggio signs after they have been input.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the arpeggio signs whose type you want to change. You can do this in Write mode and Engrave mode.
- **2.** In the Properties panel, select one of the following options from the **Arpeggio type** menu in the **Arpeggios** group:
 - Non arpeggio
 - Up arpeggio
 - Down arpeggio
 - Up arpeggio (curve)

RESULT

The type of the selected arpeggio signs is changed.

TIP

You can also change the arpeggio type by opening the ornaments popover and changing the entry.

Changing the end appearance of arpeggio signs

Down arpeggio signs have an arrowhead at the bottom of the line by default, but up arpeggio signs have no arrowhead by default. You can change the appearance of the ends of arpeggio signs individually.

NOTE

These steps only apply to up and down arpeggio signs. They do not apply to curved or non arpeggio signs.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing 1** is selected in the Engrave toolbox.

PROCEDURE

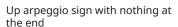
- **1.** Select the arpeggio signs of any direction whose ends you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Sign end** in the **Arpeggios** group.
- **3.** Select the end you want from the menu:
 - Nothing
 - Arrow
 - Swash

RESULT

The appearance of the ends of the selected arpeggio signs is changed.

EXAMPLE







Up arpeggio sign with an arrow at the end



Up arpeggio sign with a swash at the end

Length of arpeggio signs

The length of arpeggio signs is determined by the pitch range of notes in the voices/staves to which the arpeggio sign applies. Dorico Elements automatically adjusts the length of arpeggio signs if pitches change or you add notes to, or delete notes from, chords.

In Engrave mode, each arpeggio sign has two square handles, one at the top and one at the bottom. You can move these handles to adjust the graphical position and length of arpeggio signs. For example, you might lengthen an arpeggio sign on a chord with a small pitch range so the arpeggio sign is more clearly visible.

RELATED LINKS

Moving items graphically on page 501

General placement conventions for arpeggio signs

Arpeggio signs are positioned to the left of the notes, including any applicable accidentals, to which they apply, but are positioned between grace notes and normal notes. They should appear within the same bar as the notes to which they apply, and not on the other side of the barline.

Dorico Elements makes automatic adjustments to note spacing and staff spacing to accommodate arpeggio signs and ensure they are positioned correctly.

Arpeggio signs should cover the whole vertical range of all notes in the chord to which they apply, and protrude slightly at each end. However, they do not need to cover the stems of notes. Dorico Elements automatically creates the lengths of arpeggio signs to cover the notes in chords, and adjusts their lengths if the notes in chords change or are deleted.

If an arpeggiated chord spans two staves, such as in a piano part, its arpeggio sign can extend across both staves.

You can move arpeggio signs to different rhythmic positions in Write mode.

You can move arpeggio signs graphically in Engrave mode; however, this does not change the rhythmic positions to which they are attached.

Showing arpeggio signs before/after grace notes

You can show arpeggio signs before/after grace notes individually. You can do this for the current layout and frame chain only, or for all layouts and frame chains. By default, arpeggio

signs are positioned immediately to the left of the notes to which they apply, and so are positioned between normal notes and grace notes.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** 3 is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- 1. Select the arpeggio signs you want to show before grace notes. You can do this in Write mode and Engrave mode.
- **2.** In the Properties panel, activate/deactivate **Arpeggio before grace notes** in the **Arpeggios** group.

RESULT

The selected arpeggio signs are shown before grace notes when the property is activated, and after grace notes when the property is deactivated. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490

Arpeggios in playback

You can find options to control the playback of all arpeggios project-wide in the **Arpeggio Signs** section of the **Timing** page in **Playback Options**.

For example, you can control the speed of arpeggiation and whether arpeggiation starts on the beat or ends on the beat.

You can set a default arpeggio length for wiggly arpeggio signs and curved arpeggio signs separately, expressed as a fraction of a quarter note (crotchet) at 120 bpm. It can be helpful to set arpeggio lengths using this measurement instead of defining arpeggios as a fraction of their notated rhythm, as otherwise arpeggios in very slow music would play back much slower than most people intend.

As well as setting a default length for arpeggios, you can also set minimum and maximum values for the length of arpeggios, expressed as a fraction of the notated value of the arpeggio. This is to ensure all notes with arpeggio signs can be heard within their notated duration.

TIP

You can also use properties in the **Arpeggios Playback** group of the Properties panel to override the default playback options for individual arpeggio signs.

Changing arpeggio playback relative to the beat

You can change whether individual arpeggios are played before their notated position or after their notated position, independently of your project-wide settings.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the arpeggio signs whose playback relative to the beat you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate Playback position in the Arpeggios Playback group.
- **3.** Choose one of the following options:
 - Start on beat
 - End on beat

RESULT

The beat-relative position of the selected arpeggios in playback is changed.

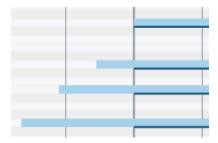
TIP

You can change the playback of all arpeggios relative to the beat project-wide on the **Timing** page in **Playback Options**.

EXAMPLE



Arpeggio starting on the beat



Arpeggio ending on the beat

RELATED LINKS

Properties panel on page 646 Engrave toolbox on page 490 Playback Options dialog on page 732

Changing the playback duration of arpeggios

You can change the duration of individual arpeggios in playback, independently of your project-wide settings.

The duration of arpeggios is expressed as a fraction of the notated rhythm of chords. For example, an arpeggio on a quarter note (crotchet) chord with a note offset value of 1/2 lasts an eighth note (quaver), whereas with a note offset value of 1/8 it lasts a 32nd note.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing 1** is selected in the Engrave toolbox.

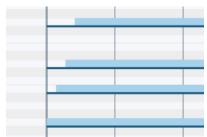
PROCEDURE

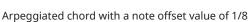
- **1.** Select the arpeggio signs whose playback duration you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Note offset** in the **Arpeggios Playback** group.
- **3.** Change the playback duration of the selected arpeggio signs by changing the value in the value field.
- 4. Press Return.

RESULT

The playback duration of the selected arpeggios is changed. This overrides your project-wide settings for the duration of arpeggios for the selected arpeggios.

EXAMPLE







Arpeggiated chord with a note offset value of 1/2

Glissando lines

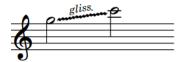
Glissando lines indicate a continuous transition between two notes, which can be smooth or in chromatic steps. They can have straight lines or wiggly lines, and can be shown with a text indication or as a line without text.

Because glissando lines are positioned between noteheads, the steepness of their angle reflects the interval between the notes: the steeper the angle, the greater the interval.

There are different conventions regarding the playing techniques for glissando and portamento. Some people understand glissando lines to indicate a chromatic scale between the two notes, either rising or falling in a series of half-steps (semitones), and portamento lines to indicate a smooth, continuous glide between the two notes. However, the terms glissando and portamento can be used interchangeably in other cases.

You can input both glissando lines and portamento lines in Dorico Elements, and you can easily change their style after they have been input.

Glissando lines in Dorico Elements automatically follow the notes at each end, meaning if you change the pitch of either note, the glissando line end positions move accordingly. Dorico Elements automatically positions glissando lines so they do not collide with accidentals.





An example glissando line with text shown and a wiggly line

An example portamento line with text shown and a straight line

Glissando lines can cross system breaks and page breaks. If text is shown for glissando lines that span system or page breaks, then that text is shown on every glissando line segment. By default, the start and end positions of each segment match the original start and end points of the whole glissando line.

RELATED LINKS

Input methods for ornaments, arpeggio signs, glissando lines, and jazz articulations on page 332 Arpeggio signs on page 1089

lazz articulations on page 1125

Fingering slides on page 967

Playing technique continuation lines on page 1166

Lines on page 1174

Changing the pitch of individual notes on page 455

Glissando lines across empty bars

In Dorico Elements, you can input glissando lines between any two notes, even if there are rests or other notes between them, and including between notes in different voices and notes on different staves.

For very long glissando lines that extend across multiple bars, you might not want to show pitches at the start of each bar; for example, to indicate that performers do not emphasize

pitches during the course of the glissando, or that performers can play the glissando at their own speed. By default, Dorico Elements shows notes or rests in every bar.

To avoid note spacing issues caused by removing rests, we recommend inputting notes in the intervening bars, then hiding their noteheads and/or stems.

EXAMPLE



A glissando line across multiple bars with hidden notes between the start/end notes

RELATED LINKS

Input methods for ornaments, arpeggio signs, glissando lines, and jazz articulations on page 332 Hiding/Showing bar rests in empty bars on page 1256 Hiding/Showing noteheads on page 1041 Hiding/Showing stems on page 1060

Changing the style of glissando lines

Glissando lines can be shown as straight lines or wiggly lines. You can change the glissando line style of glissando lines individually.

PREREQUISITE

- The lower zone is shown.
- Properties
 is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing 1** is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the glissando lines whose style you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate Glissando style in the Glissando Lines group.
- **3.** Choose one of the following options:
 - Straight line
 - Wiggly line **Z**

RESULT

The glissando line style is changed for the selected glissando lines.

TIP

- Deactivating **Glissando style** returns the selected glissando lines to the default style.
- You can also change the glissando style by opening the ornaments popover and changing the entry.

RELATED LINKS

Properties panel on page 646 Engrave toolbox on page 490 Ornaments popover on page 333

Changing glissando line text

You can show individual glissando lines with "gliss." text, "port." text, or without text. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

Glissando line text is automatically hidden on staves belonging to fretted instruments.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, Graphic Editing 3 is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** Select the glissando lines whose text you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Glissando text** in the **Glissando Lines** group.
- **3.** Select one of the following options from the menu:
 - Gliss.

gliss.

Port.



No text

······

RESULT

The text shown on the selected glissando lines is changed. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

RELATED LINKS

Properties panel on page 646

Changing the property scope on page 648

Engrave toolbox on page 490

Input methods for ornaments, arpeggio signs, glissando lines, and jazz articulations on page 332

Changing when glissando line text is shown

By default, glissando text is not shown when glissando lines are too short to accommodate the text. You can choose to show text on individual glissando lines always, or only if there is sufficient space. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

Glissando line text is automatically hidden on staves belonging to fretted instruments.

PREREQUISITE

The lower zone is shown.

- **Properties is** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** 3 is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** Select the glissando lines whose setting for when text is shown you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate Glissando text shown in the Glissando Lines group.
- **3.** Choose one of the following options:
 - Show if sufficient space
 - Always show

RESULT

When **Show if sufficient space** is chosen, glissando line text is not shown if the glissando line is too short.

When **Always show** is chosen, glissando line text is always shown, even if the glissando line is short. However, this can cause the glissando line text to collide with other items, such as noteheads and stems.

If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

TIP

You can increase the default gaps between noteheads by changing the default note spacing, and between individual noteheads by adjusting note spacing at individual rhythmic positions in Engrave mode.

RELATED LINKS

Note spacing on page 494

Glissando lines in Engrave mode

In Engrave mode, each glissando line has two square handles, one at the start and one at the end. You can move these handles to adjust the graphical position, length, and angle of glissando lines.

You can also move whole individual glissando lines graphically. If glissando lines cross system and frame breaks, you can move the glissando line segments on each side of the break independently.



Handles on a glissando line in Engrave mode

NOTE

You cannot move glissando lines rhythmically. If you want to change the rhythmic positions of glissando lines, you must delete them from their original positions and input new glissando lines at the new positions.

RELATED LINKS

Moving items graphically on page 501

Glissando lines in playback

Glissando lines are reflected in playback using either a sequence of notes or a continuous pitch bend between the start and end notes for each glissando.

Glissando playback type

In Dorico Elements, there are the following glissando playback types:

Continuous

Glissandos sound as a smooth slide between the start and end pitches for each glissando line, using MIDI pitch bend.

The following instrument families use continuous glissando playback by default: brass, singers, electronics, and strings.

NOTE

Continuous glissando playback requires the support of the sound library, consecutive notes only, and an appropriate pitch range set for the corresponding expression map. For example, HALion Symphonic Orchestra only supports a continuous glissando range of one whole step (two semitones).

Glissandos use chromatic glissando playback as a fallback if their pitch range is wider than is supported, or if the instrument ever plays chords; that is, two or more notes simultaneously.

Chromatic

Glissandos sound as a sequence of notes, usually a half-step (semitone) apart, between the start and end pitches for each glissando line.

- Harp pedal diagrams affect the pitches used in harp glissando playback.
- All other instruments use the 12-EDO chromatic scale, regardless of the current tonality system.

Chromatic glissando playback is the default for all instruments that do not use either continuous or white notes glissando playback.

White notes

Glissandos sound as a sequence of notes, only comprising natural pitches; that is, the pitches represented by white keys on keyboards.

White notes glissando playback is the default for keyboard and pitched percussion instruments.

Glissando playback duration

When glissando lines start or end on tie chains, their playback starts from the last notehead and ends at the first notehead.

By default, glissandos start sounding halfway through their duration; for tied notes, this is the duration of the last notehead in the tie chain. You can change the delay at the start of glissando lines in playback.

RELATED LINKS

Input methods for ornaments, arpeggio signs, glissando lines, and jazz articulations on page 332 Harp pedaling on page 1133

Equal Division of the Octave (EDO) on page 1009

Expression Maps dialog on page 745

Changing the glissando playback type

You can change the playback type of individual glissando lines; for example, if you want some glissando lines to play back using white notes instead of chromatic notes. By default, Dorico Elements automatically selects the glissando playback type according to the instrument family.

PREREQUISITE

- The lower zone is shown.
- Properties is selected in the lower zone toolbar.
- If you are in Engrave mode, Graphic Editing 3 is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the glissando lines whose playback type you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Playback type** in the **Glissando Lines** group.
- **3.** Select one of the following options from the menu:
 - Auto
 - Continuous
 - Chromatic
 - White notes
 - None

Delaying the start of glissandos in playback

You can change the delay at the start of glissandos in playback. By default, glissandos start sounding halfway through their duration; for tied notes, this is the duration of the last notehead in the tie chain.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, Graphic Editing 3 is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the glissando lines whose playback start you want to delay. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Delayed start** in the **Glissando Lines** group.
- **3.** Activate/Deactivate the corresponding checkbox.
- **4.** Optional: If you want to specify exactly how far through the glissando lines playback starts, activate **Delay** and change the value in the value field.
 - The value represents fractions of a quarter note. For example, **1/2** delays the start of glissandos by an eighth note.

RESULT

When the **Delayed start** checkbox is activated, the selected glissando lines start playing back halfway through the duration of the last notehead to which they apply.

When the **Delayed start** checkbox is deactivated, the selected glissando lines start playing back from the beginning of the last notehead to which they apply.

If you also activated **Delay**, playback of the selected glissando lines follows your set value.

When **Delayed start** is deactivated, glissando lines follow your project-wide setting for glissando line playback.

NOTE

You can change whether all glissando lines project-wide have delayed starts on the **Glissando Lines** page in **Playback Options**.

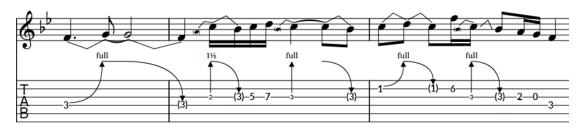
RELATED LINKS

Properties panel on page 646 Engrave toolbox on page 490 Playback Options dialog on page 732

Guitar bends

The guitar bend is a technique commonly performed on electric guitars, where the performer pushes strings out of their normal alignment after notes start to sound. Bending strings tightens them, which produces the characteristic pitch fluctuation.

Performing a guitar bend often also involves sustaining the bent pitch before allowing the string to return to its natural position and un-bent pitch. In Dorico Elements, these actions are called a "guitar bend hold" and "release" respectively.



A phrase containing guitar bends, a guitar bend hold, guitar pre-bends, and releases, shown on both a notation staff and tablature

Guitar bends and releases with bend intervals of up to a whole step (tone) are reflected in playback.

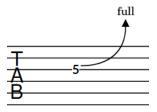
Guitar bends

Guitar bends indicate that the performer should bend the string after playing a note, so that the pitch increases while the note sounds. In Dorico Elements, each guitar bend joins two notes: the start pitch and the pitch at the peak of the bend.

On notation staves, guitar bends are notated using an angled line between the noteheads at the start and end. On tablature, guitar bends are notated using an upwards-pointing curved line with an arrowhead at the top and a bend interval above the arrowhead. The fret number of the end note is hidden automatically.



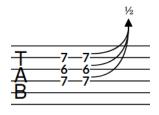
Guitar bend on notation staff



Guitar bend on tablature

If you input guitar bends on multiple notes in chords, their arrowheads are automatically aligned on tablature.

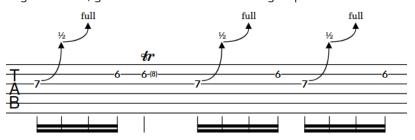




Guitar bends on chord on notation staff

Guitar bends on chord on tablature

Sequences of consecutive guitar bends are notated as bend runs on tablature. In Engrave mode, guitar bend runs function as a group.

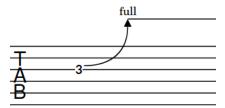


Guitar bend runs on tablature

Guitar bend holds

Guitar bend holds indicate that the performer should maintain the pitch at the peak of a guitar bend. They are usually shown on tied notes.

On tablature, guitar bend holds are notated using a horizontal line. They are not notated on notation staves.



Guitar bend hold on tablature

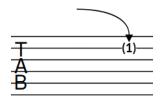
Releases

Releases indicate that the performer should allow a bent string to return to its natural position, which decreases the pitch. In Dorico Elements, each release joins two notes: the pitch at the peak of the bend and the end pitch.

On notation staves, releases are notated using an angled line between the noteheads at the start and end. On tablature, releases are notated using a downwards-pointing curved line with an arrowhead at the bottom and parenthesized fret numbers below the arrowhead to indicate the end pitches. The fret number of the start note is hidden automatically.



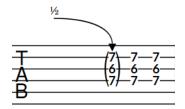




Release on tablature

If you input releases on multiple notes in chords, they are notated with a single downwards-pointing curved line on tablature. If the bend intervals are the same for all notes, the end pitches are parenthesized together.





Releases on chord on notation staff

Releases on chord on tablature

NOTE

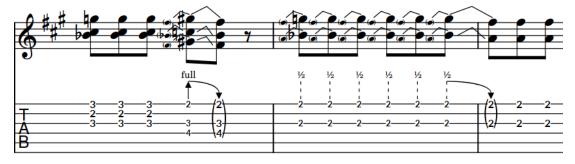
- In addition to guitar bends, Dorico Elements supports guitar pre-bends/pre-dives, guitar post-bends, vibrato bar dives and returns, and other guitar techniques.
- Because you input releases in the same way as you input guitar bends, in this documentation, "guitar bends" refers to both guitar bend and release items in projects.
- Stems, stem flags, and beaming always appear stem-up on tablature in single-voice contexts, which means they can collide with guitar bends.

RELATED LINKS

Guitar bends in Engrave mode on page 1112
Guitar techniques on page 1118
Input methods for guitar bends and guitar techniques on page 344
Tablature on page 1308
Bracketed noteheads on page 1047
String indicators on page 974
Lines on page 1174

Guitar pre-bends and pre-dives

Guitar pre-bends and pre-dives are techniques commonly performed on electric guitars, where the performer changes the initial sounding pitch of strings before playing notes, either by bending strings to tighten them or using the vibrato bar to loosen them.



A phrase containing a guitar pre-bend with release and multiple guitar pre-dives with release

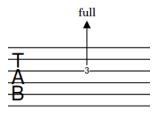
In Dorico Elements, guitar pre-bends and pre-dives are properties of notes belonging to fretted instruments, meaning they only apply to single notes.

Guitar pre-bends

Guitar pre-bends indicate that the performer should bend the string before playing the note to raise the pitch; for example, to repeat a note that was at the end of a previous quitar bend. The pitch can then be lowered after starting to sound.

On notation staves, guitar pre-bends are notated using an angled line between the noteheads at the start and end. However, unlike guitar bends, the parenthesized auxiliary notehead at the start is shown automatically as part of the pre-bend. On tablature, guitar pre-bends are notated using a solid vertical line with an arrowhead at the top, a bend interval above the arrowhead, and a small fret number below the line to indicate the start pitch.





Guitar pre-bend on notation staff

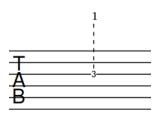
Guitar pre-bend on tablature

Guitar pre-dives

Guitar pre-dives indicate that the performer should use the vibrato bar to lower the pitch before playing the note. The pitch can then be raised after starting to sound.

On notation staves, guitar pre-dives appear the same as guitar pre-bends. On tablature, guitar pre-dives are notated using a dashed vertical line with an arrowhead at the top, a bend interval above the arrowhead, and a small fret number below the line to indicate the start pitch.





Guitar pre-dive on notation staff

Guitar pre-dive on tablature

NOTE

Stems, stem flags, and beaming always appear stem-up on tablature in single-voice contexts, which means they can collide with guitar bends.

RELATED LINKS

Guitar pre-bends/pre-dives in Engrave mode on page 1114 Inputting guitar pre-bends/pre-dives on page 346 Bracketed noteheads on page 1047 Tablature on page 1308

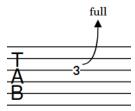
Guitar post-bends

The guitar post-bend is a technique commonly performed on electric guitars, where the performer pushes strings out of their normal alignment after notes start to sound. Bending strings tightens them, which produces the characteristic pitch fluctuation. Microtonal post-bends are particularly idiomatic in Blues music.

In Dorico Elements, guitar post-bends are properties of notes belonging to fretted instruments, meaning they only apply to single notes. They are notated the same on notation staves and tablature, using an upwards-pointing curved line with an arrowhead at the top and a bend interval above the arrowhead.



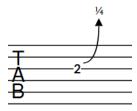
Guitar post-bend on notation staff



Guitar post-bend on tablature



Microtonal post-bend on notation staff

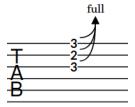


Microtonal post-bend on tablature

If you input guitar post-bends on multiple notes in chords, their arrowheads are automatically aligned. On notation staves, the appropriate number of curved lines is shown according to the staff positions of notes in chords.



Guitar post-bends on chord on notation staff



Guitar post-bends on chord on tablature

NOTE

Guitar post-bends are not currently reflected in playback. This is planned for future versions.

RELATED LINKS

Guitar post-bends in Engrave mode on page 1115 Inputting guitar post-bends on page 347

Vibrato bar dives and returns

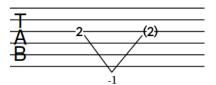
The vibrato bar dive and return is a technique performed on electric guitars with a vibrato bar, where the performer uses the vibrato bar to loosen then tighten strings after notes start to sound. This produces the characteristic downwards-then-upwards pitch fluctuation.

In Dorico Elements, each vibrato bar dive and return comprises two vibrato bar bend items, where the first vibrato bar bend ends on the same note that the second vibrato bar bend starts on. Vibrato bar bends each join two notes.

Vibrato bar dives and returns with bend intervals of up to a whole step (tone) are reflected in playback.

On notation staves, vibrato bar dives and returns are notated using an angled line between the noteheads at the start and end, meaning they appear the same as guitar bends. On tablature, vibrato bar dives and returns are notated using two straight lines that form a V and a bend interval shown at the point. The fret number of the middle note is hidden and the fret number of the end note is parenthesized automatically.



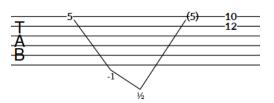


Vibrato bar dive and return on notation staff

Vibrato bar dive and return on tablature

Sequences of consecutive vibrato bar bends on notes with the same pitch direction, such as E-D-C, are notated on tablature with an additional line protrusion beyond the staff and bend interval for each vibrato bar bend.



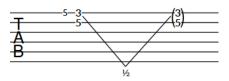


Consecutive vibrato bar bends on notation staff

Consecutive vibrato bar bends on tablature

If you input vibrato bar dives and returns on multiple notes in chords, a single V appears on tablature as long as the bend intervals are the same for all notes.





Vibrato bar dive and return on chords on notation staff

Vibrato bar dive and return on chords on tablature

RELATED LINKS

Vibrato bar dives and returns in Engrave mode on page 1116 Input methods for guitar bends and guitar techniques on page 344 Vibrato bar techniques on page 1118 Bracketed noteheads on page 1047 Tablature on page 1308

Bend intervals

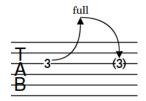
Bend intervals indicate the amount quitar bends, pre-bends, pre-dives, post-dives, and dives and returns change the pitch, expressed in relation to whole steps using text or numbers/fractions. Bend intervals appear only on tablature for most types of bends, except for guitar post-bends, whose bend intervals also appear on notation staves.

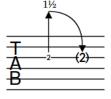
For example, full indicates a whole step guitar bend, pre-bend, or post-bend, 1/2 a half-step, and 1 1/2 a minor third.

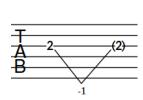
Bend intervals for guitar pre-dives and vibrato bar dives and returns always appear as numbers/ fractions, such as **1** for a whole step vibrato bar dive and return.

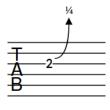
Microtonal bend intervals appear as fractions according to the prevailing tonality system, such as 3/4. Bend intervals for microtonal post-bends appear as 1/4.

EXAMPLE









Guitar bend with whole step Guitar pre-bend with interval, displayed as **full**

minor third interval, displayed as 1 1/2

Vibrato bar dive and return with whole step interval, displayed as -1

Guitar post-bend with microtonal interval, displayed as 1/4

Bend intervals for guitar bends, pre-bends, pre-dives, and post-dives are positioned above the arrowhead/line for the corresponding notation. For dives and returns, bend intervals appear at the point of the V, either above or below the staff according to the pitch direction of notes in the dive and return.

Bend intervals appear only on tablature for guitar bends, pre-bends, pre-dives, and dives and returns. They appear on both notation staves and tablature for guitar post-bends.

RELATED LINKS

Changing vibrato bar dip intervals on page 1123 Input methods for guitar bends and guitar techniques on page 344 Guitar bends in Engrave mode on page 1112 Tablature on page 1308

Hiding/Showing guitar bend hold lines

Guitar bend hold lines indicate that the bend should be held for the duration of the note, which is usually a tied note. You can hide/show hold lines on guitar bends on tablature.

NOTE

These steps only apply to guitar bends. You cannot show hold lines on pre-bends or releases.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, Graphic Editing J is selected in the Engrave toolbox.

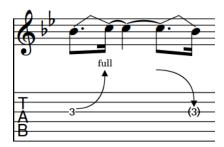
PROCEDURE

- 1. Select the guitar bends on which you want to hide/show hold lines. You can do this on notation staves and tablature in Write mode and Engrave mode.
- 2. In the Properties panel, activate/deactivate Show hold in the Guitar Bends group.

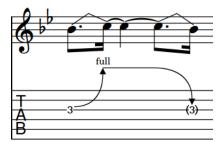
RESULT

Hold lines are shown on the selected bends on tablature when **Show hold** is activated, and hidden when it is deactivated.

EXAMPLE



Hold line hidden



Hold line shown

Changing the direction of guitar pre-bends/pre-dives

You can change the direction of guitar pre-bends/pre-dives individually. You can do this for the current layout and frame chain only, or for all layouts and frame chains. By default, guitar pre-bends/pre-dives are positioned on the notehead-side of notes in single-voice contexts. In multiple-voice contexts, they are positioned on the stem-side of notes.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing 1** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** Select the guitar pre-bends/pre-dives whose direction you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Pre-bend direction** in the **Guitar Pre-bends** group.
- **3.** Choose one of the following options:
 - Up
 - Down

RESULT

The direction of the selected guitar pre-bends/pre-dives is changed. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

TIP

You can change the direction of guitar bends on notation staves by selecting them and pressing **F**. However, you cannot use this key command for guitar pre-bends/pre-dives.

RELATED LINKS

Properties panel on page 646

Changing the property scope on page 648

Engrave toolbox on page 490

Changing vibrato bar dip intervals on page 1123

Changing the staff-relative placement of guitar techniques on page 1123

Hiding/Showing accidentals on guitar pre-bends/pre-dives

You can hide/show accidentals on guitar pre-bends/pre-dives individually; for example, to save horizontal space in a layout that also shows the interval clearly on tablature. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** Select the guitar pre-bends/pre-dives whose accidentals you want to hide/show. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Pre-bend accidental** in the **Guitar Pre-bends** group.
- **3.** Choose one of the following options:
 - Hide
 - Show

RESULT

Accidentals on the selected guitar pre-bends are hidden when you choose **Hide**, and shown when you choose **Show**. This does not affect the interval shown for the selected guitar pre-bends

on tablature. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

Deleting guitar pre-bends, pre-dives, and post-bends

You can remove guitar pre-bends, pre-dives, and post-bends from notes after you have input them. However, because guitar pre-bends, pre-dives, and post-bends are properties of notes rather than separate items in Dorico Elements, you must select and delete them differently from other items.

PROCEDURE

- **1.** In Write mode, select the notes from which you want to remove guitar pre-bends, pre-dives, and/or post-bends.
- 2. Do one of the following:
 - To remove guitar pre-bends/pre-dives, deactivate **Pre-bend interval** in the **Guitar Pre-bends** group of the Properties panel.
 - To remove guitar post-bends, deactivate **Post-bend interval** in the **Guitar Post-bends** group of the Properties panel.

RESULT

Guitar pre-bends, pre-dives, and/or post-bends are removed from the selected notes.

Guitar bends in Engrave mode

In Engrave mode, each guitar bend, release, and hold has multiple handles that you can move independently to adjust their graphical position and shape on notation staves and tablature independently.

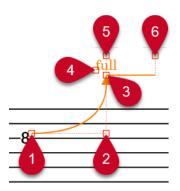
On notation staves, guitar bends and releases have three square handles. When you move either of the start/end handles, the middle handle also moves to retain its position relative to the start/end handles.



Guitar bend handles on notation staff in Engrave mode

Guitar bends and holds

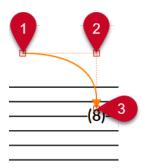
On tablature, guitar bends and holds have the following handles:



- 1 Guitar bend start handle
- 2 Guitar bend middle handle
- 3 Guitar bend end handle
- 4 Bend interval handle
- 5 Hold start handle
- 6 Hold end handle

Releases

On tablature, releases have the following handles:



- 1 Release start handle
- 2 Release middle handle
- 3 Release end handle

You can move these handles to change the shape of guitar bends and releases, change the graphical length and angle of guitar bend holds, and move bend intervals. When you move guitar bend end handles, the bend interval also moves to retain its position relative to the end handle.

If guitar bends cross system and frame breaks, you can move the guitar bend segment on each side of the break independently.

NOTE

Adjoining guitar bends, such as guitar bend runs or a guitar bend that ends on the same
note that a return starts on, function as a group. When using the mouse, moving any guitar
bend in the group upwards/downwards moves all the others. When you move individual
handles within the group using the mouse, adjacent guitar bends automatically adjust to
compensate.

When you move individual guitar bends in a group or individual handles using the keyboard, this does not affect adjacent guitar bends.

- You cannot move whole holds, you must move their handles.
- The following properties in the **Guitar Bends** group of the Properties panel are activated automatically when you move the corresponding guitar bend handle:
 - Start offset moves start guitar bend and release handles. X moves them horizontally, Y
 moves them vertically.
 - Mid offset moves middle guitar bend and release handles. X moves them horizontally, Y
 moves them vertically.
 - End offset moves end guitar bend and release handles. X moves them horizontally, Y
 moves them vertically.
 - **Interval offset** moves guitar bend interval handles. **X** moves them horizontally, **Y** moves them vertically.
 - Hold start offset moves start guitar bend hold handles. X moves them horizontally, Y
 moves them vertically.
 - Hold end offset moves end guitar bend hold handles. X moves them horizontally, Y
 moves them vertically.

RFLATED LINKS

Bend intervals on page 1109
Moving items graphically on page 501
System breaks on page 617
Frame breaks on page 620
Input methods for guitar bends and guitar techniques on page 344

Guitar pre-bends/pre-dives in Engrave mode

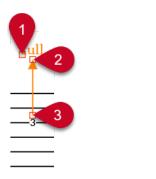
In Engrave mode, each guitar pre-bend/pre-dive has multiple handles that you can move independently to adjust their graphical position and shape on notation staves and tablature independently.

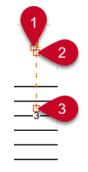
On notation staves, guitar pre-bends/pre-dives have three square handles. When you move either of the start/end handles, the middle handle also moves to retain its position relative to the start/end handles.



Guitar pre-bend/pre-dive handles on notation staff in Engrave mode

On tablature, guitar pre-bends/pre-dives have the following handles:





Guitar pre-bend handles

Guitar pre-dive handles

- 1 Bend interval handle
- 2 Guitar pre-bend/pre-dive end handle
- **3** Guitar pre-bend/pre-dive start handle

You can move these handles to change the shape of guitar pre-bends/pre-dives on notation staves, change the graphical length and angle of guitar pre-bends/pre-dives on tablature, and move bend intervals. When you move guitar pre-bend/pre-dive end handles, the bend interval also moves to retain its position relative to the end handle.

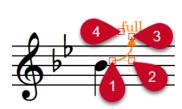
NOTE

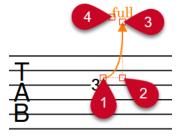
- You cannot move whole guitar pre-bends/pre-dives, you must move their handles.
- The following properties in the **Guitar Pre-bends** group of the Properties panel are activated automatically when you move the corresponding guitar pre-bend/pre-dive handle:
 - Start offset moves guitar pre-bend/pre-dive start handles. X moves them horizontally, Y
 moves them vertically.
 - Mid offset moves guitar pre-bend/pre-dive middle handles. X moves them horizontally,
 Y moves them vertically.
 - End offset moves guitar pre-bend/pre-dive end handles. X moves them horizontally, Y
 moves them vertically.
 - **Interval offset** moves guitar pre-bend/pre-dive interval handles. **X** moves them horizontally, **Y** moves them vertically.

Guitar post-bends in Engrave mode

In Engrave mode, each guitar post-bend has multiple handles that you can move independently to adjust their graphical position and shape on notation staves and tablature independently.

On both notation staves and tablature, guitar post-bends have the following handles:





- 1 Guitar post-bend start handle
- 2 Guitar post-bend middle handle
- 3 Guitar post-bend end handle
- 4 Bend interval handle

You can move these handles to change the shape of guitar post-bends and move bend intervals. When you move guitar post-bend end handles, the bend interval also moves to retain its position relative to the end handle.

NOTE

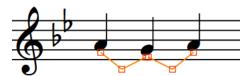
The following properties in the **Guitar Post-bends** group of the Properties panel are activated automatically when you move the corresponding guitar post-bend handle:

- **Start offset** moves guitar post-bend start handles. **X** moves them horizontally, **Y** moves them vertically.
- **Mid offset** moves guitar post-bend middle handles. **X** moves them horizontally, **Y** moves them vertically.
- **End offset** moves guitar post-bend end handles. **X** moves them horizontally, **Y** moves them vertically.
- Interval offset moves guitar post-bend interval handles. X moves them horizontally, Y
 moves them vertically.

Vibrato bar dives and returns in Engrave mode

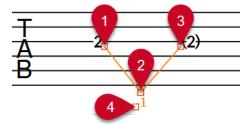
In Engrave mode, each vibrato bar dive and return has multiple handles that you can move independently to adjust their graphical position and shape.

On notation staves, each vibrato bar dive and vibrato bar return has three square handles that you can move independently. When you move either of the start/end handles, the middle handle also moves to retain its position relative to the start/end handles.



Vibrato bar dive and return handles on notation staff in Engrave mode

On tablature, vibrato bar dives and returns have the following handles:



- 1 Vibrato bar dive start handle
- 2 Vibrato bar dive end handle/Vibrato bar return start handle
- 3 Vibrato bar return end handle
- 4 Bend interval handle

You can move these handles to change the shape or angle of vibrato bar dives and returns and move bend intervals. When you move the vibrato bar dive end handle/vibrato bar return start handle with the mouse, both handles move together. When you move the handle using the keyboard, by default only the vibrato bar dive end handle moves. The same is true for consecutive vibrato bar bends with the same pitch direction.

When you move the vibrato bar dive end handle, the bend interval also moves to retain its position relative to the end handle.

If vibrato bar dives and returns cross system and frame breaks, you can move the vibrato bar dive and return segment on each side of the break independently.

NOTE

The following properties in the **Guitar Bends** group of the Properties panel are activated automatically when you move the corresponding vibrato bar dive/return handle:

- Start offset moves vibrato bar dive/return start handles. X moves them horizontally, Y
 moves them vertically.
- Mid offset moves vibrato bar dive/return middle handles. X moves them horizontally, Y moves them vertically.
- **End offset** moves vibrato bar dive/return end handles. **X** moves them horizontally, **Y** moves them vertically.
- Interval offset moves vibrato bar dive/return interval handles. X moves them horizontally, Y
 moves them vertically.

Guitar techniques

The term "guitar techniques" covers a range of techniques typically associated with guitar music, such as hammer-ons, pull-offs, and pitch alterations that use the vibrato bar on electric guitars.

RELATED LINKS

Input methods for guitar bends and guitar techniques on page 344 Guitar bends on page 1103 Guitar pre-bends and pre-dives on page 1105 Guitar post-bends on page 1107 Vibrato bar dives and returns on page 1108 Bend intervals on page 1109

Vibrato bar techniques

There are a number of different techniques that can be performed using the vibrato bar on electric fretted instruments, typically guitars. In Dorico Elements, the available vibrato bar techniques are categorized differently.

Vibrato bar dives

Vibrato bar dives indicate that the performer should use the vibrato bar to lower the pitch after playing the note, so that the pitch falls after starting to sound. This technique is also known as a "dive bomb".

In Dorico Elements, you can notate vibrato bar dives using jazz articulations to show falling lines to the right of noteheads in combination with a vibrato bar indication.



Vibrato bar scoops

Vibrato bar scoops indicate that the performer should depress the vibrato bar just before playing the note and then release the vibrato bar quickly, so that the pitch rises after starting to sound.

In Dorico Elements, vibrato bar scoops are properties of notes, meaning they only apply to single notes. By default, vibrato bar scoops only appear on notation staves and are placed to the left of noteheads on the staff.



Vibrato bar dips

Vibrato bar dips indicate that the performer should use the vibrato bar to lower and then raise the pitch by the specified interval after playing the note.

In Dorico Elements, vibrato bar dips are considered ornaments. You can select and delete them independently of the notes to which they apply. Vibrato bar dips appear

on both notation staves and tablature and are placed above the staff. You can change the staff-relative placement of individual vibrato bar dips.



Vibrato bar indications/lines

Vibrato bar indications are text instructions that indicate that the performer should use the vibrato bar. When they apply to a range of notes, they typically show dashed lines.

In Dorico Elements, vibrato bar indications/lines are considered playing techniques. They show lines when they have duration. You can select and delete them independently of the notes to which they apply. You can also change the duration line style of vibrato bar lines in the same ways as for playing technique continuation lines.



NOTE

Vibrato bar techniques are not currently reflected in playback. This is planned for future versions.

RELATED LINKS

Input methods for guitar bends and guitar techniques on page 344
Guitar pre-bends and pre-dives on page 1105
Vibrato bar dives and returns on page 1108
Jazz articulations on page 1125
Ornaments on page 1071
Playing technique continuation lines on page 1166
Changing the staff-relative placement of items on page 423

Tapping

Tapping involves performers pressing the strings of fretted instruments strongly enough that the corresponding pitch sounds without additional striking. Tapping indications can specify whether the performer should use their right or left hand for individual notes. They typically appear as the letter T, a plus sign, or a dot.

According to convention, tapping indications for the same hand and for consecutive notes on the same string with different pitches are notated alongside slurs that span the tapped phrase. This is similar to hammer-ons and pull-offs, except tapping indications appear on every note whereas hammer-on and pull-off indications typically appear centered on slurs.



A phrase containing right-hand and left-hand tapping

By default, tapping indications only appear on notation staves and are placed above the staff. You can change the staff-relative placement of individual tapping indications.

In Dorico Elements, tapping indications are considered properties of notes. There are the following types of tapping indications:

Right-hand tapping

Right-hand tapping indications specify that the performer should tap the string at the specified pitch with their right hand. In Dorico Elements, right-hand tapping indications appear as the letter T.



Right-hand tapping on notation staff

Left-hand tapping

Left-hand tapping indications specify that the performer should tap the string at the specified pitch with their left hand. In Dorico Elements, left-hand tapping indications appear as a dot.



Left-hand tapping on notation staff

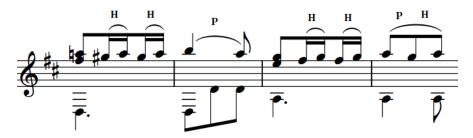
RELATED LINKS

Inputting tapping on page 357
Fingerings for fretted instruments on page 962

Hammer-ons and pull-offs

Hammer-ons and pull-offs involve performers tapping or plucking the strings of fretted instruments with their left hand strongly enough that the corresponding pitch sounds without additional striking, producing a legato effect. Ligados are a combination of at least one hammer-on and one pull-off in a single phrase.

Hammer-ons and pull-offs are notated as the letters H or P, respectively, combined with a slur spanning the corresponding notes. Dorico Elements automatically centers hammer-on/pull-off indications on slurs. For ligados, each hammer-on/pull-off indication is centered over the range of notes in the corresponding direction.



A phrase containing hammer-ons, a pull-off, and a ligado

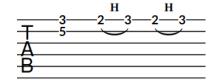
By default, hammer-ons/pull-offs appear on both notation staves and tablature and are placed above the staff. You can change the staff-relative placement of individual hammer-on/pull-off indications.

In Dorico Elements, hammer-on/pull-off indications are considered properties of notes.

Hammer-ons

Hammer-ons specify that the performer should tap the string at the specified pitch with their left hand without restriking the string. Hammer-ons require at least two notes on the same string with an ascending pitch direction, such as C-D. In Dorico Elements, hammer-ons appear as a letter H.





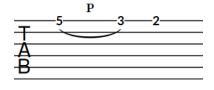
Hammer-ons on notation staff

Hammer-ons on tablature

Pull-offs

Pull-offs specify that the performer should pluck the string at the specified pitch with their left hand without restriking the string. Pull-offs require at least two notes on the same string with a descending pitch direction, such as D-C. In Dorico Elements, pull-offs appear as a letter P.



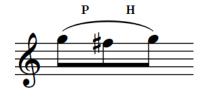


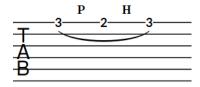
Pull-off on notation staff

Pull-off on tablature

Ligados

Ligados specify that the performer should both hammer on and pull off notes within a single phrase. Ligados require at least three notes on the same string with alternating pitch directions, such as C-D-C. In Dorico Elements, ligados comprise at least one hammer-on and pull-off.





Ligado on notation staff

Ligado on tablature

Showing notes as dead notes

You can show individual notes belonging to fretted instruments as dead notes. Dead notes are notated with cross noteheads on notation staves and with an X on tablature.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the notes belonging to fretted instruments that you want to show as dead notes. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Dead note** in the **Guitar Techniques** group.

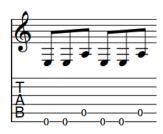
RESULT

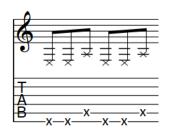
The selected notes are shown as dead notes.

NOTE

This does not currently affect their sound in playback; this is planned for future versions.

EXAMPLE





Normal notes

Dead notes

RELATED LINKS

Properties panel on page 646 Engrave toolbox on page 490 Inputting notes on tablature on page 237 Bracketed noteheads on page 1047 Tablature on page 1308

Changing vibrato bar dip intervals

You can change the intervals of individual vibrato bar dips. By default, vibrato bar dips have half step intervals.

PREREQUISITE

- The lower zone is shown.
- Properties is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the vibrato bar dips whose interval you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, change the value for **Interval above** in the **Ornaments** group. For example, enter **1** for a half step interval, **2** for a whole step interval, or **3** for a minor third interval.

RESULT

The interval of the selected vibrato bar dips is changed.

EXAMPLE



Vibrato bar dip with half step interval



Vibrato bar dip with whole step interval



Vibrato bar dip with minor third interval

RELATED LINKS

Changing ornament intervals on page 1071

Changing the staff-relative placement of guitar techniques

You can show individual tapping, hammer-on, and pull-off indications either above or below the staff. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- Properties = is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing ?** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** Select the notes whose guitar technique staff-relative placement you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Technique placement** in the **Guitar Techniques** group.
- **3.** Choose one of the following options:
 - Above
 - Below

RESULT

The staff-relative placement of tapping, hammer-on, and pull-off indications on the selected notes is changed. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

TIP

You can change the staff-relative placement of vibrato bar dips and lines by selecting them and pressing ${\bf F}$.

RELATED LINKS

Properties panel on page 646
Changing the property scope on page 648
Engrave toolbox on page 490
Changing the direction of guitar pre-bends/pre-dives on page 1110
Moving items graphically on page 501

Deleting guitar techniques

You can remove vibrato bar scoops and tapping, hammer-on, and pull-off indications from notes after you have input them. However, because these guitar techniques are properties of notes rather than separate items in Dorico Elements, you must select and delete them differently from other items.

PROCEDURE

- 1. In Write mode, select the notes from which you want to remove guitar techniques.
- 2. Remove guitar techniques in any of the following ways:
 - To remove tapping, hammer-on, and pull-off indications, deactivate **Technique** in the **Guitar Techniques** group of the Properties panel.
 - To remove guitar vibrato bar scoops, deactivate Vibrato bar scoop in the Guitar Techniques group of the Properties panel.

RESULT

Tapping, hammer-on, and pull-off indications and/or vibrato bar scoops are removed from the selected notes.

Jazz articulations

Jazz articulations in Dorico Elements cover a range of note ornamentations that are idiomatic to jazz music, and brass instruments in particular.

Although they are often known as jazz "articulations", these techniques function more like ornaments than articulations because they change the pitch rather than the duration or attack of notes. For this reason, they are considered ornaments in Dorico Elements. They are found in the Ornaments panel, and you can also input them using the ornaments popover.

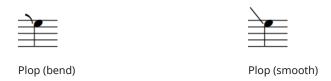
Jazz articulations can be shown as a curved line similar to a slur, which is called a "bend" in Dorico Elements, and as a straight line, which can be solid, dashed, or wiggly, which is called "smooth" in Dorico Elements.

Each note can have a single jazz articulation on each side of it, one before the note and one after. Jazz articulations after notes can have different lengths.

The following jazz articulations can be shown before notes:

Plop

An approach into the note from above.



Scoop/Lift

An approach into the note from below. A bend approach is a scoop, a smooth approach is a lift.



The following jazz articulations can be shown after notes:

Doit

A rise in pitch after the note.



Fall

A lowering of pitch after the note.



Additionally, there are other jazz ornaments commonly used by brass instruments that you can add to notes in the same ways as inputting jazz articulations.

If your sound library includes samples for jazz articulations, Dorico Elements loads the required samples using playback techniques.

RELATED LINKS

Input methods for ornaments, arpeggio signs, glissando lines, and jazz articulations on page 332 Playback techniques on page 770

Glissando lines on page 1096

Arpeggio signs on page 1089

Fingering slides on page 967

Lines on page 1174

Jazz ornaments

Jazz ornaments are notations that are commonly used in jazz music and by brass instruments, such as flips and smears, that are positioned outside of the staff rather than beside noteheads like jazz articulations.

Jazz ornaments behave more like other ornaments than jazz articulations, in that they are items separate from notes, and so can be selected independently of notes in Write mode and added to notes in addition to jazz articulations. Because they are so commonly used alongside jazz articulations, in Dorico Elements they are also included in the **Jazz** section of the Ornaments panel.

You can input jazz ornaments in the same ways as inputting other ornaments rather than jazz articulations.

The following ornaments are considered jazz ornaments in Dorico Elements:

Flip						
\sim						
Smear						
~						
Jazz turn/Shake						
Jazz turii/Silake						
₩						
Bend						

NOTE

Jazz articulations are not currently reflected in playback.

RELATED LINKS

Ornaments on page 1071

Input methods for ornaments, arpeggio signs, glissando lines, and jazz articulations on page 332

Positions of jazz articulations

In Dorico Elements, jazz articulations are automatically positioned relative to the noteheads to which they apply, with any other notations on those notes, such as rhythm dots, accidentals, and back notes, automatically considered.

When multiple notes in a chord have a jazz articulation, Dorico Elements considers the best way to align them based on how close to the noteheads they can be positioned and how many jazz articulations to show in total. Dorico Elements allows a maximum of one jazz articulation per space, meaning fewer jazz articulations than noteheads are sometimes shown on cluster chords.

In Engrave mode, each smooth jazz articulation has two square handles, one at the start and one at the end. You can move these handles to adjust the graphical position, length, and angle of jazz articulations. You can also move whole individual jazz articulations graphically.



Handles on a smooth doit in Engrave mode

NOTE

- You cannot move jazz articulations rhythmically. If you want to change the notes to which jazz articulations apply, you must delete them from their original notes and input new jazz articulations on the new notes.
- The following properties in the **Jazz Articulations** group of the Properties panel are activated automatically when you move the corresponding smooth jazz articulation handle:
 - **In far offset** moves the start handle of jazz articulations shown before notes; that is, the handle further from the note. **X** moves them horizontally, **Y** moves them vertically.
 - **In offset** moves the end handle of jazz articulations shown before notes; that is, the handle closer to the note. **X** moves them horizontally, **Y** moves them vertically.
 - **Out offset** moves the start handle of jazz articulations shown after notes; that is, the handle closer to the note. **X** moves them horizontally, **Y** moves them vertically.
 - Out far offset moves the end handle of jazz articulations shown after notes; that is, the handle further from the note. X moves them horizontally, Y moves them vertically.

RELATED LINKS

Input methods for ornaments, arpeggio signs, glissando lines, and jazz articulations on page 332 Moving items graphically on page 501 Deleting jazz articulations on page 1129

Changing the type/length of existing jazz articulations

You can change the type and length of jazz articulations after you have input them; for example, if you want to change a smooth doit to a long bend doit. You can specify the type/length of jazz articulations when using the Ornaments panel but not when using the ornaments popover.

PROCEDURE

1. In Write mode, select the notes whose jazz articulation you want to change.

2. In the Ornaments panel, click the jazz articulation you want in the Jazz section.

RESULT

The jazz articulation shown on the selected notes is changed.

TIP

You can also change the type/duration of jazz articulations using the **In** and **Out** properties in the **Jazz Articulations** group of the Properties panel.

EXAMPLE



Changing the line style of smooth jazz articulations

You can change the line style of smooth jazz articulations individually. For example, if you want selected smooth falls to have straight lines instead of wavy lines.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing 3** is selected in the Engrave toolbox.

PROCEDURE

1. Select the notes with smooth jazz articulations whose line style you want to change. You can do this in Write mode and Engrave mode.

NOTE

You must select notes with smooth jazz articulations on the same side; for example, only select notes with smooth jazz articulations before them.

- 2. In the Properties panel, select one of the following line styles from the **In line style** menu and/or **Out line style** menu in the **Jazz Articulations** group:
 - Straight
 - Wavy
 - Dashed

NOTE

In line style is available when you select notes with smooth jazz articulations before them, and **Out line style** is available when you select notes with smooth jazz articulations after them. Both are available when you select notes with smooth jazz articulations on both sides.

RESULT

The line style of the selected smooth jazz articulations is changed.

TIP

You can reset jazz articulations back to their default line style by selecting them and choosing **Edit** > **Reset Appearance**.

EXAMPLE







Doit smooth with straight line

Doit smooth with wavy line

Doit smooth with dashed line

Deleting jazz articulations

You can remove jazz articulations from notes after you have input them. However, because jazz articulations are properties of notes rather than separate items in Dorico Elements, you must select and delete them differently from other items.

PROCEDURE

- 1. In Write mode, select the notes from which you want to remove jazz articulations.
- 2. In the Ornaments panel, click **Remove** in the **Jazz** section.

RESULT

All jazz articulations are removed from the selected notes.

Page numbers

Page numbers are used to give each page a unique number, and indicate its position relative to other pages. Just as in newspapers and books, musical scores and parts use page numbers to make sure the music stays in the correct order.

Because you can have multiple flows in a single project in Dorico Elements, you do not need to change page numbers manually in most cases. However, if you have separate files that together make up a single piece, page number changes are necessary to make sure the page numbers continue seamlessly from movement to movement.

In such cases, you can change the default page numbers. For example, if you want to have four pages of front matter before the first page of music in the score, but you want the first page of music in the score to be shown as page 1, you can insert a page number change on the first page of music.

Page numbers are layout-specific in Dorico Elements, meaning you can change the page numbers in each layout independently. For example, you can change the page numbers in the score but show the default page numbers in the parts.

Page numbers in Dorico Elements use a token to ensure the number is correct.

NOTE

You must have a text frame containing the page number token on every page on which you want page numbers to be shown.

Default page templates contain text frames with page number tokens. You can change the position of page number text frames in the page template editor, which changes the position of page numbers on all pages that use that page template. You can also move page number text frames on individual pages.

You can also change the type of number used to show page numbers in each layout. For example, if you want the front matter to use Roman numerals but the music pages to use Arabic numerals, you can change the type of number together with the page number.

RELATED LINKS

Types of page templates on page 631 Frames on page 636 Tokens on page 638

Page number paragraph styles

The paragraph style for page numbers controls all aspects of their appearance, including their font, size, and horizontal alignment. You can edit the existing page number paragraph style, and create additional page number paragraph styles, in the **Paragraph Styles** dialog.

• You can open the Paragraph Styles dialog by choosing Library > Paragraph Styles.

Dorico Elements offers a single paragraph style for page numbers by default, but you can create other paragraph styles for page numbers. For example, if you want page numbers to appear bold and centered at the tops of pages in full score layouts but appear italic and on the outer

edges of pages in part layouts, you can create a new paragraph style based on the existing **Page Number** paragraph style, but rename it and change the settings.

RELATED LINKS

Paragraph Styles dialog on page 739

Changing the page number numeral style

Page numbers can appear as Arabic or Roman numerals. You can change the numeral style of page numbers in each layout independently.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- 2. In the Layouts list, select the layouts whose page number numeral style you want to change. By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, Shift -clicking adjacent layouts, and Ctrl/Cmd -clicking individual layouts.
- **3.** In the category list, click **Page Setup**.
- 4. In the Page Numbers section, select one of the following options from the Use menu:
 - Number
 - Roman numeral
- 5. Click Apply, then Close.

RESULT

The page number numeral style is changed in the selected layouts.

Hiding/Showing page numbers

You can hide/show page numbers in each layout independently, including specifying whether to hide/show a page number on the first page. For example, you can show page numbers on every page in the score but hide page numbers on the first page in the parts.

NOTE

To show page numbers, there must be a text frame containing the page number token on the page. The **First** page templates in the default page template sets do not contain text frames containing page number tokens, so you must add these if you want to show page numbers on pages that use these page templates.

PROCEDURE

- **1.** Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
- 2. In the Layouts list, select the layouts in which you want to hide/show page numbers. By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, Shift -clicking adjacent layouts, and Ctrl/Cmd -clicking individual layouts.
- 3. In the category list, click Page Setup.

- 4. In the Page Numbers section, select one of the following options from the Visibility menu:
 - Always shown
 - Always hidden
 - Not on first page
- 5. Click Apply, then Close.

RESULT

- If you select **Always shown**, page numbers are shown on all pages that have a text frame containing the page number token in the selected layouts.
- If you select **Always hidden**, page numbers are hidden on all pages in the selected layouts, including on pages that have a text frame containing the page number token.
- If you select **Not on first page**, page numbers are hidden on the first page in the selected layouts, but shown on all other pages that have a text frame containing the page number token.

NOTE

Your per-layout setting for whether page numbers are hidden/shown above flow headings affects whether page numbers are shown on pages where they are higher on the page than flow headings.

RELATED LINKS

Types of page templates on page 631
Tokens on page 638
Flow headings on page 634
Hiding/Showing information above flow headings on page 596

Hiding/Showing guide page numbers

You can hide/show guide page numbers at the top of every page in page view; for example, to make it easier to check the page number of pages that use the **First** page template. Guide page numbers are not printed.

PROCEDURE

Choose View > Page Numbers.

RELATED LINKS

Switching to galley/page view on page 49 Hiding/Showing guide bar numbers on page 811

Harp pedaling

Harp pedaling is a broad term that covers the specific requirements for notating music for harps. This primarily involves harp pedal diagrams, which are often necessary due to the way in which modern concert harps change their tuning.



A passage with a full harp pedal diagram at the start and two subsequent partial pedal changes

Harps have seven strings in each octave, one for each diatonic pitch C-B, unlike pianos, which have twelve keys in each octave, one for each half-step (semitone) degree between C-B. Therefore, harps have a mechanical action to change their tuning that includes seven pedals, with each pedal controlling the pitch of the corresponding note in all octaves. These pedals are organized into two groups, one for each foot: three pedals for the left foot and four pedals for the right foot.

Each harp pedal has three possible positions:

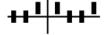
- 1. Flat or highest position: lowers the pitch of the corresponding note by a half-step
- 2. Natural or middle position
- **3.** Sharp or lowest position: raises the pitch of the corresponding note by a half-step

NOTE

The lowest two harp strings, C and D, are not affected by the C and D pedal positions.

There are different ways to notate the pedal settings required for a piece of music or a passage within a piece. In Dorico Elements, you can show harp pedaling in the following ways:

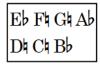
Diagram



Indicates the physical positions of the seven pedals. The vertical line represents the split between left-foot and right-foot pedals and the horizontal line represents the natural position.

- Pedals below the horizontal line indicate sharpened notes.
- Pedals above the horizontal line indicate flattened notes.

Note Names



Indicates the required accidentals for the seven diatonic pitches, arranged in two lines. Right-foot pedals are shown on top and left-foot pedals are shown below.

Any pitches that you input that do not fit with the current harp pedal diagram are considered out of range, and appear red when colors are shown for notes that are out of range. If you do not input any harp pedaling, Dorico Elements assumes all harp pedals are in their natural setting, as they would be for C major.

In Dorico Elements, you can input harp pedal diagrams using the playing techniques popover and you can automatically generate accurate harp pedal diagrams based on an entire flow or a specific passage of music. However, you can only input and show harp pedal diagrams on staves belonging to harp instruments; if you copy material from harp staves to other instruments, harp pedaling is automatically removed.

By default, harp pedaling is hidden in full score/custom score layouts and shown in part layouts. In layouts where harp pedaling is hidden, harp pedal diagrams are indicated by signposts. You can hide/show harp pedaling in each layout independently and hide individual harp pedal diagrams in layouts where harp pedaling is shown. You can also determine when to show partial harp pedaling, such as when only a single pedal must be changed at one time.

Harp pedal diagrams in Dorico Elements affect the pitches played back in glissando lines.

RELATED LINKS

Input methods for playing techniques, pedal lines, string indicators, and harp pedal diagrams on page 358

Calculating harp pedal diagrams based on existing music on page 371 Hiding/Showing colors for notes out of range on page 1044 Glissando lines in playback on page 1100

Changing the appearance of harp pedal diagrams

Harp pedaling can be shown as a diagram or using note names. You can change the appearance of harp pedal diagrams individually. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- Harp pedaling is shown in the current layout.
- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing !** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** Select the harp pedal diagrams whose appearance you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Appearance** in the **Harp Pedals** group.
- **3.** Choose one of the following options:

- Diagram
- Note Names

RESULT

The appearance of the selected harp pedal diagrams is changed in the current layout. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

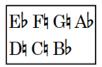
TIP

You can change the default appearance of harp pedaling in each layout independently in **Layout Options** > **Players** > **Harp Pedaling**.

EXAMPLE



Harp pedaling shown as a diagram



Harp pedaling shown using note names

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490 Partial harp pedaling on page 1139 Layout Options dialog on page 728

Hiding/Showing harp pedaling in layouts

You can input and calculate harp pedaling in any layout, but by default harp pedaling is not shown in full score layouts, as they are usually only useful for the performer. You can hide/show harp pedaling in each layout independently.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- 2. In the Layouts list, select the layouts in which you want to hide/show harp pedaling. By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, Shift-clicking adjacent layouts, and Ctrl/Cmd -clicking individual layouts.
- **3.** In the category list, click **Players**.
- **4.** In the **Harp Pedaling** section, activate/deactivate **Show harp pedaling**.
- 5. Click Apply, then Close.

RESULT

Harp pedaling is shown in the selected layouts when the checkbox is activated, and hidden when the checkbox is deactivated.

In layouts where harp pedaling is hidden, harp pedal diagrams are indicated by signposts.

NOTE

- You can hide individual harp pedal diagrams in layouts where harp pedaling is shown, but you cannot show individual harp pedal diagrams in layouts where harp pedaling is hidden.
- You can hide/show harp pedaling signposts by choosing View > Signposts > Harp Pedals.

Hiding/Showing harp pedal diagrams individually

You can hide/show individual harp pedal diagrams in layouts in which harp pedaling is shown. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- Harp pedaling is shown in the current layout.
- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** 3 is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- 1. In the music area, open the layout in which you want to hide/show individual harp pedal diagrams. You can do this in Write mode and Engrave mode.
- **2.** Select the harp pedal diagrams you want to hide, or the signposts of harp pedal diagrams you want to show.
- **3.** In the Properties panel, activate/deactivate **Hide** in the **Harp Pedals** group.

RESULT

The selected harp pedal diagrams are hidden when **Hide** is activated, and shown when it is deactivated. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

Signposts are shown at the position of each hidden harp pedal diagram. However, signposts are not printed by default.

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490 Signposts on page 438 Annotations on page 581

Hiding/Showing borders on harp pedal diagrams

You can hide/show borders on individual note name harp pedal diagrams. For example, on systems with very tight vertical spacing, hiding borders on harp pedal diagrams can give you a little extra space.

NOTE

These steps only apply to harp pedal diagrams using note names.

PREREQUISITE

- Harp pedaling is shown in the current layout.
- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, Graphic Editing I is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the note name harp pedal diagrams on which you want to hide/show borders. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Border** in the **Harp Pedals** group.
- 3. Activate/Deactivate the corresponding checkbox.

RESULT

Borders are shown on the selected note name harp pedal diagrams when the checkbox is activated, and hidden when the checkbox is deactivated.

EXAMPLE





Note name harp pedal diagram with border hidden

Note name harp pedal diagram with border shown

Changing the thickness of harp pedal diagram borders

You can change the thickness of borders on individual note name harp pedal diagrams.

NOTE

These steps only apply to harp pedal diagrams using note names.

PREREQUISITE

• Harp pedaling is shown in the current layout.

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing !** is selected in the Engrave toolbox.

PROCEDURE

- 1. In Engrave mode, select the note name harp pedal diagrams whose border thickness you want to change.
- 2. In the Properties panel, activate **Border thickness** in the **Harp Pedals** group.
- 3. Change the value in the value field.

RESULT

The thickness of borders on the selected harp pedal diagrams is changed.

RELATED LINKS

Properties panel on page 646 Paragraph Styles dialog on page 739

Changing the padding around harp pedal diagrams

You can change the padding around harp pedal diagrams individually, and for each edge independently. This affects the distance between harp pedal diagrams and erased backgrounds and borders. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- Harp pedaling is shown in the current layout.
- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing]** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- 1. In Engrave mode, select the harp pedal diagrams whose padding you want to change.
- **2.** In the Properties panel, activate the following properties, individually or together, in the **Harp Pedals** group:
 - Left padding
 - Right padding
 - Top padding
 - Bottom padding
- 3. Change the values in the value fields.

RESULT

The padding around the selected harp pedal diagrams is changed. Increasing the values increases the padding, decreasing the values decreases the padding. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490

Positions of harp pedal diagrams

By default, harp pedal diagrams are centered vertically between the two staves usually shown for harps.

You can move harp pedal diagrams to different rhythmic positions in Write mode. They are automatically positioned to avoid collisions.

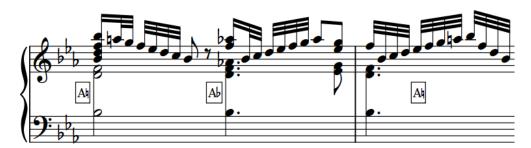
You can move harp pedal diagrams graphically in Engrave mode, but this does not change the rhythmic positions to which they are attached.

RELATED LINKS

Moving notes/items rhythmically on page 448 Moving items graphically on page 501

Partial harp pedaling

Partial harp pedal diagrams only show the notes whose pedal setting must change at that position, rather than showing the required settings for all pedals. This can make those changes immediately clear to the performer, as they have fewer pedals to read.



Partial pedal diagrams for a sequence containing several quick pedal changes

You can allow partial harp pedaling for individual harp pedal diagrams and you can set a maximum threshold of pedal changes at a single position, above which all harp pedal diagrams must show all pedals. This is because performers are used to the pattern of note names in complete harp pedal diagrams, and if there are many changes in a partial harp pedal diagram, this can be harder to read than a complete one.

By default, Dorico Elements shows notes in partial harp pedal diagrams on two lines with right-foot pedals on top and left-foot pedals below.

NOTE

Only harp pedal diagrams using note names can be shown as partial.

Allowing/Disallowing partial harp pedaling

You can allow/disallow partial harp pedaling for individual note name harp pedal diagrams. The default setting in Dorico Elements is to allow partial harp pedaling for up to three pedal changes. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

NOTE

- These steps only apply to harp pedal diagrams using note names.
- Harp pedal diagrams positioned at the very beginning of a flow can only appear as full harp pedal diagrams.

PREREQUISITE

- Harp pedaling is shown in the current layout.
- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing 1** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** Select the note name harp pedal diagrams for which you want to allow/disallow partial harp pedaling. You can do this in Write mode and Engrave mode.
- **2.** In the Properties panel, activate **Partial pedaling** in the **Harp Pedals** group.
- **3.** Activate/Deactivate the corresponding checkbox.

RESULT

Partial harp pedaling is allowed for the selected note name harp pedal diagrams when the checkbox is activated, and disallowed when the checkbox is deactivated. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

EXAMPLE



Harp pedal diagram showing all pedals



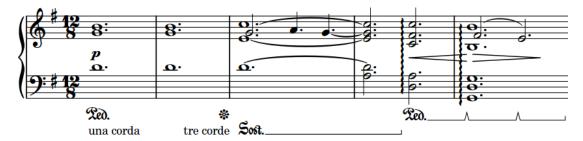
Partial harp pedal diagram

RELATED LINKS

Hiding/Showing harp pedaling in layouts on page 1135 Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490

Pedal lines

Pedal lines indicate to performers which piano pedals to use, and can also give performance instructions, such as how far down to depress the pedals and when to lift the pedal to clear the resonance.



Most pianos have either two or three pedals. These pedals are:

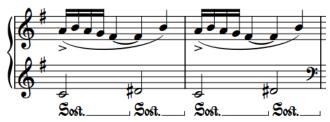
Sustain pedal

The sustain pedal controls the dampers on the piano strings, which is why it is also known as the "damper pedal". It is also the most commonly used pedal. Depressing the sustain pedal removes the dampers, allowing the strings to resonate longer. Sustain pedals are usually on the right.



Sostenuto pedal

The *sostenuto* pedal only allows the strings of the notes currently depressed on the keyboard to resonate. It is also known as the "middle pedal" as it is usually in the middle of the other pedals.



Una corda pedal

The *una corda* pedal shifts the action inside the piano so that the hammers hit fewer strings than normal. Historically, this caused hammers only to hit one string, not the usual three, which is where the name comes from. Because this reduces the volume and impact of the sound, it is also known as the "soft pedal".



Dorico Elements offers comprehensive notational and playback support for piano pedal lines. You can create pedaling for the sustain, *sostenuto*, and *una corda* pedals, with support for modern sustain pedaling techniques, including changing the pedal level over the course of a single pedal instruction.

You can change the appearance of pedal lines, including changing their start sign and continuation type. For example, if you want to show some pedal lines with a continuation line and some only with a sign at the end.

In Dorico Elements, pedal lines are considered playing techniques because they alter the sound produced by the instrument. Therefore, pedal lines are included in the Playing Techniques panel in Write mode and you can input them using the playing techniques popover. However, pedal lines have additional, unique requirements that do not apply to other playing techniques, such as retakes, pedal level changes, start signs, end signs, and continuation lines.

RELATED LINKS

Input methods for playing techniques, pedal lines, string indicators, and harp pedal diagrams on page 358

Pedal line start signs, hooks, and continuation lines on page 1151

Text pedal line signs on page 1156

Pedal lines in playback on page 1158

Playing technique continuation lines on page 1166

Lines on page 1174

MIDI Import Options dialog on page 84

Sustain pedal retakes and pedal level changes

Pedal retakes indicate where a player should lift the sustain pedal, which dampens the piano's strings and clears the resonance, before depressing the pedal again. Pedal level changes indicate a change to how far the pedal is depressed.

Dorico Elements provides clear representations of pedal retakes and level changes for pedal lines with the line continuation type.

NOTE

- In Dorico Elements, you cannot input pedal level changes. However, pedal level changes are shown if you import or open a project that contains them, and you can remove them in the same way as removing retakes.
- You can only add pedal retakes to sustain pedal lines.

EXAMPLE



- 1 Ped. glyph
- 2 Retake
- 3 One quarter depressed
- 4 Half depressed
- 5 Three quarters depressed

- 6 Fully depressed
- 7 Line end hook

RELATED LINKS

Changing the pedal line continuation type on page 1153

Input methods for playing techniques, pedal lines, string indicators, and harp pedal diagrams on page 358

Removing retakes and pedal level changes on page 1147

Sustain pedal lines in Engrave mode

When you select sustain pedal lines in Engrave mode, handles appear at the start/end of each pedal line, and on any retakes or pedal level changes on the line. These handles allow you to move each part of the pedal line independently, and to change the pedal levels at the start, end, and at each retake or pedal level change.



A sustain pedal with a retake in Engrave mode

There are two handles for the start of the pedal line, three for retakes and pedal level changes, and three for the end of the pedal line.

NOTE

- Pedal levels cannot be lower than **0** or higher than **1**, as shown in properties in either the **Pedal Lines** group or the **Pedal Line Retakes** group of the Properties panel.
 - 1 is fully depressed.
 - **0** is not depressed.
- Sostenuto and una corda pedal lines only have a single handle at their start/end, which allows you to move their start/end positions graphically, but only horizontally.

Start of sustain pedal lines

There are two handles at the start of pedal lines.



- The left handle moves the start point of the pedal line. You can move this handle to the right/left.
- The right handle changes the start pedal level of the pedal line. You can move this handle upwards/downwards. This changes the angle of the pedal continuation line in relation to the next retake or pedal level change, or the end of the pedal line.

Pedal level changes and retakes



- The left handle changes the pedal level before the retake or pedal level change. You can move this handle upwards/downwards.
- The right handle changes the pedal level after the retake or pedal level change. You can move this handle upwards/downwards.
- The bottom handle corresponds to the position of the retake or pedal level change. You can move this handle to the right/left.

End of sustain pedal lines



- The top handle changes the hook length. You can move this handle upwards/downwards.
- The right handle changes the pedal level at the end of the pedal line. You can move this handle upwards/downwards.
- The bottom handle moves the end point of the pedal line. You can move this handle to the right/left.

RELATED LINKS

Pedal line start signs, hooks, and continuation lines on page 1151 Moving items graphically on page 501

Changing the type of pedal line retakes

You can change existing retakes on sustain pedal lines to pedal level changes and vice versa.

For example, if you do not want the pedal to be released completely between the old and new levels, change the type to **Change Level** instead of **Retake**.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing 3** is selected in the Engrave toolbox.

PROCEDURE

- **1.** In Engrave mode, select the retake or pedal level change whose type you want to change.
- 2. In the Properties panel, activate **Retake type** in the **Pedal Line Retakes** group.
- **3.** Choose the type you want from the following options:
 - Retake
 - Change Level

RESULT

The type of pedal line retake is changed.

NOTE

The appearance of the new type of pedal line retake depends on the pedal levels already set on each side. For example, a retake notch is only shown on one side of the retake if the pedal level on the other side is set to **0**.

Changing the global level for pedal lines

You can change the global level for individual sustain pedal lines and show the level as a prefix before the pedal line start sign, such as "1/2 Ped.". For example, to indicate a pianist should only half depress the sustain pedal throughout a piece.

By default, the global level of sustain pedal lines is fully depressed.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing]** is selected in the Engrave toolbox.

PROCEDURE

- 1. In Engrave mode, select the pedal lines whose global level you want to change.
- 2. In the Properties panel, activate Global level in the Pedal Lines group.
- **3.** Select one of the following options from the menu:
 - 1/8
 - 1/4
 - 1/2
 - 3/4

RESULT

The global level for the selected pedal lines is changed and the selected level appears as a prefix before their start signs.

NOTE

Level prefixes do not appear for pedal lines with hook start signs.

EXAMPLE



Pedal line with default fully depressed pedal level



Pedal line with half depressed pedal level

RELATED LINKS

Properties panel on page 646

Engrave toolbox on page 490

Changing the start sign appearance of pedal lines on page 1151

Changing pedal line levels

You can change the level at the start and end of individual sustain pedal lines, and at each retake or pedal level change. For example, if you want to specify how far to depress the pedal at specific rhythmic positions.

NOTE

You can only change the level of pedal lines with the line continuation type.

PREREQUISITE

Graphic Editing ? is selected in the Engrave toolbox.

PROCEDURE

- 1. In Engrave mode, select any of the following handles on each pedal line whose pedal line levels you want to change:
 - To change the start pedal level, select the right handles on start signs.
 - To change the pedal level immediately before retakes/level changes, select the left handle of retakes/level changes.
 - To change the pedal level immediately after retakes/level changes, select the right handle of retakes/level changes.
 - To change the end pedal level, select the right handles on end hooks.
- **2.** Move the handles in any of the following ways:
 - To move them upwards, press Alt/Opt-Up Arrow.
 - To move them downwards, press Alt/Opt-Down Arrow.
 - To snap the level to 0 (not depressed), press Ctrl/Cmd-Alt/Opt-Up Arrow.
 - To snap the level to 1 (fully depressed), press Ctrl/Cmd-Alt/Opt-Down Arrow.
 - Click and drag the handles upwards/downwards to the level you want.

RESULT

The pedal levels at the selected positions on the corresponding pedal lines are changed.

TIP

The following properties in the **Pedal Lines** group of the Properties panel are activated when you change the corresponding pedal line level:

- Start level
- Start level at retake
- End level at retake
- End level

You can also use these properties to change the pedal line level at the corresponding positions by changing the values in the value fields. For example, **1** is fully depressed and **0** is not depressed.

Deactivating the properties resets the selected pedal lines to their default pedal line levels.

RELATED LINKS

Properties panel on page 646 Engrave toolbox on page 490

Changing the pedal line continuation type on page 1153

Removing retakes and pedal level changes

You can remove pedal retakes and level changes without deleting the sustain pedal line or changing its rhythmic position.

PROCEDURE

- **1.** In Write mode, select an item on each staff and at each rhythmic position where you want to remove retakes or pedal level changes.
- 2. Remove the retakes or pedal level changes in any of the following ways:
 - Open the playing techniques popover, enter **nonotch** into the popover, then press **Return**.

NOTE

nonotch must be spelled as one word, without a space.

Choose Edit > Notations > Pedal Lines > Remove Retake. You can also choose this
option from the context menu.

RESULT

The retakes or pedal level changes at each selected rhythmic position on each selected staff are removed. The corresponding sustain pedal lines return to their previous levels as set by either the start of the pedal line, or the retake or pedal level change immediately preceding the ones you removed.

RELATED LINKS

Playing techniques popover on page 358 Merging pedal lines on page 1150

Positions of pedal lines

The default placement of pedal lines is below the bottom staff, even if there are only notes in the upper staff for the right hand. They are placed outside all other notations, including octave lines, slurs, and articulations.

If one pedal is used, it is placed as close to the bottom of the staff as possible, while remaining outside of all other notations.

If multiple pedals are used simultaneously, they are organized below the bottom of the staff as follows:

- 1. Sustain pedal: closest to the staff
- 2. Sostenuto pedal: below the sustain pedal line
- 3. Una corda pedal: furthest from the staff

The beginning of the glyph/text that indicates the start position of pedal lines aligns with the note to which it applies. If you are using a line end hook to indicate the end of pedal lines, the hook aligns with the note or rhythmic position to which it applies.

You can move pedal lines to different rhythmic positions in Write mode. They are automatically positioned to avoid collisions.

NOTE

You cannot move retakes rhythmically. You must remove them and input a new retake at the position you want.

You can move pedal lines graphically in Engrave mode. However, this does not change the rhythmic positions to which they are attached. You can move multiple pedal lines together, but only upwards/downwards. Similarly, you can move handles on multiple pedal lines together, but only to the right/left.

RELATED LINKS

Text pedal line signs on page 1156

Pedal line start signs, hooks, and continuation lines on page 1151

Sustain pedal retakes and pedal level changes on page 1142

Input methods for playing techniques, pedal lines, string indicators, and harp pedal diagrams on page 358

Moving notes/items rhythmically on page 448

Moving items graphically on page 501

Changing the position of pedal lines relative to grace notes

You can change the start/end positions of individual pedal lines relative to grace notes.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the pedal lines whose position relative to grace notes you want to change. You can do this in Write mode and Engrave mode.
- In the Properties panel, activate any of the following properties in the Pedal Lines group:
 - Starts before grace notes
 - Ends before grace notes
- **3.** Activate/Deactivate the corresponding checkboxes.

RESULT

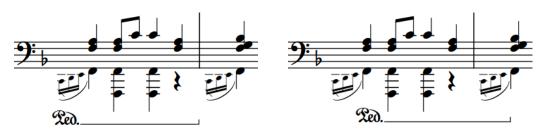
When the checkboxes are activated, the corresponding parts of the selected pedal lines are positioned before grace notes.

When the checkboxes are deactivated, the corresponding parts of the selected pedal lines are positioned after grace notes.

TIP

You can adjust the precise position of pedal lines in further detail in Engrave mode.

EXAMPLE



Pedal line starting/ending before grace notes

Pedal line starting/ending after grace notes

RELATED LINKS

Properties panel on page 646 Engrave toolbox on page 490

Splitting pedal lines

You can split sustain pedal lines at any rhythmic position with an existing item along their length into two separate pedal lines.

NOTE

These steps only apply to sustain pedal lines.

PREREQUISITE

If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.

PROCEDURE

1. Select an item on the staff and at the rhythmic position where you want to split the sustain pedal line. You can do this in Write mode and Engrave mode.

NOTE

You can only split pedal lines on one staff at a time.

2. Choose **Edit** > **Notations** > **Pedal Lines** > **Split Pedal Line**. You can also choose this option from the context menu.

RESULT

The pedal line on the selected staff is split at the selected rhythmic position.

EXAMPLE





A single pedal line

The pedal line after being split into two

AFTER COMPLETING THIS TASK

You can move, lengthen/shorten, and edit both pedal lines independently.

RELATED LINKS

Engrave toolbox on page 490

Selecting/Deselecting notes and items individually on page 411

Lengthening/Shortening items on page 419

Moving notes/items rhythmically on page 448

Changing the pedal line continuation type on page 1153

Input methods for playing techniques, pedal lines, string indicators, and harp pedal diagrams on page 358

Merging pedal lines

You can merge existing sustain pedal lines together; for example, if you want to fill in a gap between two sustain pedal lines.

NOTE

These steps only apply to sustain pedal lines.

PREREQUISITE

If you are in Engrave mode, **Graphic Editing** 3 is selected in the Engrave toolbox.

PROCEDURE

1. Select the sustain pedal lines on the same staff that you want to merge together. You can do this in Write mode and Engrave mode.

NOTE

You can only merge pedal lines on one staff at a time.

2. Choose **Edit** > **Notations** > **Pedal Lines** > **Merge Pedal Lines**. You can also choose this option from the context menu.

RESULT

The selected pedal lines are merged together into a single pedal line.

For sustain pedal lines with line continuation types, retakes are added at the start position of each merged pedal line.

Pedal line start signs, hooks, and continuation lines

Pedal lines normally comprise a start sign, a continuation line, and an end hook. This indicates clearly to performers where to depress each type of pedal, how long to keep it depressed, and where to lift it.



- 1 Start sign
- 2 Continuation line
- 3 End hook

In Dorico Elements, you can change the appearance of each part of pedal lines individually; for example, if you want the start sign of an individual pedal line to show text instead of a glyph.

You can select whole pedal lines in Write mode and change most aspects of their appearance according to the type of pedal line, such as their continuation line or start sign.

For sustain pedals only, you can select each segment of a sustain pedal independently in Engrave mode, and set different properties for each segment. Sustain pedal lines have independent segments on each separate system on which they appear.

RELATED LINKS

Sustain pedal lines in Engrave mode on page 1143

Input methods for playing techniques, pedal lines, string indicators, and harp pedal diagrams on page 358

Changing the start sign appearance of pedal lines

You can change the appearance of the start of pedal lines individually. Pedal line start signs can be shown as variations of the traditional pedal line glyph, other symbols, or text.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.

PROCEDURE

1. Select the pedal lines whose start sign appearance you want to change. You can do this in Write mode and Engrave mode.

NOTE

The pedal lines you select must be the same type; for example, only sustain pedal lines.

- 2. In the Properties panel, activate **Sign appearance** in the **Pedal Lines** group.
- **3.** Select one of the options from the menu.

The options are different according to the type of pedal line selected.

RESULT

The start sign appearance of the selected pedal lines is changed.

TIP

- The end signs of una corda pedal lines automatically match their start signs.
- Deactivating **Sign appearance** returns the selected pedal lines to your default setting for start sign appearance.

EXAMPLE

Sustain pedal lines	Ded.	Ded	\mathfrak{T}	T	Ped.	L
	Ped. Glyph	Ped Glyph	P Glyph	Symbol	Ped. Text	Hook
Sostenuto pedal lines	Sost.	S	Ţ	Sost.	Sostenuto	
	Sost. Glyph	S Glyph	Symbol	Sost. text	Sostenuto text	
Una corda pedal lines	J	u.c.	una corda			
	Symbol	u. c.	una corda			

AFTER COMPLETING THIS TASK

If you selected a text sign appearance, you can edit the text shown.

RELATED LINKS

Properties panel on page 646 Engrave toolbox on page 490 Editing pedal line start text on page 1156

Changing the type of hook at the start/end of pedal lines

You can change the type of hook shown at the start/end of pedal lines individually.

NOTE

You can only change the start hook type of pedal lines that have a hook as their start sign, and you can only change the end hook type of pedal lines that have a continuation line.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.

PROCEDURE

1. Select the pedal lines whose hook type you want to change. You can do this in Write mode and Engrave mode.

- **2.** In the Properties panel, activate the following properties, individually or together, in the **Pedal Lines** group:
 - Line start hook
 - Line end hook
- **3.** Select one of the following options from each menu:
 - No Hook
 - Vertical Hook
 - Slant Hook
 - Inverse Hook

RESULT

The hook type at the start/end of the selected pedal lines is changed.

EXAMPLE

Led.___

Xed.__

Ded.___

Leo.___

No Hook line end

Vertical Hook line end

Slant Hook line end

Inverse Hook line end

Changing the pedal line continuation type

You can change the continuation type used for individual pedal lines. For example, if you want some pedal lines to show a dashed line and a sign at the end, but others to show a line and end hook.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing 1** is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the pedal lines whose continuation type you want to change. You can do this in Write mode and Engrave mode.
- **2.** In the Properties panel, activate **Continuation type** in the **Pedal Lines** group.
- **3.** Select one of the following continuation types from the menu:
 - Line
 - Sign at End
 - Sign at End and Dashed Line
 - None

RESULT

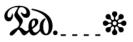
The continuation type of the selected pedal lines is changed.

EXAMPLE











Line

Sign at End

Sign at End and Dashed Line

lone

RELATED LINKS

Properties panel on page 646 Engrave toolbox on page 490

Sustain pedal retakes and pedal level changes on page 1142 Editing una corda pedal line restorative text on page 1158

Lengthening/Shortening gaps and dashes in pedal continuation lines

You can change the length of dashes and the gaps between dashes in individual dashed pedal continuation lines. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

NOTE

These steps only apply to pedal lines with dashed continuation lines.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing ?** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- 1. In Engrave mode, select the pedal lines whose dashes you want to change.
- **2.** In the Properties panel, activate the following properties, individually or together, in the **Pedal Lines** group:
 - Dash length
 - Dash gap length
- **3.** Change the values in the value fields.

RESULT

Increasing **Dash length** makes dashes in pedal continuation lines longer, decreasing the value makes dashes shorter.

Increasing **Dash gap length** makes gaps between dashes in pedal continuation lines longer, decreasing the value makes gaps shorter.

If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

RELATED LINKS

Properties panel on page 646

Changing the property scope on page 648

Changing the line width of pedal lines

You can change the thickness of continuation lines individually. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing !** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** In Engrave mode, select the pedal lines whose continuation line thickness you want to change.
- **2.** In the Properties panel, activate **Line width** in the **Pedal Lines** group. The value resets to **0** automatically when you first activate the property.
- 3. Change the value in the value field.

RESULT

Increasing **Line width** makes pedal continuation lines thicker, decreasing the value makes pedal continuation lines thinner. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

Parenthesizing pedal line continuation signs

You can show individual pedal line continuation signs with/without parentheses. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

Pedal line continuation signs are shown by default at the start of new systems when pedal lines continue across system/frame breaks.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing 3** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** Select the pedal lines whose continuation sign appearance you want to change. You can do this in Write mode and Engrave mode.
- **2.** In the Properties panel, activate **Show continuation sign in parentheses** in the **Pedal Lines** group.
- **3.** Activate/Deactivate the corresponding checkbox.

RESULT

Continuation signs are shown with parentheses when the checkbox is activated, and without parentheses when the checkbox is deactivated. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

Text pedal line signs

All types of pedal lines can have text as their start signs, instead of glyphs or hooks. You can override the text shown at the start of pedal lines that have text start signs, you can change the continuation text shown at the start of new systems, and you can override the restorative text shown at the end of *una corda* pedal lines.

Pedal lines that use a text indication rather than a symbol

For pedal lines such as *una corda* or sustain that have text for their start sign, such as **Ped. Text**, rather than the more ornate symbol, you can override the text shown at the start of the pedal line and replace it with your preferred performance direction.

Continuation sign/text

When pedal lines continue onto subsequent systems, a continuation sign/text is shown in parentheses by default. If the pedal line is using text for their start sign, such as **Ped. Text**, rather than a symbol, you can change the text shown at the start of a new system and replace it with your preferred performance direction.

Una corda pedal lines

The equivalent to the final pedal lift for the *una corda* pedal marking is the indication to return to *tre corde*. You can override the *tre corde* text shown at the end of the pedal line and replace it with your preferred performance direction.

RELATED LINKS

Changing the start sign appearance of pedal lines on page 1151 Input methods for playing techniques, pedal lines, string indicators, and harp pedal diagrams on page 358

Editing pedal line start text

You can change the text shown at the start of individual pedal lines that use text as their start sign.

PREREQUISITE

- The lower zone is shown.
- **Properties =** is selected in the lower zone toolbar.
- If you are in Engrave mode, Graphic Editing 3 is selected in the Engrave toolbox.

PROCEDURE

- 1. Select the pedal lines whose start text you want to edit. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Text** in the **Pedal Lines** group.
- 3. Enter the text you want into the value field.

4. Press Return.

RESULT

The text shown at the start of the selected pedal lines is changed.

Deactivating **Text** restores the default start text for the selected pedal lines.

NOTE

Deactivating properties permanently deletes any custom text entered.

RELATED LINKS

Properties panel on page 646 Engrave toolbox on page 490

Editing pedal line continuation text

You can change the text shown at the start of subsequent systems when pedal lines continue across system/frame breaks.

NOTE

These steps only apply to pedal lines that use text as their start sign.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** Is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the pedal lines whose continuation text you want to edit. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Continuation text** in the **Pedal Lines** group.
- **3.** Enter the text you want into the value field.
- 4. Press Return.

RESULT

The continuation text shown at the start of subsequent systems for the selected pedal lines is changed.

Deactivating **Continuation text** restores the default continuation text for the selected pedal lines.

NOTE

Deactivating properties permanently deletes any custom text entered.

Editing una corda pedal line restorative text

The equivalent to the final pedal lift for *una corda* pedal lines is the indication to return to *tre corde*. You can change the *tre corde* text shown at the end of individual *una corda* pedal lines.

NOTE

These steps only apply to *una corda* pedal lines that use text as their start sign.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, Graphic Editing 3 is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the *una corda* pedal lines whose restorative text you want to edit. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Restorative text** in the **Pedal Lines** group.
- 3. Enter the text you want into the value field.
- 4. Press Return.

RESULT

The restorative text shown at the ends of the selected *una corda* pedal lines is changed.

Deactivating **Restorative text** restores the default restorative text for the selected pedal lines.

NOTE

Deactivating properties permanently deletes any custom text entered.

Pedal lines in playback

Pedal lines are automatically played back in Dorico Elements.

The three piano pedals send MIDI controllers as follows:

- Sustain pedal lines send MIDI controller 64 (Sustain).
- Sostenuto pedal lines send MIDI controller 66 (Sostenuto).
- Una corda pedal lines send MIDI controller 67 (Soft Pedal).

Some piano VST instruments, such as Pianoteq and Garritan CFX Concert Grand, support partial depression of the sustain pedal. Consult the manufacturer's documentation for more information.

Playback Options

You can find options for how Dorico Elements plays back pedaling on the **Pedal Lines** page in **Playback Options**.

You can control the following parameters of pedal line playback:

- The length of the initial pedal depression
- The length of a retake in the middle of a pedal line

- The length of the final pedal release
- Whether initial depressions and retakes are played before or after the onset of the notes or chords at their rhythmic positions

RELATED LINKS
Playback Options dialog on page 732
MIDI CC editor on page 684

Pedal lines imported from MusicXML files

Sustain pedal lines can be imported from MusicXML files. MusicXML can only describe the sustain pedal, and it cannot describe changes in pedal depression level.

Playing techniques

The term "playing techniques" covers a wide range of instructions intended to tell performers to modify the sound of the notes they are playing; for example, by changing their embouchure or changing the position of their bow, or by modifying their instrument, such as adding a mute or depressing a pedal.

In Dorico Elements, there are the following types of playing techniques:

Glyph playing techniques

Playing techniques that display symbols, such as up bow ∨ or down bow ☐ markings.

Text playing techniques

Playing techniques that display text, such as pizz. or con sordino.

You can find all available playing techniques in the Playing Techniques panel in Write mode, organized by instrument family. For example, you can find pedal lines in the **Keyboard** section of the Playing Techniques panel.

NOTE

Because pedal lines have additional, unique requirements that do not apply to other playing techniques, such as retakes, start signs, and continuation lines, they are documented separately. Pedal lines also have their own group of the Properties panel that is separate from the **Playing Techniques** group.



Musical phrase with glyph and text playing techniques, including grouped text playing techniques with a continuation line

Playing techniques can change how instruments play back. For example, inputting a *pizz*. playing technique on a violin staff activates a key switch that changes the sound produced by the VST instrument. Dorico Elements uses playback techniques to produce the required sounds in playback for the playing techniques you input, provided your sound library includes the corresponding samples.

Many playing techniques that only appear once in the music nonetheless imply that the playing technique continues. For example, *pizzicato* usually appears once but applies until the next playing technique, such as *arco*. In Dorico Elements, you can show continuation lines after and between playing techniques to convey clearly to performers the notes to which you want them to apply. You can also group multiple playing techniques together.

Playing technique texts use a plain font, neither bold nor italic, so they are not confused with dynamics and expressive text.

TIP

You can change different aspects of the **Playing Technique Font** font style in the **Edit Font Styles** dialog. Pedal lines use a separate font style to other playing techniques.

RELATED LINKS

Input methods for playing techniques, pedal lines, string indicators, and harp pedal diagrams on page 358

Playback techniques on page 770

Pedal lines on page 1141

String indicators on page 974

Edit Font Styles dialog on page 737

Changing the default font family on page 743

MIDI Import Options dialog on page 84

Exporting text on page 101

Adding text to playing techniques

You can add text to playing techniques after they have been input; for example, to clarify the intention of the playing technique. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

NOTE

These steps do not apply to pedal lines.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing 1** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** Select the playing techniques to which you want to add text. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Suffix** in the **Playing Techniques** group.
- 3. Enter the text you want into the value field.
- 4. Press Return.

RESULT

The text you entered is added to the selected playing techniques and appears after them. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

EXAMPLE



Playing techniques without suffixes



Suffixes added to playing techniques

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490 Text pedal line signs on page 1156

Erasing the background of playing techniques

You can erase the background of individual playing techniques; for example, to ensure they remain legible when crossing barlines. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing 3** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- 1. In Engrave mode, select the playing techniques whose backgrounds you want to erase.
- 2. In the Properties panel, activate Erase background in the Playing Techniques group.

RESULT

The backgrounds of the selected playing techniques are erased. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

Deactivating Erase background returns the selected playing techniques to the default nonerased background.

EXAMPLE





Text playing technique with non-erased background
Text playing technique with erased background

AFTER COMPLETING THIS TASK

You can change the padding between playing techniques and each edge of their erased areas.

RELATED LINKS

Erasing the background of text items on page 1338

Changing the erasure padding of text playing techniques

You can change the erasure padding of individual playing techniques, including changing the padding between playing techniques and each edge of their erased areas independently. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing 3** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** In Engrave mode, select the text playing techniques whose erasure padding you want to change.
- **2.** In the Properties panel, activate the **Erasure padding** properties, individually or together, in the **Playing Techniques** group.
 - L changes the padding between playing techniques and their left edge.
 - R changes the padding between playing techniques and their right edge.
 - **T** changes the padding between playing techniques and their top edge.
 - **B** changes the padding between playing techniques and their bottom edge.
- 3. Change the values in the value fields.

RESULT

Increasing the values increases the padding, decreasing the values decreases the padding. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

Hiding/Showing playing techniques

You can hide/show playing techniques individually; for example, if your expression map requires you to input a playing technique to trigger the correct playback but you do not want that technique to appear in the music. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** Select the playing techniques you want to hide, or the signposts of playing techniques you want to show. You can do this in Write mode and Engrave mode.
- **2.** In the Properties panel, activate/deactivate **Hidden** in the **Playing Techniques** group.

RESULT

The selected playing techniques are hidden when **Hidden** is activated, and shown when it is deactivated. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

Signposts are shown at the position of each hidden playing technique. However, signposts are not printed by default.

TIP

- You can hide/show playing technique signposts by choosing View > Signposts > Playing Techniques.
- You can assign a key command for Hide/Show Item on the Key Commands page in Preferences.
- You can input hidden playing techniques when using the playing techniques popover.

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648

Engrave toolbox on page 490

Expression maps on page 744

Signposts on page 438

Key Commands page in the Preferences dialog on page 58

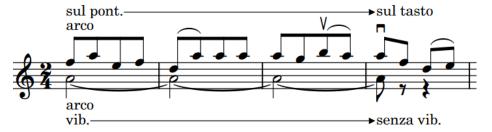
Annotations on page 581

Inputting playing techniques with the popover on page 362

Positions of playing techniques

Playing techniques, both as text and symbols, are placed above the staff by default. On vocal staves, they are placed above the staff and below dynamics. In multiple-voice contexts, playing techniques for the up-stem voices are placed above the staff, and playing techniques for the down-stem voices are automatically placed below the staff.

Glyph playing techniques are center-aligned on noteheads. Text playing techniques are left-aligned with noteheads.



Placement of playing techniques with two voices on the same staff

You can move playing techniques to different rhythmic positions in Write mode. They are automatically positioned to avoid collisions.

You can move playing techniques graphically in Engrave mode, but this does not change the rhythmic positions to which they are attached.

You can change the vertical order of playing techniques, but only within their stacking category.

RELATED LINKS

Playing technique continuation line components on page 1168

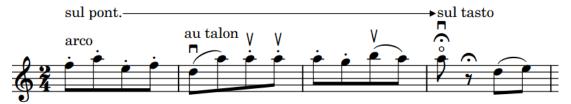
Groups of playing techniques on page 1171 Moving notes/items rhythmically on page 448 Moving items graphically on page 501

Changing the vertical order of playing techniques

You can change the vertical order of playing techniques within each stacking order category when multiple playing techniques exist at the same rhythmic position. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

In Dorico Elements, there are the following vertical stacking categories for playing techniques:

- **1.** Text/Grouped playing techniques, including playing techniques with continuation lines: furthest from the staff
- 2. Bowing marks: inside text/grouped playing techniques by default, but outside fermatas
- 3. Glyph playing techniques: closest to the staff, and inside fermatas



Musical passage containing all vertical stacking categories for playing techniques

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing ?** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- 1. In Engrave mode, select the playing techniques whose vertical order you want to change.
- 2. In the Properties panel, activate **Tucking index** in the **Playing Techniques** group.
- 3. Change the value in the value field.

RESULT

The order of the selected playing techniques relative to other playing techniques in the same stacking category, either at the same rhythmic position or along their duration, is changed. This also affects other playing techniques in the same groups.

Playing techniques with higher **Tucking index** values are placed further from the staff, while playing techniques with lower values are placed closer.

If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

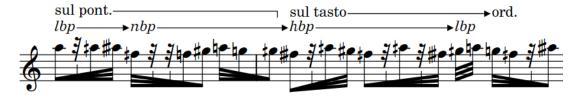
RELATED LINKS

Properties panel on page 646
Changing the property scope on page 648
Engrave toolbox on page 490
Changing the staff-relative placement of items on page 423
Tucking index properties on page 504

Types of fermatas on page 992

Playing technique continuation lines

Playing technique continuation lines convey exactly the notes to which playing techniques apply, and can also indicate a gradual transition between playing techniques.



A phrase with multiple playing technique continuation lines

In Dorico Elements, there are the following types of playing technique continuation lines:

Duration line

Indicates a specific duration to which the playing technique applies. The duration line for most playing techniques is a solid line with a hook cap at the end.

Playing techniques show duration lines when the following conditions are met:

- The playing technique has duration.
- The continuation type for the playing technique is set to show lines.
- The playing technique is ungrouped or is the final playing technique in a group.

Transition line

Indicates that the playing technique at the start must gradually turn into the playing technique at the end over the duration specified by the line. The transition line for most playing techniques is a solid line with an arrow cap at the end.

Transition lines are automatically shown between playing techniques in groups.

NOTE

Playing technique continuation lines do not affect playback. The sounds produced in playback rely on the playback technique associated with the playing technique, the expression map settings, and the sound libraries loaded in the project.

RELATED LINKS

Input methods for playing techniques, pedal lines, string indicators, and harp pedal diagrams on page 358

Lengthening/Shortening items on page 419

Line components on page 1176

Playing technique duration

In Dorico Elements, playing techniques have an explicit duration when they apply to a specific range, rather than from a single rhythmic position onwards. Playing techniques with duration only affect playback within their duration and can show continuation lines.

In Write mode, playing techniques with duration have start and end handles that show their duration.



Start and end handles on a playing technique with duration

You can give duration to any playing technique in any of the following ways:

- Group playing techniques together
- Input playing techniques with an open end during note input and extend them
- Add playing techniques to a range of notes
- Lengthen playing techniques





String indicator (selected) with no duration

String indicator (selected) with duration and duration

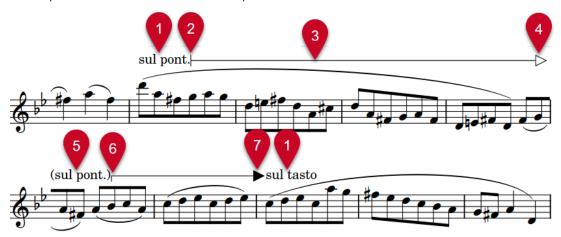
RELATED LINKS

Input methods for playing techniques, pedal lines, string indicators, and harp pedal diagrams on page 358

Lengthening/Shortening items on page 419 Grouping playing techniques together on page 1172 Vibrato bar techniques on page 1118 String indicators on page 974

Playing technique continuation line components

In Dorico Elements, playing technique continuation lines consist of multiple components that together function as a single item. The duration line and transition line for the same playing technique can have different default components.



1 Playing technique

Controls the default appearance of the following line.

2 Start cap

Symbol shown at the start of playing technique continuation lines.

3 Line body

Horizontal line, pattern, or wedge that makes up the main part of a playing technique continuation line and extends across its entire length.

4 Continuation end cap

Symbol shown at the end of segments of playing technique continuation lines that continue across multiple systems.

5 Playing technique continuation sign

Parenthesized reminder of the current playing technique shown at the start of subsequent segments of playing technique continuation lines that continue across multiple systems. You cannot hide playing technique continuation signs independently of the playing technique.

6 Continuation cap

Symbol shown at the start of subsequent segments of playing technique continuation lines that continue across multiple systems.

7 End cap

Symbol shown at the end of playing technique continuation lines.

RELATED LINKS Lines on page 1174

Playing technique continuation lines in Engrave mode

In Engrave mode, each playing technique continuation line has two square handles, one at the start and one at the end. You can move these handles to adjust the graphical position, length, and angle of playing technique continuation lines.

If playing technique continuation lines cross system and frame breaks, you can move the line segments on each side of the break independently.



Moving playing techniques with continuation lines moves them both together, including any adjacent playing techniques and continuation lines in the same group. Moving continuation lines or continuation line handles moves the continuation lines independently of the playing technique.

RELATED LINKS

Moving items graphically on page 501

Hiding/Showing playing technique duration lines

You can hide/show duration lines for individual playing techniques. When hiding duration lines, you can show nothing or *sim*.. When showing duration lines, you can show a line or repeat the signs of glyph playing techniques. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

NOTE

These steps only apply to playing technique duration lines. They do not apply to playing technique transition lines.

PREREQUISITE

- The playing techniques whose duration lines you want to hide/show have duration.
- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing ?** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** Select the playing techniques whose duration lines you want to hide/show. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Continuation type** in the **Playing Techniques** group.
- **3.** Select one of the following options from the menu:
 - None
 - sim.
 - Line
 - Repeat the signs (glyph playing techniques only)

RESULT

Duration lines are hidden after the selected playing techniques when you select **None**. When you select **sim.**, duration lines are hidden and *sim.* is shown once after each selected playing technique.

Duration lines are shown after the selected playing techniques when you select **Line**.

For glyph playing techniques, the playing technique is repeated for each note within the duration automatically when you select **Repeat the signs**.

If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

EXAMPLE



AFTER COMPLETING THIS TASK

You can change the style of the duration lines.

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490

Changing the style of playing technique continuation lines

You can change the style of individual playing technique duration lines and transition lines; for example, if you want to show a single duration line as a wiggly line. You can change the whole line style, including the caps, or only the body style, which does not affect the caps.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing 3** is selected in the Engrave toolbox.

PROCEDURE

- **1.** In Engrave mode, select the playing technique continuation lines whose style you want to change.
- **2.** In the Properties panel, activate one of the following properties in the **Playing Techniques** group:
 - To change the whole line style, including caps, activate **Line style**.
 - To change only the body style, excluding caps, activate **Line body style**.
- **3.** Select the style you want from the menu.

RESULT

The corresponding style of the selected playing technique continuation lines is changed.

AFTER COMPLETING THIS TASK

You can change the caps of individual playing technique continuation lines.

RELATED LINKS

Changing the body style of lines on page 1186

Changing the caps of playing technique continuation lines

You can change the caps of individual playing technique continuation lines independently of their line body styles. You can also change the caps of individual segments of playing technique continuation lines that continue across multiple systems.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing [7]** is selected in the Engrave toolbox.

PROCEDURE

- **1.** In Engrave mode, select the playing technique continuation lines whose caps you want to change.
- **2.** In the Properties panel, activate the following properties, individually or together, in the **Playing Techniques** group:
 - To change the cap at the start of the selected lines, activate **Start cap**.
 - To change the cap at the end of the selected lines, activate **End cap**.
 - To change the cap at the start of segments of the selected lines on subsequent systems, activate **Continuation cap**.
 - To change the cap at the end of segments of the selected lines on subsequent systems, activate **Continuation end cap**.
- **3.** Select the style you want from each menu.

RESULT

The corresponding caps of the selected playing technique continuation lines are changed.

AFTER COMPLETING THIS TASK

You can change the style of individual playing technique continuation lines.

RELATED LINKS

Changing the caps of lines on page 1186

Groups of playing techniques

Groups of playing techniques are automatically aligned in a row and can be moved and edited as a group. When you move individual playing techniques within a group, the lengths of any continuation lines on either side automatically adjust to compensate.







The same group of playing techniques with adjusted transition lines after the middle playing technique moved rhythmically

Two or more playing techniques are automatically grouped together if they are adjoining with duration between them and were added to existing music together or input in sequence during note input.

Transition lines are automatically shown between playing techniques in groups. The final playing technique in playing technique groups can show a duration line if it has duration.

All of the playing techniques in a group are highlighted when any of the playing techniques in the group are selected.



In Engrave mode, you can move each playing technique and continuation line within a group individually. Playing techniques in groups are attached to continuation lines, meaning that if you move a playing technique, any adjacent continuation lines automatically move with it. Groups of playing techniques have a handle at the start of the group, which controls the vertical position of the whole group.

sul tasto—→sul pont.

NOTE

- You cannot group a playing technique group to another playing technique group, you can
 only group single playing techniques together or single playing techniques to an existing
 group.
- Groups of playing techniques apply project-wide, meaning you cannot have playing techniques grouped one way in some layouts but differently in other layouts. However, you can move playing techniques graphically in each layout independently and independently of their groups.

RELATED LINKS

Input methods for playing techniques, pedal lines, string indicators, and harp pedal diagrams on page 358

Playing technique duration on page 1167 Lengthening/Shortening items on page 419

Moving notes/items rhythmically on page 448

Moving items graphically on page 501

Grouping playing techniques together

You can manually group playing techniques together that were not automatically grouped when they were input. Grouped playing techniques are automatically aligned in a row, show transition lines between them, and can be moved and edited as a group.

NOTE

You cannot group a playing technique group to another playing technique group, you can only group single playing techniques together or single playing techniques to an existing group.

If you want to group a playing technique group to another playing technique group, you must first ungroup them.

PROCEDURE

- 1. In Write mode, select the playing techniques you want to group together.
- 2. Choose **Edit** > **Notations** > **Playing Techniques** > **Group Playing Techniques**. You can also choose this option from the context menu.

RESULT

The selected playing techniques are grouped together. Their durations are extended to reach the next playing technique in the group, and transition lines are shown between playing techniques in the group.

RELATED LINKS

Playing technique continuation lines on page 1166

Ungrouping playing techniques and removing playing techniques from groups

You can ungroup playing techniques so that all playing techniques in the group become ungrouped. You can also remove only selected playing techniques from groups while leaving other playing techniques in the group.

This applies to all layouts in which the playing techniques appear.

PROCEDURE

- 1. In Write mode, select the playing techniques you want to ungroup or remove from groups.
- **2.** Do one of the following:
 - To ungroup all playing techniques in the selected groups, choose Edit > Notations > Playing Techniques > Ungroup Playing Techniques.
 - To remove only the selected playing techniques from their groups, choose Edit > Notations > Playing Techniques > Remove Playing Technique from Group.

TIP

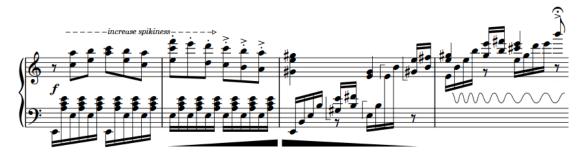
You can also choose these options from the context menu.

RESULT

The selected playing techniques or all playing techniques are removed from the selected groups. Playing techniques that previously had transition lines now appear with duration lines.

Lines

Lines can convey a variety of meanings in music, such as indicating which hand to use in piano music or a gradual change in bow pressure. In Dorico Elements, lines can be vertical, horizontal, or angled between notes and have different styles and appearances.



A phrase containing horizontal and vertical lines that convey a range of meanings

NOTE

Due to their generic designs, such as a dashed line with arrow end cap, lines in Dorico Elements have no definitive musical meaning and function primarily graphically, meaning they do not affect playback. Dorico Elements includes dedicated features for specific notations that affect playback if applicable, such as dynamics, arpeggios, glissandi, and trills.

The following types of lines are available in Dorico Elements:

Horizontal lines

Horizontal lines span a specified duration; that is, they start at one rhythmic position and end at a later rhythmic position. They might indicate a change over time, such as a wedge that represents bow pressure, or suggest a link between notes, such as a bracket spanning the theme in a fugue or a straight line between notes showing where a melody moves to a different staff.

By default, horizontal lines only apply to single staves. However, there are certain situations where you require a horizontal line to appear in all part layouts but only at system object positions in the full score layout. You can input horizontal lines that apply to all staves or only apply to single staves in Dorico Elements.

Attachment types control the positions of horizontal lines and certain aspects of their functionality. Horizontal lines can have different attachment types at their start and end. For example, a line can be attached to a notehead at the start, but attached to a barline at the end.

NOTE

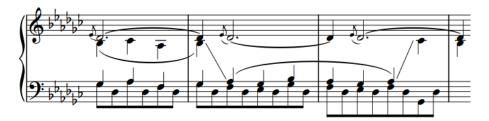
You cannot change the attachment type of horizontal lines after they have been input.

In Dorico Elements, each end of horizontal lines can have the following attachment types:

Notehead-attached

Attached to an individual note independently of its rhythmic position, meaning that the ends of notehead-attached lines move with notes if you change their

pitch or move them rhythmically. Notehead-attached lines can be both angled or horizontal, as their end positions and resulting angles are determined by the interval between the start and end notes.



A phrase containing two notehead-attached lines, showing where the melody moves between piano staves

Barline-attached

Attached to a rhythmic position and aligned with barlines, if their rhythmic positions coincide with barline positions. Barline-attached lines are always horizontal.



A barline-attached line spanning two full bars

• Rhythmic position-attached

Attached to a rhythmic position and positioned relative to notes, chords, or rests at those rhythmic positions.

Rhythmic position-attached lines are horizontal and placed above the staff by default. Their endpoints start to the left and end to the right of notes, chords, or rests at the corresponding rhythmic positions.



A rhythmic position-attached line spanning two full bars

Vertical lines

Vertical lines exist at a single rhythmic position and are positioned relative to notes or chords at that position. They might convey details about a specific moment, such as indicating which hand to use for specific notes in piano music.



Vertical lines indicating which notes to play with the right hand

RELATED LINKS

Input methods for lines on page 375

Arpeggio signs on page 1089

Glissando lines on page 1096

Jazz articulations on page 1125

Octave lines on page 897

Trills on page 1075

Playing technique continuation lines on page 1166

Pedal lines on page 1141

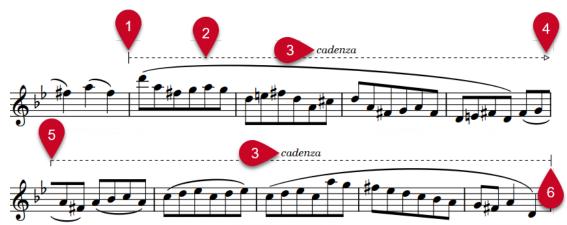
Repeat endings on page 1210

Guitar bends on page 1103

Tuplet brackets on page 1391

Line components

In Dorico Elements, lines consist of multiple components that together function as a single item.



1 Start cap

Symbol shown at the start of lines. Caps can be arrowheads, hooks, or terminal lines.

2 Line body

Horizontal or vertical line, repeating symbols, dash/dot pattern, or wedge that makes up the main part of a line and extends across its entire length or height.

3 Text

Text shown in addition to caps, either centered in the middle of each line segment or only at the start or end of lines. On vertical lines, text reads upwards by default.

4 Continuation end cap

Symbol shown at the end of segments of lines that continue across multiple systems. Caps can be arrowheads, hooks, or terminal lines.

5 Continuation cap

Symbol shown at the start of subsequent segments of lines that continue across multiple systems. Caps can be arrowheads, hooks, or terminal lines.

6 End cap

Symbol shown at the end of lines. Caps can be arrowheads, hooks, or terminal lines.

NOTE

Dorico Pro provides further options for customizing lines and line components, such as using text for caps and music symbols for annotations in the center of lines. You might encounter lines with different components than are available in Dorico Elements if you import or open a project that contains them.

RELATED LINKS

Changing the body style of lines on page 1186
Changing the caps of lines on page 1186
Adding text to lines on page 1188
Playing technique continuation lines on page 1166

Positions of lines

The position of lines relative to notes and staves depends on the line type and, for horizontal lines, their attachment type.

Notehead-attached horizontal lines

Notehead-attached lines are positioned in relation to the corresponding noteheads; that is, starting to the right of the start note and ending to the left of the end note. They automatically follow the notes at each end, meaning if you change the pitch of either note or move them rhythmically, the line end positions move accordingly. Because their positions depend on the pitches of notes, they can appear both inside and outside the staff. If they are only attached to noteheads at one end, they remain horizontal but follow the staff position of the note to which they are attached.

Barline-attached horizontal lines

Barline-attached horizontal lines are placed above the staff by default. Their endpoints align with barlines if their duration coincides with barline positions. If their endpoints do not coincide with barlines, they are positioned like rhythmic position-attached lines.

Rhythmic position-attached horizontal lines

Rhythmic position-attached lines are placed above the staff by default. Their endpoints start to the left and end to the right of notes, chords, or rests at the corresponding rhythmic positions.

Vertical lines

Vertical lines are positioned to the left of the notes to which they apply, including any applicable accidentals, but are positioned between grace notes and normal notes. If multiple vertical lines exist at the same rhythmic position, the most recent line is positioned furthest to the right; that is, directly to the left of notes or chords.

You can change the position/placement of lines in a variety of ways, such as showing vertical lines on the right of notes or changing the placement of horizontal lines to show them inside the

Showing vertical lines on the right/left of notes

You can change the side of notes on which vertical lines appear; for example, to show selected vertical lines on the right side of notes.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing 1** is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the vertical lines whose horizontal position you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Side** in the **Vertical Lines** group.
- **3.** Choose one of the following options:
 - Left
 - Right

RESULT

The selected lines appear on the corresponding side of notes.

EXAMPLE





Vertical line on the left of notes

Vertical line on the right of notes

AFTER COMPLETING THIS TASK

You can change the order of vertical lines when multiple vertical lines exist at the same rhythmic position and on the same side of notes.

Changing the horizontal order of vertical lines

You can change the horizontal order of vertical lines when multiple vertical lines exist at the same rhythmic position and on the same side of notes.

PREREQUISITE

The lower zone is shown.

- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the vertical lines whose order you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Column** in the **Vertical Lines** group.
- 3. Change the value in the value field.

RESULT

The order of the selected vertical lines relative to any other vertical lines at the same rhythmic positions is changed.

Lines with higher **Column** values are placed further to the left, while lines with lower values are placed further to the right.

Enabling/Disabling vertical line collision avoidance

You can change whether individual vertical lines avoid collisions, which can affect horizontal spacing. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing 3** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

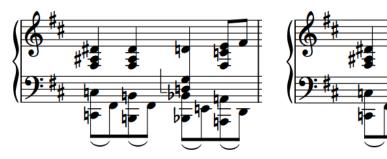
PROCEDURE

- **1.** In Engrave mode, select the vertical lines whose collision avoidance you want to enable/ disable.
- 2. In the Properties panel, activate **Avoid collisions** in the **Vertical Lines** group.
- **3.** Activate/Deactivate the corresponding checkbox.

RESULT

The selected vertical lines avoid collisions when the checkbox is activated, and do not avoid collisions when the checkbox is deactivated. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

EXAMPLE



Collision avoidance enabled

Collision avoidance disabled

AFTER COMPLETING THIS TASK

You can move lines graphically in Engrave mode; for example, to accommodate accidentals.

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490 Note spacing on page 494 Moving items graphically on page 501

Showing vertical lines before grace notes

You can position individual vertical lines so they appear to the left of grace notes. By default, vertical lines are positioned after grace notes; that is, between grace notes and normal notes.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing !** is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the vertical lines you want to show before grace notes. You can do this in Write mode and Engrave mode.
- **2.** In the Properties panel, activate **Line before grace notes** in the **Vertical Lines** group.

RESULT

The selected vertical lines are positioned before grace notes.

Deactivating **Line before grace notes** shows the selected vertical lines after grace notes again.

EXAMPLE





Vertical line after grace notes

Vertical line before grace notes

Changing the placement of horizontal lines

You can show individual horizontal lines above, below, or inside the staff. By default, horizontal lines are placed above the staff.

NOTE

These steps only apply to barline-/rhythmic position-attached horizontal lines.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the horizontal lines whose placement you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Placement** in the **Horizontal Lines** group.
- **3.** Select one of the following options from the menu:
 - Above
 - Below
 - Inside staff

RESULT

The placement of the selected horizontal lines is changed. Horizontal lines inside the staff are centered on the middle staff line by default.

TIP

You can also cycle through the different placement options for selected horizontal lines by pressing ${\bf F}$.

AFTER COMPLETING THIS TASK

- You can change the staff position of lines shown inside the staff.
- You can erase the background of text on lines shown inside the staff.

RELATED LINKS

Properties panel on page 646

Engrave toolbox on page 490

Erasing the background of line text on page 1193

Changing the staff position of horizontal lines inside the staff

You can change the staff position of horizontal lines shown inside the staff, including changing the staff position of the start/end of lines independently of each other; for example, if you want lines to appear angled.

PREREQUISITE

- The horizontal lines whose staff position you want to change are placed inside the staff and have at least one barline-/rhythmic position-attached end.
- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing 1** is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the horizontal lines placed inside the staff whose staff position you want to change. You can do this in Write mode and Engrave mode.
- **2.** In the Properties panel, activate the following properties, individually or together, in the **Horizontal Lines** group:
 - Start position
 - End position
- 3. Change the values in the value fields.

RESULT

The staff positions of the corresponding ends of the selected lines are changed according to the new values. For example, **0** is the middle line of the staff, **4** is the top line of the staff, and **-4** is the bottom line of the staff.

EXAMPLE



Horizontal lines inside the staff with different staff positions at their start/end

Length of lines

Dorico Elements automatically calculates the appropriate length for both horizontal and vertical lines.

- The length of horizontal lines is determined by the rhythmic duration of the line. Horizontal lines with different attachment types are positioned differently, which can affect their graphical length. For example, barline-attached lines can appear longer than rhythmic position-attached lines with the same duration.
- The length of vertical lines is determined by the pitch range of notes in the voices/staves to
 which the line applies. Dorico Elements automatically adjusts the length of vertical lines if
 pitches change or you add notes to, or delete notes from, chords.

You can lengthen/shorten both horizontal and vertical lines; for example, if you want an individual vertical line to extend above the top note in a chord.

Lengthening/Shortening horizontal lines

You can lengthen/shorten horizontal lines rhythmically after they have been input.

NOTE

These steps only apply to barline-/rhythmic position-attached horizontal lines. You cannot lengthen/shorten notehead-attached horizontal lines, except by lengthening/shortening the notes to which they are attached.

PROCEDURE

1. In Write mode, select the horizontal lines you want to lengthen/shorten.

NOTE

When using the mouse, you can only lengthen/shorten one line at a time.

- **2.** Lengthen/Shorten the lines in any of the following ways:
 - To lengthen them by the current rhythmic grid resolution, press Shift-Alt/Opt-Right Arrow.
 - To shorten them by the current rhythmic grid resolution, press Shift-Alt/Opt-Left Arrow.
 - To snap the end of a single line to the next notehead, press Ctrl/Cmd-Shift-Alt/Opt-Right Arrow.
 - To snap the end of a single line to the previous notehead, press Ctrl/Cmd-Shift-Alt/ Opt-Left Arrow.

NOTE

- When multiple lines are selected, you can only lengthen/shorten them according to the current rhythmic grid resolution.
- When using the keyboard, lengthening/shortening lines only moves their end. You
 can move the start of lines by moving lines rhythmically, or by clicking and dragging
 the start handle of a single line.
- Click and drag the circular handle at the start/end to the right/left.

RESULT

Single lines are lengthened/shortened according to the current rhythmic grid resolution or to the next/previous notehead, whichever is closer.

Multiple lines are lengthened/shortened according to the current rhythmic grid resolution.

TIP

You can move lines graphically in Engrave mode, including changing their graphical length.

RELATED LINKS

Inputting horizontal lines on page 375 Moving items graphically on page 501 Rhythmic grid on page 212

Lengthening/Shortening vertical lines

You can lengthen/shorten individual vertical lines to different staff positions. You can do this for the current layout and frame chain only, or for all layouts and frame chains. By default, vertical lines automatically span the pitch range of notes in the voices to which they apply.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** Is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** Select the vertical lines you want to lengthen/shorten. You can do this in Write mode and Engrave mode.
- **2.** In the Properties panel, activate the following properties, individually or together, in the **Vertical Lines** group:
 - Top position
 - Bottom position
- **3.** Change the values in the value fields.

RESULT

The vertical length of the selected lines is changed. Increasing the values moves the corresponding end up by staff positions, decreasing the values moves the corresponding end down by staff positions. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

TIP

You can move lines graphically in Engrave mode, including changing their graphical length.

RELATED LINKS

Inputting vertical lines on page 377
Properties panel on page 646
Changing the property scope on page 648
Engrave toolbox on page 490

Changing the start/end positions of horizontal lines

By default, rhythmic position-attached horizontal lines start before notes/accidentals and end immediately after the last note, chord, or rest at their end rhythmic position. You can change the start and end positions of individual rhythmic position-attached horizontal lines independently; for example, if you want them to start before noteheads rather than accidentals and end immediately before the following note, chord, or rest.

NOTE

These steps only apply to rhythmic position-attached horizontal lines.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing 1** is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the rhythmic position-attached horizontal lines whose start and/or end position you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate Horizontal start position in the Horizontal Lines group.
- **3.** Select one of the following options from the menu:
 - Notehead
 - Notehead center
 - Accidental
- **4.** Activate **Horizontal end position** in the **Horizontal Lines** group.
- **5.** Select one of the following options from the menu:
 - End at right-hand side of final note
 - End on center of final note
 - End immediately before following note

RESULT

The start and/or end position of the selected rhythmic position-attached horizontal lines is changed.

EXAMPLE



Horizontal line starting before the notehead



Horizontal line starting centered on the notehead



Horizontal line starting before the accidental







Horizontal line ending after final note

Horizontal line ending centered on the final notehead

Horizontal line ending before following note

Changing the body style of lines

You can change the body style of individual lines without changing their caps.

PREREQUISITE

- The lower zone is shown.
- Properties is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.

PROCEDURE

1. Select the lines whose body style you want to change. You can do this in Write mode and Engrave mode.

NOTE

You must select either only horizontal lines or only vertical lines.

- 2. In the Properties panel, activate **Line body style** in either the **Horizontal Lines** or **Vertical Lines** group.
- **3.** Select the style you want from the menu.

RESULT

The body style of the selected lines is changed.

NOTE

This does not affect the caps of the selected lines.

RELATED LINKS

Line components on page 1176 Properties panel on page 646 Engrave toolbox on page 490

Changing the caps of lines

You can change the caps of individual lines without changing their body style.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, Graphic Editing 3 is selected in the Engrave toolbox.

PROCEDURE

 Select the lines whose caps you want to change. You can do this in Write mode and Engrave mode.

NOTE

You must select either only horizontal lines or only vertical lines.

- **2.** In the Properties panel, activate the following properties, individually or together, in either the **Horizontal Lines** or **Vertical Lines** group:
 - To change the cap at the start/bottom of the selected lines, activate **Start cap**.
 - To change the cap at the end/top of the selected lines, activate **End cap**.
 - To change the segment start cap of the selected horizontal lines on subsequent systems, activate **Continuation cap**.
 - To change the segment end cap of the selected horizontal lines on previous systems to where the lines end, activate **Continuation end cap**.
- **3.** Select the style you want from each menu.

RESULT

The corresponding caps of the selected lines are changed.

NOTE

This does not affect the body style of the selected lines.

Changing the direction of lines

You can change the direction of both horizontal and vertical lines; for example, to make a horizontal line with an arrow end cap point to the left, or to make a vertical line with text appear upside-down with its text reading downwards.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing 1** is selected in the Engrave toolbox.

PROCEDURE

1. Select the lines whose direction you want to change. You can do this in Write mode and Engrave mode.

NOTE

You must select either only horizontal lines or only vertical lines.

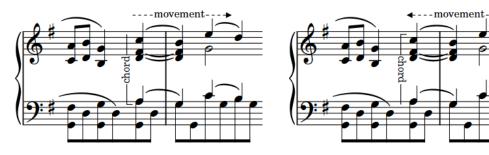
2. In the Properties panel, activate **Reverse** in either the **Horizontal Lines** or **Vertical Lines** group.

RESULT

The direction of the selected lines is change. Text on vertical lines now reads downwards.

Deactivating **Reverse** returns the selected lines to their default direction.

EXAMPLE



Horizontal and vertical lines with default directions

Reversed horizontal and vertical lines

Adding text to lines

You can add text to both horizontal and vertical lines; for example, to clarify the intention of the line.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing 1** is selected in the Engrave toolbox.

PROCEDURE

1. Select the lines to which you want to add text. You can do this in Write mode and Engrave mode.

NOTE

You must select either only horizontal lines or only vertical lines.

- 2. In the Properties panel, activate **Text** in either the **Horizontal Lines** or **Vertical Lines** group.
- **3.** Enter the text you want into the value field.
- 4. Press Return.

RESULT

The text you entered into the value field is shown centered in the middle of the selected lines. On vertical lines, it reads upwards.

EXAMPLE



Text on a horizontal line



Text on a vertical line

AFTER COMPLETING THIS TASK

- If you want text on vertical lines to read downwards, you can reverse the lines.
- You can erase the backgrounds of text on lines.

RELATED LINKS

Properties panel on page 646 Engrave toolbox on page 490 Input methods for lines on page 375

Line text font styles

There are different font styles for line text according to the line type. You can change different aspects of these fonts in the **Edit Font Styles** dialog, such as changing the font size to make line text appear larger.

The following font styles are used for line text:

- Horizontal Line Font: Used for text on horizontal lines.
- Vertical Line Font: Used for text on vertical lines.

NOTE

Changes made to font styles apply to the entire project, including part layouts.

RELATED LINKS

Edit Font Styles dialog on page 737

Changing the position of text relative to horizontal lines

You can change the position of text relative to horizontal lines individually; for example, to show text above horizontal lines. By default, text is centered on horizontal lines.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** 3 is selected in the Engrave toolbox.

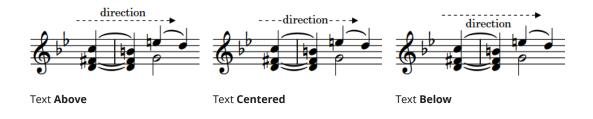
PROCEDURE

- **1.** Select the horizontal lines whose text position you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Text position** in the **Horizontal Lines** group.
- **3.** Select one of the following options from the menu:
 - Above
 - Centered
 - Below
 - Inside
 - Outside

RESULT

The position of text relative to the selected horizontal lines is changed. When annotations are positioned **Inside** or **Outside**, their position relative to the line changes according to the staff-relative placement of the line.

EXAMPLE



RELATED LINKS

Properties panel on page 646 Engrave toolbox on page 490

Changing the position of text relative to vertical lines

You can change the position of text relative to vertical lines individually; for example, to show text on the left of vertical lines. By default, text is centered on vertical lines.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing ?** is selected in the Engrave toolbox.

PROCEDURE

- 1. Select the vertical lines whose text position you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Text position** in the **Vertical Lines** group.
- **3.** Select one of the following options from the menu:
 - Left

- Centered
- Right

RESULT

The position of text relative to the selected vertical lines is changed.

EXAMPLE



Changing the placement of text relative to lines

You can change the placement of text relative to lines individually; for example, to show text at the start of horizontal lines or the top of vertical lines. By default, text appears in the center of lines.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** 3 is selected in the Engrave toolbox.

PROCEDURE

1. Select the lines whose text placement you want to change. You can do this in Write mode and Engrave mode.

NOTE

You must select either only horizontal lines or only vertical lines.

- 2. In the Properties panel, activate **Text placement** in either the **Horizontal Lines** or **Vertical Lines** group.
- **3.** Select one of the following options from the menu:
 - Start
 - Center
 - End
- **4.** Optional: If you chose **Start** or **End** and want to change the offset from the corresponding end of the line, activate **Start/end gap** in either the **Horizontal Lines** or **Vertical Lines** group and change the value in the value field.

RESULT

The placement of text relative to the selected lines is changed. For vertical lines, **Start** places text at the bottom of the line, **End** places text at the top.

If you also activated **Start/end gap**, the gap between text on the selected lines and the corresponding end is changed.

RELATED LINKS

Properties panel on page 646 Engrave toolbox on page 490

Forcing line text to be horizontal

You can force the text of individual lines always to appear horizontal; for example, to make text on vertical lines easier to read.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.

PROCEDURE

1. Select the lines whose text you want to keep horizontal. You can do this in Write mode and Engrave mode.

NOTE

You must select either only horizontal lines or only vertical lines.

2. In the Properties panel, activate **Keep text horizontal** in either the **Horizontal Lines** or **Vertical Lines** group.

RESULT

Text on the selected lines always appears horizontal, even if the line is angled or vertical.

Adding borders to line text

You can add borders to text shown on individual lines and change the border thickness; for example, if you want to make the boundary of the text relative to the line clear. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing 3** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

1. In Engrave mode, select the lines whose text you want to add borders to.

NOTE

You must select either only horizontal lines or only vertical lines.

- 2. In the Properties panel, activate **Border thickness** in either the **Horizontal Lines** or **Vertical Lines** group.
- 3. Change the value in the value field.

RESULT

Borders with the corresponding thickness are added to text on the selected lines. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490

Erasing the background of line text

You can erase the background of text shown on individual lines; for example, to ensure they remain legible if they appear inside the staff. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing ?** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

1. In Engrave mode, select the lines whose text backgrounds you want to erase.

NOTE

You must select either only horizontal lines or only vertical lines.

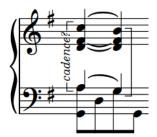
2. In the Properties panel, activate **Erase background** in either the **Horizontal Lines** or **Vertical Lines** group.

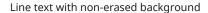
RESULT

The backgrounds of text on the selected lines are erased. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

Deactivating **Erase background** returns text on the selected lines to the default non-erased background.

EXAMPLE







Line text with erased background

Changing the erasure padding of line text

You can change the erasure padding of text on individual lines, including changing the padding between line text and each edge of their erased areas independently. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing 3** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

1. In Engrave mode, select the lines whose text erasure padding you want to change.

NOTE

You must select either only horizontal lines or only vertical lines.

- **2.** In the Properties panel, activate the **Erasure padding** properties, individually or together, in either the **Horizontal Lines** or **Vertical Lines** group.
 - L changes the padding between line text and their left edge.
 - R changes the padding between line text and their right edge.
 - **T** changes the padding between line text and their top edge.
 - **B** changes the padding between line text and their bottom edge.
- **3.** Change the values in the value fields.

RESULT

Increasing the values increases the padding, decreasing the values decreases the padding. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490

Lines in Engrave mode

In Engrave mode, each line has two square handles, one at the start and one at the end of horizontal lines, and one at the top and one at the bottom of vertical lines. You can move these handles to adjust the graphical position, length, and angle of lines.

You can also move whole individual lines graphically. If horizontal lines cross system and frame breaks, you can move the line segments on each side of the break independently.



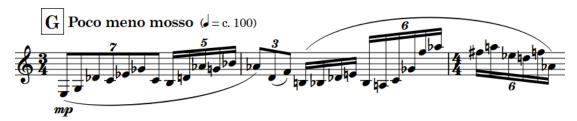
Handles on a vertical line and horizontal line in Engrave mode

RELATED LINKS
Line components on page 1176
Moving items graphically on page 501

Rehearsal marks

Rehearsal marks are ordered sequences of letters or numbers that provide useful reference points, such as indicating significant changes in the music. They allow performers to co-ordinate easily in rehearsals and make the chronological sequence of the music clear.

In Dorico Elements, rehearsal marks follow an automatic sequence where each rehearsal mark has a unique index, ensuring there are never duplicate rehearsal marks.



A rehearsal mark, showing the letter G

By default, rehearsal marks in Dorico Elements appear as letters, but you can change the sequence type to show letters, numbers, or bar numbers. You can use all three available rehearsal mark sequences simultaneously.

In order to ensure they are easily noticeable, and cannot be confused with bar numbers when using numbers for rehearsal marks, rehearsal marks are shown in a rectangular enclosure.

In Dorico Elements, rehearsal marks are categorized as system objects. Therefore, rehearsal marks follow your per-layout settings for the visibility and positioning of system objects.

RELATED LINKS

Inputting rehearsal marks on page 390
Changing the positions of system objects on page 1304
Going to rehearsal marks on page 430
Exporting text on page 101
Tempo marks on page 1313
Bar numbers on page 808

Positions of rehearsal marks

Rehearsal marks are placed outside the music, above the staff, and at the same positions as other system objects so they can be seen easily.

By default, rehearsal marks are positioned above barlines and to the right of clefs or key signatures at the start of systems. Although you can input rehearsal marks at rhythmic positions within a bar in Dorico Elements, this is not common practice.

When rehearsal marks coincide with tempo changes, Dorico Elements automatically positions tempo marks to the right of rehearsal marks. Dorico Elements automatically adjusts staff spacing to ensure rehearsal marks are correctly positioned.

You can move rehearsal marks to different rhythmic positions in Write mode. They are automatically positioned to avoid collisions.



The vertical spacing between the top two staves is increased to allow room for the rehearsal mark and the tempo marks.

You can move rehearsal marks graphically in Engrave mode, but this does not change the rhythmic positions to which they are attached.

Rehearsal marks are categorized as system objects in Dorico Elements, which you can show above the first bracket of selected instrument families. You can change the instrument families above which system objects appear in each layout independently; for example, if you want rehearsal marks to appear at multiple vertical positions in each system in the full score only.

RELATED LINKS

Inputting rehearsal marks on page 390
Moving items graphically on page 501
Changing the positions of system objects on page 1304

Changing the index of rehearsal marks

By default, the rehearsal mark sequence resets at the start of each flow. If you want the rehearsal mark sequence to continue across flows, for example, to avoid having multiple rehearsal marks with the same letter in the same project, you can change the index position of individual rehearsal marks.

Changing the index position changes the shown number or letter. For example, index position 1 appears as rehearsal mark A or 1, position 2 appears as B or 2, and so on.

You can also change the index position of a rehearsal mark to avoid showing a letter that could easily be confused with another letter or another number, such as I or O.

NOTE

These steps do not apply to rehearsal marks using the bar number sequence type.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.

PROCEDURE

- 1. Select the rehearsal mark whose index position you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Index** in the **Rehearsal Marks** group.

3. Change the value in the value field.

RESULT

The selected rehearsal mark changes according to the **Index** value and its sequence type.

Any subsequent rehearsal marks without index changes in the same sequence follow the new index automatically. For example, if you changed a rehearsal mark from A to P, the next rehearsal mark changes from B to Q.

TIP

You can also change the sequence type of rehearsal marks; for example, if you want rehearsal mark C to appear as rehearsal mark 3.

Changing the rehearsal mark sequence type

Rehearsal marks can be letters, numbers, or bar numbers. You can change the sequence type of individual rehearsal marks, and create secondary rehearsal mark sequences.

In Dorico Elements, you can use all three available rehearsal mark sequences simultaneously. For example, you can have the main sequence of rehearsal marks showing letters, but also have a secondary sequence of numbers to mark different moments, perhaps entry points for a solo line, and also highlight prominent bar numbers within those sections.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, Graphic Editing 3 is selected in the Engrave toolbox.

PROCEDURE

- 1. Select the rehearsal mark whose sequence type you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Sequence type** in the **Rehearsal Marks** group.
- **3.** Select one of the following options from the menu:
 - Letters
 - Numbers
 - Bar numbers

RESULT

The selected rehearsal mark now displays a letter, a number, or the current bar number.

If it is the first rehearsal mark in either the letters sequence or the numbers sequence in the flow, it shows either A or 1. If there are already rehearsal marks in either the letters sequence or the numbers sequence in the flow, it shows the next letter or number according to the index.

NOTE

You can change the index of a rehearsal mark sequence independently of other rehearsal mark sequences. However, you cannot change the index of rehearsal marks using the bar number sequence type.

RELATED LINKS

Properties panel on page 646 Engrave toolbox on page 490 Adding bar number changes on page 817

Adding prefixes/suffixes to rehearsal marks

You can add both prefixes and suffixes to individual rehearsal marks.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing ?** is selected in the Engrave toolbox.

PROCEDURE

- 1. Select the rehearsal marks to which you want to add a prefix or suffix. You can do this in Write mode and Engrave mode.
- **2.** In the Properties panel, activate the following properties, individually or together, in the **Rehearsal Marks** group:
 - Prefix
 - Suffix
- 3. Enter the text you want into the value field.
- 4. Press Return.

RESULT

The text you entered into the value field is added to the selected rehearsal marks as a prefix or a suffix.

Editing the rehearsal mark paragraph style

You can edit the formatting of the paragraph style used for rehearsal marks; for example, if you want to change the size of rehearsal marks in full score layouts without affecting their size in part layouts.

PROCEDURE

- 1. Choose Library > Paragraph Styles to open the Paragraph Styles dialog.
- 2. In the paragraph styles list, select Rehearsal Marks.
- **3.** Optional: Select one of the available styles from the **Parent** menu. If you select a parent style, an activated switch is shown beside all the options that are different in the selected paragraph style, compared to its parent style.
- **4.** Activate and change the available options as required.
- **5.** Click **OK** to save your changes and close the dialog.

RESULT

The formatting of the rehearsal mark paragraph style is changed.

RELATED LINKS
Paragraph Styles dialog on page 739

Markers

Markers are labels locked to a particular position in time, most commonly in relation to a video. They typically indicate an important moment that requires musical prominence, and composers often use them to help shape the writing process.



Markers on a timecode staff showing custom text and timecodes

By default, markers in Dorico Elements show the default text "Marker" and also include the timecode of their fixed position in time.

In Dorico Elements, you can use markers in any project. However, because they are most commonly used in conjunction with video, markers are included in the Video panel in Write mode. There is also a Markers track in Play mode that displays markers, and allows you to input new ones.

You can use markers to help find suitable tempos for your project, as Dorico Elements can calculate possible tempos between important markers so that the markers occur on strong beats in the time signature.

You can show markers above/below the start of each system or below the timecode staff, if there is one, in each layout independently.

Any markers you input are automatically included when you export MIDI.

RELATED LINKS

Inputting markers/timecodes on page 391 Video panel on page 392 Find Tempo dialog on page 393 Timecodes on page 1206 Markers track on page 519 Exporting text on page 101

Hiding/Showing markers

By default, markers are shown in full score layouts and hidden in part layouts. You can hide and show markers in each layout independently; for example, if markers are helpful for the conductor to see but not for the players.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- 2. In the **Layouts** list, select the layouts in which you want to hide/show markers.

By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, **Shift** -clicking adjacent layouts, and **Ctrl/Cmd** -clicking individual layouts.

- 3. In the category list, click Markers and Timecode.
- 4. Activate/Deactivate Show markers.
- 5. Click Apply, then Close.

RESULT

Markers are hidden/shown in the selected layouts.

RFLATED LINKS

Inputting markers/timecodes on page 391

Changing the vertical position of markers

You can show markers above the system, below the system, or on a separate single-line timecode staff above a selected bracketed instrument family group, which can make them clearer in the score. When markers are shown on a timecode staff, timecodes are also automatically shown below the timecode staff.

NOTE

You cannot show multiple timecode staves in a system.

PROCEDURE

- Press Ctrl/Cmd-Shift-L to open Layout Options.
- **2.** In the **Layouts** list, select the layouts in which you want to change the vertical position of markers.

By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, **Shift** -clicking adjacent layouts, and **Ctrl/Cmd** -clicking individual layouts.

- 3. In the category list, click Markers and Timecode.
- **4.** In the **Markers** subsection, choose one of the following options for **Vertical position**:
 - Above system
 - Below system
 - Timecode staff
- **5.** Optional: If you chose **Timecode staff**, select the bracketed instrument family above which you want to show the timecode staff from the **Position timecode staff above bracket** menu.
- 6. Click Apply, then Close.

RESULT

The vertical position of markers is changed in the selected layouts.

NOTE

• If you show markers on a timecode staff, timecodes are also shown on the staff by default. If you only want to show markers on a separate staff and exclude timecodes, you must then change **Timecode frequency on timecode staff** to **Never**.

You can also change the vertical position of timecodes so they appear above/below the start of systems rather than on the timecode staff.

 You can change the default distance between the timecode staff and other staves on the Vertical Spacing page in Layout Options.

AFTER COMPLETING THIS TASK

You can change the frequency of timecodes on the timecode staff.

RELATED LINKS

Changing the vertical position of timecodes on page 1207
Changing the timecode frequency on page 1208
Changing bracket grouping according to ensemble type on page 846
Layout Options dialog on page 728

Editing marker text

The default text shown in new markers is "Marker". You can change the text shown in each marker individually.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, Graphic Editing 3 is selected in the Engrave toolbox.

PROCEDURE

- 1. Select the markers whose text you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate Marker text in the Markers group.
- 3. Enter the text you want into the value field.
- 4. Press Return.

RESULT

The text shown in the selected markers is changed. It uses the **Marker Text Font** font style.

TIP

You can also enter custom text for markers when inputting them using the **Add Marker** dialog, and change marker text in the **Markers** section of the Video panel in Write mode.

RELATED LINKS

Properties panel on page 646 Engrave toolbox on page 490 Add Marker dialog on page 391

Editing the marker/timecode font styles

You can edit the formatting of the font styles used for all markers and timecodes project-wide; for example, if you want markers to appear bold and italic. Markers and timecodes use different fonts, meaning you can change them independently of each other.

PROCEDURE

- 1. Choose **Library** > **Font Styles** to open the **Edit Font Styles** dialog.
- 2. In the font styles list, select one of the following font styles:
 - Marker Text Font: Used for markers
 - Marker Timecode Font: Used for timecodes shown in markers
 - Timecode Font: Used for timecodes shown on a timecode staff
- **3.** Activate the following options, individually or together, to change the corresponding aspect of the font:
 - Font family
 - Size
 - Style
 - Underlined
- 4. Optional: If required, repeat steps 2 and 3 to change the other font.
- **5.** Click **OK** to save your changes and close the dialog.

RESULT

The formatting of the selected font styles is changed project-wide.

RELATED LINKS

Edit Font Styles dialog on page 737

Changing the timecodes of markers

You can change the timecodes of individual markers after they have been input; for example, if the video has been edited and the marker now occurs ten seconds later.

NOTE

Because this changes where markers occur in the project, this also moves markers relative to the notated music.

PROCEDURE

- **1.** In Write mode, select an item in the flow containing the markers whose timecodes you want to change.
- 2. In the Notations toolbox, click **Panels** , then **Video** to show the Video panel.
- 3. In the Markers section, double-click the timecode you want to change.
- 4. Enter the new timecode you want into the value field.
- 5. Press Return.

RESULT

The timecode of the marker is changed. The marker automatically moves relative to the music to reflect its new time position.

RELATED LINKS

Video panel on page 392

Changing the initial timecode value on page 1207

Defining markers as important

You can define individual markers as important, which allows them to be considered when finding suitable tempos in the **Find Tempo** dialog.

PROCEDURE

- 1. In Write mode, click **Video** in the Notations toolbox to show the Video panel.
- **2.** In the **Markers** section, activate the checkbox in the **Imp.** column for each marker you want to define as important.

RESULT

Markers with activated checkboxes are defined as important. The **Find Tempo** button at the bottom of the **Markers** section becomes available.

RELATED LINKS

Find Tempo dialog on page 393

Timecodes

Timecodes indicate an exact position in time, usually in the context of a video. They allow precise synchronization between multiple elements, such as music and moving images, and can be used as a reference tool.

Timecodes are displayed in the format hh:mm:ss:ff, which is two-digit hours, minutes, seconds, and frames.

00:24:09:07

A timecode on a timecode staff

In Dorico Elements, you can specify the type of timecode from the following types:

Non-drop frame timecodes

Each frame is numbered sequentially from the preceding one without skipping any frame numbers.

Non-drop frame timecodes are shown with the suffix **fps** and use a colon separator between seconds and frames; for example, 00:00:01:05.

Drop frame timecodes

Some frame numbers are skipped in order to accommodate the difference in frame rate between 29.97 fps and 30 fps. In every minute except every tenth minute, two timecode numbers are dropped from the frame count.

Drop frame timecodes are shown with the suffix **dfps** and use a semicolon separator between the seconds and frames; for example, 00:00:01;05.

Timecodes in Dorico Elements are flow-specific, meaning you can set timecodes for each flow that are completely independent of the timecodes for other flows. You can set timecodes in the **Video Properties** dialog, including for flows without a video.

NOTE

The timecodes shown in flow cards in the **Flows** panel in Setup mode reflect the timecode at the start of the flow, which can be different to the timecode you set in the **Video Properties** dialog. For example, if you set the **Timecode start** to **02:00:00:00** but also set the **Flow attachment position** to **8** quarter note beats, and the tempo is 60 bpm, the timecode shown in the flow card is 01:59:52:00.



By default, timecodes appear in markers. You can show markers above/below the start of each system or below the timecode staff, if there is one, in each layout independently.

Additionally, you can change the time displayed in the **Transport** window to be the timecode rather than elapsed time, which is shown by default.

RELATED LINKS

Inputting markers/timecodes on page 391

Frame rates on page 189

Video Properties dialog on page 185

Editing the marker/timecode font styles on page 1204

Changing the content shown in the transport display on page 543

Markers on page 1201

Changing the initial timecode value

You can change the timecode at which each flow in your project starts; for example, if you are using a separate project for the second reel of a film. You can also change the initial timecode in projects without videos.

PROCEDURE

- 1. In Write mode, select an item in the flow whose initial timecode value you want to change.
- 2. In the Notations toolbox, click **Panels** , then **Video** to show the Video panel.
- 3. In the Video panel, click **Properties** to open the **Video Properties** dialog.
- 4. Change the value for Timecode start.
- **5.** Click **OK** to save your changes and close the dialog.

RESULT

The initial timecode for the flow in which you selected an item is changed.

RELATED LINKS

Video panel on page 392

Changing the start position of videos on page 187

Changing the timecodes of markers on page 1204

Changing the vertical position of timecodes

You can show timecodes either above/below the start of systems or on a separate single-line staff in each layout independently. For example, you can show timecodes and markers on a separate timecode staff in full score layouts but show only timecodes above the start of systems in part layouts.

NOTE

You cannot show timecodes on multiple staves in a system.

PREREQUISITE

If you want to show timecodes on a separate staff, you have changed the vertical position of markers so they appear on a separate staff.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- **2.** In the **Layouts** list, select the layouts in which you want to change the vertical position of timecodes.

By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking

and dragging across multiple layouts, **Shift** -clicking adjacent layouts, and **Ctrl/Cmd** -clicking individual layouts.

- 3. In the category list, click Markers and Timecode.
- 4. In the **Timecode** subsection, choose one of the following options for **Show timecode**:
 - Above or below start of system
 - Below timecode staff
- **5.** Optional: If you chose **Above or below start of system**, choose one of the following options for **Timecode position relative to system**:
 - Above system
 - Below system
- 6. Optional: If you chose Above or below start of system and want to change the gap between timecodes and the staff, change the values in the Offset at start of system value fields.
- 7. Click Apply, then Close.

RESULT

The vertical position of timecodes is changed in the selected layouts.

NOTE

Your setting for **Timecode frequency on timecode staff** also applies when timecodes are shown above/below the start of systems.

RELATED LINKS

Changing the vertical position of markers on page 1202

Changing the timecode frequency

You can show timecodes at different intervals in layouts in which timecodes are shown on a separate staff. For example, you can show timecodes every bar in full score layouts but only at the start of each system in part layouts.

NOTE

We do not recommend that you show timecodes every bar in layouts with multi-bar rests, as the result is illegible overlapping timecodes. If you want to show timecodes in part layouts with multi-bar rests, we recommend either showing timecodes only at the start of each system or not showing multi-bar rests in the layout.

PREREQUISITE

Markers are shown in the selected layouts.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- 2. In the **Layouts** list, select the layouts in which you want to change the timecode frequency. By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking

and dragging across multiple layouts, **Shift** -clicking adjacent layouts, and **Ctrl/Cmd** -clicking individual layouts.

- 3. In the category list, click **Markers and Timecode**.
- **4.** Optional: If the selected layouts do not show timecodes on a separate staff, choose **Timecode staff** for **Vertical position**.
- **5.** Choose one of the following options for **Timecode frequency on timecode staff**:
 - Start of system
 - Every bar
 - Never
- 6. Click Apply, then Close.

RELATED LINKS

Hiding/Showing markers on page 1201 Hiding/Showing multi-bar rests on page 1258

Repeat endings

For music with repeated passages, repeat endings show which bars are played at the end of each repetition, with different endings each time if required. They are also known as "volta lines", or as "first and second endings", but in this documentation, we refer to them as "repeat endings".

Repeat endings comprise two or more segments, where each segment contains a different possible ending. When you input repeat endings, Dorico Elements automatically inputs an end repeat barline at the end of the first segment. Segments in repeat endings are clearly marked with solid lines above and numbers that indicate the playthroughs in which the segment is used.



A repeat ending with three playthroughs divided across two endings

Dorico Elements allows you to create repeat endings containing any number of segments, and allows you to control which segments are used for each playthrough. For example, you might want a repeat ending with two segments but four total playthroughs, where the first two playthroughs use the first repeat ending segment and the final two playthroughs use the second repeat ending segment.

In Dorico Elements, repeat endings are categorized as system objects. Therefore, repeat endings follow your per-layout settings for the visibility and positioning of system objects.

RELATED LINKS

Input methods for repeats and tremolos on page 395
Dividing playthroughs across repeat ending segments on page 1211
Changing the positions of system objects on page 1304
Repeats in playback on page 534
Changing the number of playthroughs at repeat barlines on page 536
Lines on page 1174

Changing the total number of playthroughs in repeat endings

By default, each segment in repeat endings is played once, so each segment shows a single digit that indicates the playthrough for which it is used. You can increase the total number of playthroughs for repeat endings individually so that segments are played more than once.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** 3 is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the repeat endings whose total number of playthroughs you want to change. You can do this in Write mode and Engrave mode.
- **2.** In the Properties panel, activate **No. times played** in the **Repeat Endings** group.
- **3.** Change the value in the value field.

NOTE

You cannot have fewer playthroughs than the number of segments.

RESULT

The total number of playthroughs in the selected repeat endings is changed. Dorico Elements adds additional playthroughs to the last closed segment in the repeat ending.

AFTER COMPLETING THIS TASK

Once you have set the total number of playthroughs, you can then change which segment is used for each playthrough.

RELATED LINKS

Properties panel on page 646

Engrave toolbox on page 490

Repeats in playback on page 534

Changing the number of playthroughs at repeat barlines on page 536

Muting notes/items individually on page 533

Input methods for repeats and tremolos on page 395

Dividing playthroughs across repeat ending segments

You can control how the total number of playthroughs is divided across the different segments in individual repeat endings. For example, if in a repeat ending with six playthroughs, you want to include playthroughs 1 to 3 in the first ending and playthroughs 4 to 6 in the second ending.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing 3** is selected in the Engrave toolbox.

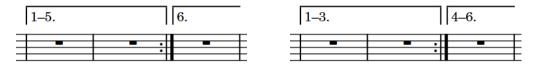
PROCEDURE

- 1. In Engrave mode, select an individual segment in the repeat ending structure whose included playthroughs you want to change.
- 2. In the Properties panel, activate **Times played for segment** in the **Repeat Endings** group.
- **3.** Enter the number of each playthrough that you want to include in the selected segment, with each playthrough separated by a comma.
 - For example, for a repeat ending with six playthroughs, enter **4,5,6** to include the 4th, 5th, and 6th playthroughs in the second segment.

RESULT

The playthroughs included in the selected segment are changed.

EXAMPLE



Default distribution of playthroughs

Customized distribution of playthroughs

Lengthening/Shortening segments in repeat endings

You can increase/decrease the number of bars included in each segment of repeat endings by lengthening/shortening each segment independently.

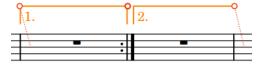
PROCEDURE

1. In Write mode, select the repeat ending you want to lengthen/shorten.

NOTE

You can only lengthen/shorten one repeat ending segment at a time.

2. Select the circular handle at the end of the segment you want to lengthen/shorten.



The selected handle in the middle has a thicker line.

3. Click and drag the handle to the right/left to snap it to the next/previous barline.

NOTE

Segments must contain at least one bar.

4. Optional: Repeat steps 1 to 3 for each segment in the repeat ending.

RESULT

The selected segment is lengthened/shortened.

NOTE

- This does not automatically input or move repeat barlines. You must input and delete repeat barlines as appropriate manually.
- You can also lengthen/shorten the final segment in a single repeat ending by selecting the repeat ending and using the following key commands:
 - To lengthen the final segment, press **Shift-Alt/Opt-Right Arrow**.
 - To shorten the final segment, press Shift-Alt/Opt-Left Arrow.

RELATED LINKS

Input methods for bars, beats, and barlines on page 294 Deleting notes/items on page 443

Positions of repeat endings

Repeat endings are placed above the staff at the same positions as other system objects, and their hooks align with barlines. They are commonly positioned outside of other notations, but some long items, such as gradual tempo changes, can be placed above repeat endings.

You can move repeat endings to different rhythmic positions in Write mode.

You can move each repeat ending segment graphically in Engrave mode and independently of other segments in the repeat ending; however, this does not change the rhythmic positions to which they are attached.

In Engrave mode, each repeat ending segment has two square handles, one at the start and one at the end.

If repeat ending segments cross system and frame breaks, you can move the segments on each side of the break independently.



Repeat endings are categorized as system objects in Dorico Elements, which you can show above the first bracket of selected instrument families. You can change the instrument families above which system objects appear in each layout independently; for example, if you want repeat endings to appear at multiple vertical positions in each system in the full score only.

RELATED LINKS

Moving notes/items rhythmically on page 448
Moving items graphically on page 501
Changing the positions of system objects on page 1304
Input methods for repeats and tremolos on page 395

Editing repeat ending text

You can replace the text shown in individual segments in repeat endings with custom text. By default, it shows the playthrough numbers for the segment.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing 3** is selected in the Engrave toolbox.

PROCEDURE

- 1. In Engrave mode, select the repeat ending segments whose text you want to change.
- 2. In the Properties panel, activate **Custom text** in the **Repeat Endings** group.
- 3. Enter the text you want into the value field.
- 4. Press Return.

RESULT

The text shown in the selected segments is changed.

Deactivating **Custom text** restores the default text for the selected repeat ending segments.

NOTE

- Deactivating properties permanently deletes any custom text entered.
- You can edit the formatting of the Repeat Endings Font in the Edit Font Styles dialog. For
 example, if you want all repeat ending text project-wide to appear in italics.

RELATED LINKS

Properties panel on page 646 Engrave toolbox on page 490 Dividing playthroughs across repeat ending segments on page 1211 Edit Font Styles dialog on page 737

Changing the appearance of repeat ending segments

You can change the appearance and length of individual repeat ending segments, independently of other segments.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing I** is selected in the Engrave toolbox.

PROCEDURE

1. In Engrave mode, select the repeat ending segments whose appearance you want to change.

NOTE

You must select either only final segments or only preceding segments.

- 2. In the Properties panel, activate **End of line** in the **Repeat Endings** group.
- **3.** Select one of the following options from the menu:
 - Open, short
 - Open, full length
 - Closed

RESULT

The appearance of the selected repeat ending segments is changed.

Lengthening/Shortening repeat ending hooks

You can lengthen/shorten the hooks in repeat endings individually. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

NOTE

You cannot change the hook length of an individual segment in a repeat ending. Changing the hook length affects the whole repeat ending.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing 3** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- 1. In Engrave mode, select the repeat endings whose hooks you want to lengthen/shorten.
- 2. In the Properties panel, activate **Hook length** in the **Repeat Endings** group.
- 3. Change the value in the value field.

RESULT

Increasing the value makes repeat ending hooks longer. Decreasing the value makes repeat ending hooks shorter. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490

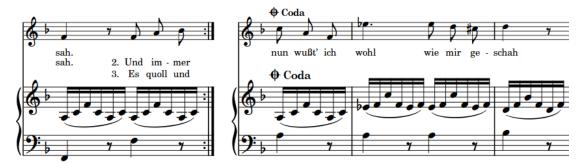
Repeat endings in MusicXML files

All aspects of repeat endings can be imported from and exported in MusicXML files.

However, while MusicXML can represent this, segments in the middle of sets of endings cannot have an open right-hand end in Dorico Elements.

Repeat markers

Repeat markers show that musical material is to be repeated, but unlike repeat endings, repeat markers often involve jumping to different positions and sections in the music instead of moving through the music consecutively.



A mid-system coda section

In Dorico Elements, repeat markers are divided into the following types:

Repeat jumps

Specify the position from which players or playback must jump, such as *D.C. al Coda* or *D.S. al Fine*.

Repeat jumps are right-aligned with their rhythmic position, meaning their text or symbol ends at that rhythmic position and extends to the left.

D.C. al Coda

D.S. al Fine

Repeat sections

Specify the destinations for jumps, such as *segno* or *coda*, or where the music should end, such as *Fine*. In Dorico Elements, coda sections that start mid-system are automatically separated from the preceding music with a gap. Coda sections at the start of systems are indented by the same amount.

Repeat markers are left-aligned with their rhythmic position, meaning their text or symbol starts at that rhythmic position and extends to the right.





Fine

By default, repeat markers are shown on a single line, but you can show them on two lines individually to reduce their horizontal length if necessary. You can also customize their paragraph styles, including changing their font size, in the **Paragraph Styles** dialog.

RELATED LINKS

Input methods for repeats and tremolos on page 395 Showing repeat markers on one/two lines on page 1219 Paragraph Styles dialog on page 739 Repeats in playback on page 534 Repeat counts on page 1222 Changing the gap before codas on page 1221 Types of barlines on page 799

Repeat marker paragraph styles

Repeat markers use paragraph styles to format their fonts, including their size, spacing, alignment, and other formatting options. Because the different types of repeat markers require different formatting, they each have a separate paragraph style by default.

Dorico Elements provides the following default paragraph styles for repeat markers:

- **Repeat Marker Jumps**: The default paragraph style used for repeat jumps, such as *D.C. al Coda* or *D.S. al Fine*.
- Repeat Marker Sections: The default paragraph style used for repeat sections, such as coda or Fine.

By default, the formatting of these paragraph styles is the same but you can edit paragraph styles independently of each other in the **Paragraph Styles** dialog; for example, if you want to decrease the size of repeat jumps but leave repeat sections with their default size.

NOTE

The **Repeat Marker Jumps** paragraph style inherits settings from the **Repeat Marker Sections** style. If you change the **Repeat Marker Sections** paragraph style, this also affects any corresponding options for the **Repeat Marker Jumps** paragraph style that have not been overridden.

RELATED LINKS

Paragraph Styles dialog on page 739
Showing repeat markers on one/two lines on page 1219

Changing the index for repeat markers

You can change the index of individual repeat markers; for example, if a flow requires two different codas with different symbols so players can tell them apart.

By default, all repeat markers of the same type have the same appearance, even when there are multiple repeat markers in the flow.

NOTE

You cannot change the index of *Fine* or *D.C.* repeat markers.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, Graphic Editing 3 is selected in the Engrave toolbox.

PROCEDURE

1. Select the repeat marker whose index you want to change. You can do this in Write mode and Engrave mode.

- **2.** In the Properties panel, activate the following properties, individually or together as appropriate for your selection, in the **Repeat Markers** group:
 - Marker index
 - 'Jump to' index
- 3. Change the values in the value fields.

NOTE

You can only enter values between 1 and 3.

RESULT

Marker index changes the order of the selected repeat marker relative to other repeat markers of the same type.

'Jump to' index changes the destination of the selected repeat marker.

EXAMPLE

If you have two codas in a flow with two different D.S. al Coda markers, you might set **Marker index** to **1** for the first coda and **2** for the second, then set **'Jump to' index** to **1** for the first D.S. al Coda marker and **2** for the second.

D.S. % al **⊕**

D.S. \% al \theta 2

D.S. al Coda marker with default indexes

D.S. al Coda marker with both indexes set to 2

RELATED LINKS

Properties panel on page 646
Engrave toolbox on page 490
Repeats in playback on page 534
Input methods for repeats and tremolos on page 395

Editing repeat marker text

You can change the text shown in individual repeat markers; for example, if you are typesetting a score with an unusual repeat marker instruction.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** 3 is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the repeat markers whose text you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Custom text** in the **Repeat Markers** group.
- 3. Enter the text you want into the value field.
- 4. Press Return.

RESULT

The text shown in the selected repeat markers is changed. Segno symbols and coda symbols in *D.C./D.S.* repeat jumps are removed and replaced with your custom text.

Showing repeat markers on one/two lines

You can show individual repeat markers either on a single line or spread across two lines, independently of your per-layout settings; for example, if a single long repeat marker extends beyond the page margins in one part layout. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

NOTE

You can only change the word wrapping of repeat jumps, such as *D.C. al Fine* and *D.S. al Coda*, that do not have custom text.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- 1. In Engrave mode, select the repeat markers whose word wrapping you want to change.
- 2. In the Properties panel, activate **Word wrap** in the **Repeat Markers** group.
- **3.** Activate/Deactivate the corresponding checkbox.

RESULT

The selected repeat markers are shown on two lines when the checkbox is activated, and on one line when the checkbox is deactivated. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

When the property is deactivated, repeat markers follow your per-layout setting for word wrapping.

TIP

You can show all repeat markers on two lines in each layout independently in **Layout Options** > **Staves and Systems** > **Repeat Markers**. For example, you can show them on one line in the full score but on two lines in part layouts.

EXAMPLE



Repeat marker without word wrapping



Repeat marker with word wrapping

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490 Layout Options dialog on page 728

Hiding/Showing repeat markers

You can hide/show repeat markers individually; for example, if you want a separated coda section without showing the coda symbol and text.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the repeat markers you want to hide, or the signposts of repeat markers you want to show. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate/deactivate Hide in the Repeat Markers group.

RESULT

The selected repeat markers are hidden when **Hide** is activated, and shown when it is deactivated.

Signposts are shown at the position of each hidden repeat marker. However, signposts are not printed by default.

TIP

You can hide/show repeat marker signposts by choosing **View > Signposts > Repeat Markers**.

RELATED LINKS

Properties panel on page 646 Engrave toolbox on page 490 Signposts on page 438 Input methods for repeats and tremolos on page 395

Positions of repeat markers

Repeat markers are placed above the staff by default, and at the same positions as other system objects. Coda sections are separated from the preceding music by a gap in the system.

You can move repeat markers to different rhythmic positions in Write mode.

You can move repeat markers graphically in Engrave mode, but this does not change the rhythmic positions to which they are attached.

You can change the default staff-relative placement of repeat markers in each layout independently.

Repeat markers are categorized as system objects in Dorico Elements, which you can show above the first bracket of selected instrument families. You can change the instrument families above which system objects appear in each layout independently; for example, if you want repeat markers to appear at multiple vertical positions in each system in the full score only.

RELATED LINKS

Input methods for repeats and tremolos on page 395 Layout Options dialog on page 728 Changing the positions of system objects on page 1304 Moving notes/items rhythmically on page 448 Moving items graphically on page 501 Repeats in playback on page 534

Changing the staff-relative placement of repeat markers

You can show repeat markers either above, below, or both above and below the staff in each layout independently.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- **2.** In the **Layouts** list, select the layouts in which you want to change the staff-placement of repeat markers.

By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, **Shift** -clicking adjacent layouts, and **Ctrl/Cmd** -clicking individual layouts.

- **3.** In the category list, click **Staves and Systems**.
- **4.** In the **Repeat Markers** section, choose one of the following options for **Default placement for repeat jumps and 'Fine'**:
 - Above staff
 - Below staff
 - Above and below bottom staff
- 5. Click Apply, then Close.

RESULT

The staff-relative placement of all repeat markers is changed in the selected layouts.

Changing the gap before codas

You can change the gap preceding individual coda sections.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** [7] is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the codas whose gap you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Coda gap width** in the **Repeat Markers** group.

3. Change the value in the value field.

RESULT

The gap preceding the selected coda sections is changed.

RELATED LINKS

Moving the start/end of systems on page 500 Changing the first system indent on page 1305 Hiding/Showing systemic barlines and brackets/braces on page 802

Input methods for repeats and tremolos on page 395

Repeat counts

Repeat counts at end repeat barlines tell performers how many times to play through sections of music. This is particularly helpful for sections played through three or more times, as end repeat barlines typically indicate that the preceding music is played through twice.

By default, Dorico Elements shows repeat counts at system object positions for end repeat barlines set to have three or more playthroughs, when repeats are included in playback.



Repeat count at the end of a section, indicating it should be played four times

Repeat counts are right-aligned with their end repeat barline by default. You can change the location of repeat counts; for example, if you want to show repeat counts at both the start and end of repeated sections, or hide repeat counts entirely. Repeat counts shown at the start of repeated sections are left-aligned with start repeat barlines.

TIP

Repeat counts use the **Repeat Counts** paragraph style, which you can edit in the **Paragraph Styles** dialog.

RELATED LINKS

Changing the number of playthroughs at repeat barlines on page 536

Repeats in playback on page 534

Input methods for bars, beats, and barlines on page 294

Changing the positions of system objects on page 1304

Changing the application language on page 55

Paragraph Styles dialog on page 739

Bar repeat counts on page 1226

Slash region counts on page 1243

Numbered bar region counts on page 1232

Changing the location of repeat counts

You can change the location of individual repeat counts relative to the repeated section. For example, if you want to show some repeat counts at the start of repeated sections or hide some repeat counts entirely. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- Repeats are included in playback.
- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing 1** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** Select the end repeat barlines or repeat counts whose count location you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Count location** in the **Time Signatures** group.
- **3.** Select one of the following options from the menu:
 - Start
 - End
 - Neither
 - Both

RESULT

The location of the selected repeat counts is changed. Repeat counts shown at the start of repeated sections are left-aligned with the start repeat barlines that correspond to the selected end repeat barlines.

If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

EXAMPLE





Both

Neither

RELATED LINKS

Properties panel on page 646

Changing the property scope on page 648

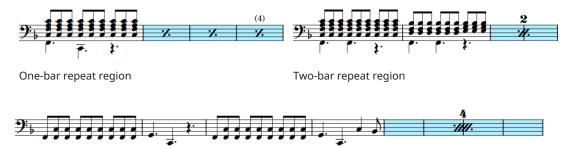
Engrave toolbox on page 490

Changing the number of playthroughs at repeat barlines on page 536

Bar repeats

Bar repeats indicate that the musical material in preceding bars must be repeated exactly, but without notating that material again. Bar repeats can comprise groups of one, two, or four bars.

For example, a one-bar repeat indicates that the material in one bar is repeated, meaning every bar in the region repeats the same material. A four-bar repeat indicates that the material in the previous four bars is repeated.



Four-bar repeat region

This notation short-hand can make repetitive music easier to read, as performers must only read the repeated phrase once and then simply count how many times they repeat it. Bar repeats can also save horizontal space, as bar repeat symbols are usually narrower than the equivalent fully written-out bars.

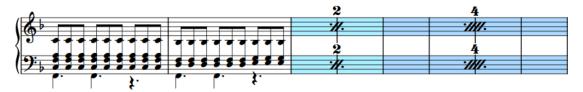
In Dorico Elements, bar repeat regions are used to display bar repeats, meaning as many bar repeat symbols as necessary to fill the region are shown automatically.

In Write mode, each region has a handle at the start and end, which you can use to move and lengthen/shorten regions.



By default, bar repeat regions are highlighted with a colored background. As you zoom out, the highlights become more opaque, which is especially useful when viewing full score layouts in galley view. These highlights are considered annotations, are not printed by default, and you can hide/show them.

You can also show adjacent bar repeat regions; for example, if you want to use a two-bar repeat in the first iteration of a phrase, and then a four-bar repeat to indicate the whole phrase is repeated. When two different bar repeat regions are adjacent, they alternate highlight colors to ensure the separate regions are always identifiable.



Phrase containing two adjacent bar repeat regions

RELATED LINKS

Inputting bar repeats on page 407
Numbered bar regions on page 1231
Slash regions on page 1239
Repeat counts on page 1222
Hiding/Showing multi-bar rests on page 1258
Changing the number of playthroughs at repeat barlines on page 536
Annotations on page 581

Changing the length of the repeated phrase in bar repeat regions

You can change the number of bars that make up the repeated phrase in individual bar repeats after you have input them; for example, if you want the region to repeat the previous two bars rather than the previous four bars.

NOTE

You cannot repeat more bars than exist before the bar repeat region. For example, if a bar repeat region follows the first notated bar in a flow, you cannot increase the number of bars in the repeated phrase.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing 3** is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the bar repeat regions whose phrase length you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, select one of the following options from the **No. bars** menu in the **Bar Repeat Regions** group:
 - One bar
 - Two bars
 - Four bars

RESULT

The number of bars that make up the repeated phrase in the selected bar repeat regions is changed. This is also reflected in playback.

TIP

- Any dynamics you add within bar repeat regions affect the playback of the repeated music.
- You can also change the length of the repeated phrase by opening the repeats popover and changing the entry.

RELATED LINKS

Properties panel on page 646 Engrave toolbox on page 490 Repeats popover on page 395

Hiding/Showing region highlights

You can hide/show colored highlights for bar repeat and numbered bar regions at any time; for example, if you want to show the highlights when inputting music but hide them when engraving.

PROCEDURE

Choose View > Highlight Bar Repeat Regions.

RELATED LINKS

Numbered bar regions on page 1231

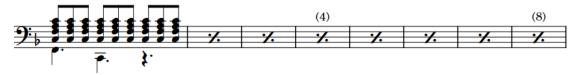
Bar repeat counts

Bar repeat counts are numbers shown at regular intervals either above or below bar repeats, to help performers keep track of how many bars have passed. The intervals are usually based on typical musical phrases, such as every four or eight bars.

NOTE

Bar repeat counts are only shown on one-bar repeat regions.

Because bar repeats must start with a fully notated phrase of at least one bar, the bar repeat count starts from the notated bar rather than the first bar in the bar repeat region. For example, the third bar in a bar repeat region shows the count number 4, as that bar is the fourth time the original notated bar is played. Each bar repeat region has its own separate count.



Bar repeat region with counts shown every four bars

In Dorico Elements, you can change the start count of each bar repeat region, how frequently counts are shown, and whether counts are shown with parentheses, without parentheses, or hidden. You can also customize the count font style.

NOTE

Bar repeat, slash, and numbered bar region counts use the same font style.

RELATED LINKS

Inputting bar repeats on page 407
Hiding/Showing multi-bar rests on page 1258
Hiding/Showing bar number ranges on multi-bar rests on page 810
Repeat counts on page 1222
Slash region counts on page 1243
Numbered bar region counts on page 1232

Changing the start count of bar repeats

You can change the number from which individual bar repeats start; for example, if you want to notate the first bar in a repeated phrase at the start of each system, but show a continuous count across multiple bar repeats.

NOTE

- The start count applies to the first bar in the bar repeat, which is the notated bar. For example, changing the start count of a one-bar repeat region lasting three bars to **5**, with bar repeat counts shown every four bars, causes the count at the end of the bar repeat region to show the number 8.
- Bar repeat counts are only shown on one-bar repeat regions.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.

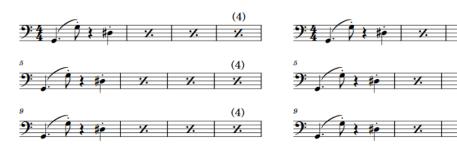
PROCEDURE

- **1.** Select the one-bar repeat regions whose start count you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Count from** in the **Bar Repeat Regions** group.
- 3. Change the value in the value field.

RESULT

The start count of the selected bar repeat regions is changed. If the count frequency is every two bars or more, counts appear on different bars. For example, changing the start count from 1 to 2, with counts shown every four bars, causes the count to appear on the second bar in the bar repeat region instead of the third.

EXAMPLE



Separate bar repeats on multiple systems in the same part layout with the default count

Separate bar repeats on multiple systems in the same part layout with their counts changed to imply a continuous region

(4)

(8)

(12)

Changing the bar repeat count frequency

You can change how often counts are shown on individual one-bar repeat regions; for example, if you want to show the count after eight bars on a single bar repeat region.

NOTE

Bar repeat counts are only shown on one-bar repeat regions.

PREREOUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the one-bar repeats whose count frequency you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate Count frequency in the Bar Repeat Regions group.
- **3.** Change the value in the value field.

RESULT

The count frequency is changed for the selected bar repeat regions.

RELATED LINKS

Properties panel on page 646

Engrave toolbox on page 490

Hiding/Showing bar number ranges on multi-bar rests on page 810

Hiding/Showing or parenthesizing bar repeat counts

You can hide counts or show counts with or without parentheses for individual bar repeat regions. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

NOTE

Bar repeat counts are only shown on one-bar repeat regions.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, Graphic Editing I is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** Select the one-bar repeats whose counts you want to hide/show or parenthesize. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate Count appearance in the Bar Repeat Regions group.
- **3.** Select one of the following options from the menu:
 - With parentheses
 - Without parentheses
 - Do not show

RESULT

Counts in the selected bar repeat regions are shown with parentheses, without parentheses, or hidden. If the property scope was set to Locally, this change only takes effect in the current layout and frame chain.

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648

Editing the count font style

You can edit the formatting of the font style used for all bar repeat, slash, and numbered bar region counts project-wide; for example, if you want counts to appear bold and italic.

PROCEDURE

- 1. Choose **Library** > **Font Styles** to open the **Edit Font Styles** dialog.
- 2. In the font styles list, select Bar Repeat Count.
- 3. Activate the following options, individually or together, to change the corresponding aspect of the font:
 - Font family
 - Size
 - Style
 - **Underlined**
- **4.** Click **OK** to save your changes and close the dialog.

RESULT

The formatting of the font style used for counts in bar repeat, slash, and numbered bar regions is changed project-wide.

RELATED LINKS

Edit Font Styles dialog on page 737 Slash region counts on page 1243 Numbered bar region counts on page 1232

Bar repeat grouping

Bar repeat grouping allows you to consolidate longer bar repeat regions, which can be helpful in very regular music as it can simplify the overall phrasing.

The symbols shown on the staff are different for the different groupings, and two-bar and four-bar repeats also show a number to indicate how many bars are included in the group.









One-bar repeat symbol

Two-bar repeat symbol

Three-bar repeat symbol Four-bar repeat symbol

You can specify the grouping when inputting bar repeats, and you can change the grouping of bar repeats after they have been input. Depending on where the bar repeat region starts

and ends relative to the written material, Dorico Elements automatically adjusts the displayed symbols to achieve an accurate result. For example, an eight-bar phrase containing a single notated bar followed by seven one-bar repeats grouped every four bars is automatically shown with a one-bar repeat, two-bar repeat, then four-bar repeat to fill the seven bars.



Eight-bar phrase with seven one-bar repeats grouped every four bars

TIP

When showing multi-bar rests, you can also choose to consolidate one-bar repeat regions.

RELATED LINKS

Inputting bar repeats on page 407 Hiding/Showing multi-bar rests on page 1258

Changing bar repeat grouping

You can change how bar repeats are grouped after they have been input; for example, if you want to group a region of one-bar repeats every two bars.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing 1** is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the bar repeat regions whose grouping you want to change. You can do this in Write mode and Engrave mode.
- **2.** In the Properties panel, select one of the following options from the **Group every** menu in the **Bar Repeat Regions** group:
 - One bar
 - Two bars
 - Four bars

NOTE

The options available depend on the minimum length of the selected bar repeat regions. For example, if you select bar repeat regions that last three bars, only **One bar** and **Two bars** are available in the menu.

RESULT

The grouping in the selected bar repeat regions is changed. Dorico Elements automatically calculates the clearest way to group the region. For example, an eight-bar phrase containing a single notated bar followed by seven one-bar repeats grouped every four bars is automatically shown with a one-bar repeat, two-bar repeat, then four-bar repeat to fill the seven bars.

Numbered bar regions

Numbered bar regions allow you to show bar counts in specific regions without additional notations. This can help performers keep track of how many bars have passed when playing repetitive music.



Numbered bar region spanning six bars

By default, numbered bar regions are hidden in full score/custom score layouts and shown in part layouts. You can hide/show numbered bar regions in each layout independently.

In Write mode, each region has a handle at the start and end, which you can use to move and lengthen/shorten regions.



By default, numbered bar regions are highlighted with a colored background. As you zoom out, the highlights become more opaque, which is especially useful when viewing full score layouts in galley view. These highlights are considered annotations, are not printed by default, and you can hide/show them.

When two different numbered bar regions are adjacent, they alternate highlight colors to ensure the separate regions are always identifiable.



Phrase containing two adjacent numbered bar regions

RELATED LINKS

Inputting numbered bar regions on page 408
Editing the count font style on page 1229
Hiding/Showing region highlights on page 1226
Bar repeats on page 1224
Slash regions on page 1239
Repeat counts on page 1222
Hiding/Showing bar numbers on page 808

Hiding/Showing numbered bar regions

You can input numbered bar regions in any layout, but by default they do not appear in full score layouts, as they are normally most useful in part layouts. You can hide/show numbered bar regions in each layout independently.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- 2. In the **Layouts** list, select the layouts in which you want to hide/show numbered bar regions. By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
- **3.** In the category list, click **Players**.
- **4.** In the **Numbered Bar Regions** section, activate/deactivate **Show bar count in numbered** bar regions.
- 5. Click Apply, then Close.

RESULT

Numbered bar regions are shown in the selected layouts when the checkbox is activated, and hidden when the checkbox is deactivated.

Numbered bar region counts

Numbered bar region counts are numbers shown at regular intervals either above or below the staff, to help performers keep track of how many bars have passed.

By default, bar counts are shown on every bar in numbered bar regions. They are also shown on the last bar in each system and on the first and last bars in each region, regardless of the count frequency.

When numbered bar regions last four or more bars, Dorico Elements adds the total range in parentheses to the count on the first bar, such as showing "1 (-8)" on the first bar in a numbered bar region lasting eight bars.



Numbered bar region with counts shown every three bars, count and range shown at the start, and parenthesized count shown at the end of the system

In Dorico Elements, you can change the start count of each numbered bar region, how frequently counts are shown, their staff-relative placement, and whether counts and ranges are shown with parentheses, without parentheses, or hidden. You can also customize the count font style.

NOTE

Bar repeat, slash, and numbered bar region counts use the same font style.

RELATED LINKS

Inputting numbered bar regions on page 408 Editing the count font style on page 1229 Repeat counts on page 1222 Bar repeat counts on page 1226 Slash region counts on page 1243

Changing the start count of numbered bar regions

You can change the number from which individual numbered bar regions start; for example, if you want to show a continuous count across multiple numbered bar regions.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the numbered bar regions whose start count you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Count from** in the **Bar Repeat Regions** group.
- **3.** Change the value in the value field.

RESULT

The start count of the selected numbered bar regions is changed. If the count frequency is every two bars or more, counts appear on different bars. For example, changing the start count from 1 to 2, with counts shown every four bars, causes the count to appear on the third bar in the region instead of the fourth.

Changing the numbered bar region count frequency

You can change how frequently counts are shown in individual numbered bar regions; for example, if you want to show the count after eight bars in a single numbered bar region.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the numbered bar regions whose count frequency you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate Count frequency in the Bar Repeat Regions group.
- **3.** Change the value in the value field.

RESULT

The count frequency is changed for the selected numbered bar regions.

RELATED LINKS

Properties panel on page 646
Engrave toolbox on page 490
Inputting numbered bar regions on page 408
Hiding/Showing bar number ranges on multi-bar rests on page 810

Hiding/Showing or parenthesizing numbered bar region counts

You can show counts with or without parentheses for individual numbered bar regions. You can also hide/show or parenthesize counts at the ends of systems and on the first and last bars in each region independently of each other. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** Select the numbered bar regions whose counts you want to hide/show or parenthesize. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate Count appearance in the Bar Repeat Regions group.
- **3.** Select one of the following options from the menu:
 - Without parentheses
 - With parentheses
- **4.** Activate **Range appearance** and select one of the following options from the menu:
 - With parentheses
 - Without parentheses
 - No range
- **5.** Activate the following properties, individually or together, to change the appearance of the corresponding count:
 - Show in first bar
 - Show in final bar
 - Show at ends of systems
- **6.** Select one of the following options from each menu:
 - With parentheses
 - Without parentheses
 - Do not show

RESULT

The corresponding counts and ranges in the selected numbered bar regions are shown with parentheses, without parentheses, or hidden. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

EXAMPLE



Counts and range shown without parentheses

Range hidden and counts shown with parentheses

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648

Changing the staff-relative placement of numbered bar region counts

You can show the counts in individual numbered bar regions either above or below the staff. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

NOTE

Changing the staff-relative placement of counts affects all counts in the region. You cannot change the placement of a single count independently of other counts in the region.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- 1. Select the numbered bar regions whose count staff-relative placement you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Staff-relative position** in the **Bar Repeat Regions** group.
- 3. Choose one of the following options:
 - Above
 - Below

RESULT

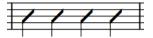
The staff-relative placement of all counts in the selected numbered bar regions is changed. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

Rhythm slashes

Rhythm slashes are diagonal lines positioned on staves that are used to indicate that performers should play something, but without specifying the exact rhythms and pitches. They are often accompanied by chord symbols to indicate the set of notes the performer should use.

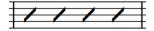
There are two different types of rhythm slashes:

Slashes with stems



Slashes with stems usually indicate the rhythm to be played, but not the pitches. Also known as "rhythmic notation".

Slashes without stems



Slashes without stems do not usually indicate either rhythms or pitches. Also known as "slash notation"

In Dorico Elements, you can present both types of rhythm slashes simultaneously by using a combination of slash regions and slash voices.

RELATED LINKS

Inputting slash regions on page 406
Inputting notes into slash voices on page 229
Hiding/Showing notes alongside slash regions on page 1241
Including/Excluding slash voices in playback on page 1238
Chord symbols on page 852

Slash voices

Slash voices allow you to notate specific rhythms for rhythm slashes. They behave similarly to normal voices as you must input notes and rhythms manually, but all notes in slash voices are positioned by default on the middle line of the staff, regardless of the pitches you input.

If you later change the time signature, such as from 3/4 to 6/8, Dorico Elements only changes the note grouping to fit the meter just like for other notes; it does not change the presentation of rhythm in slash voices like it does for slash regions.

NOTE

- Because you can change notes in slash voices to normal voices and vice versa, the pitches you input are retained.
- By default, notes in slash voices are not played back. However, if you include slash voices in playback, notes in slash voices play back with their input pitch.

You can have multiple slash voices active at the same time. To accommodate all slash voices in multiple-voice contexts, Dorico Elements changes their staff position automatically. However, you can also change the staff position of rhythm slashes manually.

You can use slash regions and slash voices in the same project and at the same rhythmic positions; for example, you can input a slash region where you do not want to be specific about the rhythm, then input notes in a slash voice for a single bar where you want to specify an exact rhythm.

RELATED LINKS

Slashes in multiple-voice contexts on page 1246 Implicit rests in multiple-voice contexts on page 1251 Inputting notes into slash voices on page 229 Changing the voice of existing notes on page 453

Changing the slash voice type

You can change the voice type of slash voices; for example, if you want to change a slash voice from having stems to being stemless. You can also change the type to normal notes, which restores the original pitches you input, and change normal notes to rhythm slashes.

NOTE

This affects all notes in the same voice. If you only want to change the slash voice type of some notes, you must change the voice of those notes instead.

PREREQUISITE

If you are in Engrave mode, **Graphic Editing** Is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select a note in the voice whose slash type you want to change. You can do this in Write mode and Engrave mode.
- 2. Choose Edit > Notations > Voices > Rhythmic Slashes > [Voice type].
 For example, to change a whole normal voice to a stemless slash voice, choose Edit > Notations > Voices > Rhythmic Slashes > Slashes without Stems.

TIP

You can also choose these options from the context menu.

RESULT

The slash voice type of all notes in the same voice and flow as the selected note is changed.

If you change normal notes to a slash voice, they are all automatically positioned on a single staff line. By default in single-voice contexts, this is the middle line of the staff.

If you change rhythm slashes to normal notes, their original pitches are restored, meaning their staff positions reflect their pitches.

RELATED LINKS

Engrave toolbox on page 490

Adding slash voices to percussion kits

You can add slash voices to percussion kits; for example, to show the desired rhythm for a passage without specifying the instruments to be played. You can add multiple slash voices to the same kit, including slash voices with and without stems.

NOTE

Rhythm slashes in percussion kits only appear when the five-line staff presentation is used. They do not appear in grid or single-line instrument presentations.

PROCEDURE

- **1.** In Setup mode, in the **Players** panel, expand the card of the player holding the percussion kit to which you want to add slash voices.
- 2. In the kit instrument label, click the instrument menu and choose **Edit Percussion Kit** to open the **Edit Percussion Kit** dialog.
- **3.** In the action bar below the five-line staff editor, click the button that corresponds to the type of slash voice you want to add.
 - Slashes with stems
 - Slashes without stems

RESULT

The corresponding type of slash voice is added to the kit. It is positioned on the middle line of the staff by default.

During note input, you can move the caret to slash voices just like moving it to other instruments in the kit, and input notes into slash voices just like inputting notes in percussion kit instruments.

AFTER COMPLETING THIS TASK

You can change the staff position of slash voices in the kit.

RELATED LINKS

Percussion kits and drum sets on page 140
Percussion kit presentation types on page 1406
Players panel on page 108
Edit Percussion Kit dialog on page 140
Moving instruments in percussion kits on page 146

Including/Excluding slash voices in playback

By default, notes in slash voices are not played back. You can include/exclude all notes in slash voices project-wide in playback.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-P to open Playback Options.
- 2. In the category list, click Repeats.
- 3. In the Rhythm Slashes section, activate/deactivate Play slash voices.
- **4.** Click **Apply**, then **Close**.

RESULT

All notes in slash voices project-wide are included in playback when **Play slash voices** is activated, and excluded when it is deactivated.

When slash voices are included in playback, notes in slash voices play back with their input pitch.

RELATED LINKS

Playback Options dialog on page 732 Repeats in playback on page 534 Including/Excluding pauses in playback on page 997 Inputting notes into slash voices on page 229

Slash regions

Slash regions automatically display rhythm slashes as appropriate for the meter throughout their duration; for example, they show four slashes per bar in 4/4 and two slashes per bar in 6/8 by default. A single slash region can extend across multiple different meters.



A single slash region covering multiple different meters

Multiple slash regions can exist at the same rhythmic position. When slash regions overlap, Dorico Elements treats this as a multiple-voice context and changes the staff position of slashes automatically.

In Write mode, each region has a handle at the start and end, which you can use to move and lengthen/shorten regions.



By default, slash regions are highlighted with a colored background. As you zoom out, the highlights become more opaque, which is especially useful when viewing full score layouts in galley view. These highlights are considered annotations, are not printed by default, and you can hide/show them.

When two different slash regions are adjacent, they alternate highlight colors to ensure the separate regions are always identifiable.



Two adjacent slash regions with different highlight colors

You can use slash regions and slash voices in the same project and at the same rhythmic positions; for example, you can input a slash region where you do not want to be specific about the rhythm, then input notes in a slash voice for a single bar where you want to specify an exact rhythm.

By default, Dorico Elements hides notes at the same rhythmic positions as slash regions, but you can show notes alongside individual slash regions.

TIP

Because rhythm slashes are often accompanied by chord symbols to indicate the set of notes the performer should use, you can show chord symbols in slash/chord symbol regions but hide them elsewhere.

RELATED LINKS

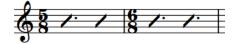
Inputting slash regions on page 406
Hiding/Showing chord symbols on page 859
Chord symbol regions on page 863
Numbered bar regions on page 1231
Bar repeats on page 1224
Repeat counts on page 1222
MIDI trigger regions on page 559
Annotations on page 581

Note grouping in slash regions

You can find options to control the grouping and duration of rhythm slashes in slash regions in each flow independently in **Notation Options** > **Note Grouping** > **Rhythmic Slashes**.

The available options include changing whether rhythm slashes follow the beat grouping or the time signature denominator, and set the duration for rhythm slashes in open meter. For example, you can show six slashes in 6/8 instead of two dotted slashes.

Musical examples demonstrate how each option affects the appearance of your music.





Rhythm slashes following beat grouping

Rhythm slashes following time signature denominator

RELATED LINKS

Notation Options dialog on page 730 Note and rest grouping on page 841 Time signatures on page 1359

Splitting slash regions

You can split slash regions after they have been input; for example, if you later want to input more precise notation in the middle of an existing slash region.

PROCEDURE

- **1.** In Write mode, select a slash in each slash region you want to split, immediately to the right of where you want to split them.
- **2.** Split the slash regions in any of the following ways:
 - Press U.
 - In the Notes toolbox, click **Scissors** \square.

RESULT

The slash regions are split immediately to the left of the selected slashes. Each part now has its own start/end handles, which you can use to lengthen/shorten each part independently.

RELATED LINKS

Notes toolbox on page 192

Changing the slash region count frequency on page 1244

Lengthening/Shortening items on page 419

Moving notes/items rhythmically on page 448

Hiding/Showing stems in slash regions

You can hide/show stems and beams, where applicable, on slashes in individual slash regions. By default, slashes in slash regions are shown without stems.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, Graphic Editing 3 is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select any part of each slash region in which you want to hide/show stems. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Slash type** in the **Slash Regions** group.
- **3.** Choose one of the following options:
 - With stems
 - Without stems

RESULT

Stems are hidden in the selected slash regions when you choose **Without stems**, and shown when you choose **With stems**.

If appropriate for the prevailing meter, such as 3/8, beams are shown in addition to stems.

RELATED LINKS

Properties panel on page 646

Engrave toolbox on page 490

Hiding/Showing notes alongside slash regions

You can hide/show notes at the same rhythmic positions as slash regions; for example, if you want to input notes to hear in playback but only want to show the slash region, or if you want to notate suggested notes in addition to the slash region.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing ?** is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select any part of each slash region alongside which you want to hide/show other notes. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate/deactivate Show other voices in the Slash Regions group.

RESULT

All notes in other voices present alongside the selected slash regions are shown when **Show other voices** is activated, and hidden when it is deactivated.

EXAMPLE





Swing J = 108

Notes hidden alongside a slash region

Hiding/Showing padding rests before/after slash regions

You can hide/show padding rests before/after slash regions that start partway through bars individually; for example, if you have other notes at those positions and the rests would be misleading. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

By default, Dorico Elements automatically shows implicit padding rests around slash regions that start/end partway through bars, so that the full duration of each bar is clear.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing 3** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** Select any part of each slash region whose padding rests you want to hide/show. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate the following properties, individually or together, in the Slash Regions group:
 - Hide rests before start
 - Hide rests after end

RESULT

Padding rests are hidden on the corresponding side of the selected slash regions. For example, activating both properties hides padding rests both before and after the selected slash regions. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490 Implicit vs. explicit rests on page 1250

Hiding/Showing slash region highlights

You can hide/show the colored highlights for slash regions at any time; for example, if you want to show the highlights when inputting music but hide them when engraving.

PROCEDURE

• Choose View > Highlight Slash Regions.

Slash region counts

Slash region counts are numbers shown at regular intervals, either above or below slash regions, to help performers keep track of how many bars have passed. The intervals are usually based on typical musical phrases, such as every four or eight bars.

By default, slash region counts are shown in parentheses every four bars and are placed below the staff. Each slash region has its own separate count.



Slash region with counts shown every two bars

In Dorico Elements, you can change the start count of each slash region, how frequently counts are shown, their staff-relative placement, and whether counts are shown with parentheses, without parentheses, or hidden. You can also customize the count font style.

NOTE

Bar repeat, slash, and numbered bar region counts use the same font style.

RELATED LINKS

Editing the count font style on page 1229 Repeat counts on page 1222 Bar repeat counts on page 1226 Numbered bar region counts on page 1232

Changing the start count of slash regions

You can change the number from which individual slash region counts start; for example, if you want to input more precise notation between two slash regions but want the count to appear to continue across the regions.

PREREQUISITE

- The lower zone is shown.
- Properties is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing ?** is selected in the Engrave toolbox.

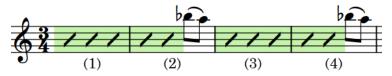
PROCEDURE

- **1.** Select any part of each slash region whose start count you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Count from** in the **Slash Regions** group.
- 3. Change the value in the value field.

RESULT

The start count of the selected slash regions is changed. If the count frequency is every two bars or more, counts appear on different bars. For example, changing the start count from 1 to 2, with counts shown every four bars, causes the count to appear on the third bar in the region instead of the fourth.

EXAMPLE



Two separate slash regions, where the start count in the second region has been changed so it appears to continue on from the first region.

Changing the slash region count frequency

You can change how frequently counts are shown on individual slash regions; for example, if you want to show the count after eight bars on a single slash region. By default, slash region counts are shown every four bars.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select any part of each slash region whose count frequency you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Count frequency** in the **Slash Regions** group.
- **3.** Change the value in the value field.

RESULT

The count frequency is changed for the selected slash regions.

RELATED LINKS

Properties panel on page 646

Engrave toolbox on page 490

Splitting slash regions on page 1240

Hiding/Showing bar number ranges on multi-bar rests on page 810

Hiding/Showing or parenthesizing slash region counts

You can hide counts or show counts with or without parentheses for individual slash regions. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** Select any part of each slash region whose counts you want to hide/show or parenthesize. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Count appearance** in the **Slash Regions** group.
- **3.** Select one of the following options from the menu:
 - With parentheses
 - Without parentheses
 - Do not show

RESULT

Counts in the selected slash regions are shown with parentheses, without parentheses, or hidden. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490

Changing the staff-relative placement of slash region counts

You can show the counts in individual slash regions either above or below the staff. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

NOTE

Changing the staff-relative placement of counts affects all counts in the region. You cannot change the placement of a single count independently of other counts in the region.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, Graphic Editing 3 is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- 1. Select any part of each slash region whose count staff-relative placement you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Count position** in the **Slash Regions** group.
- **3.** Choose one of the following options:
 - Above
 - Below

RESULT

The staff-relative placement of all counts in the selected slash regions is changed. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

Slashes in multiple-voice contexts

Multiple slash regions and slash voices can exist at the same rhythmic positions. In multiple-voice contexts for slash voices and when slash regions overlap, Dorico Elements automatically changes their staff position and offset to accommodate all slashes as legibly as possible.





Single slash region

Two slash regions, one up-stem and one down-stem

You can set default per-flow settings for the position and offset of slashes relative to other slashes at the same rhythmic positions on the **Voices** page in **Notation Options**.

NOTE

These options affect all rhythm slashes, including notes in slash voices as well as slash regions.

You can also control the positions of rhythm slashes relative to each other manually by changing their stem/voice direction and by changing their staff position.

RELATED LINKS

Notation Options dialog on page 730 Note positions in multiple-voice contexts on page 1418 Changing the voice of existing notes on page 453

Changing the voice direction of slash regions

You can change the voice direction of slash regions individually. When multiple slash regions overlap, this affects their stem directions.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** 3 is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select any part of each slash region whose voice direction you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Voice direction** in the **Slash Regions** group.
- **3.** Choose one of the following options:
 - Up
 - Down

RESULT

The voice direction, and therefore stem direction, of the selected slash regions is changed.

NOTE

This only affects the direction of stems in slash regions on the middle line of the staff and when multiple slash regions exist at the same rhythmic position. For example, if you change the voice direction of a slash region on the bottom line of the staff to **Down**, its stem direction does not change if it does not overlap with another slash region.

Changing the staff position of rhythm slashes

You can change the staff position of rhythm slashes in both slash voices and slash regions; for example, to accommodate other notes at the same rhythmic positions better. By default, rhythm slashes are positioned on the middle line of the staff.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** ? is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the rhythm slashes whose staff position you want to change. You can do this in Write mode and Engrave mode.
 - For notes in slash voices, you must select every note whose staff position you want to change.
 - For slash regions, you can select any part of each region whose staff position you want to change.
- **2.** In the Properties panel, activate **Slash pos.** in the corresponding group for the type of rhythm slash whose staff position you want to change:
 - Notes and Rests for notes in slash voices
 - Slash Regions for slash regions
- **3.** Change the value in the value field.

RESULT

The staff position of the selected rhythm slashes is changed. For example, changing the **Slash pos.** value to **4** positions rhythm slashes on the top line of a five-line staff, while **-4** positions them on the bottom line.

If any of the rhythm slashes have stems, their stem direction is adjusted automatically.

RELATED LINKS
Engrave toolbox on page 490
Stem direction on page 1055
Adding slash voices to percussion kits on page 1238

Rests

Rests are markings with a rhythmic value that indicate no note is played for that duration. Each note duration has an equivalent rest; for example, a quarter note rest is different to a sixteenth note rest.

All notes and rests within a bar must add up to the duration of the bar, according to the prevailing time signature. Dorico Elements automatically fills the gaps between notes with implicit rests of the appropriate duration. Therefore, it is usually not necessary to input rests in Dorico Elements.

The table shows some examples of notes and the rests with the equivalent rhythmic value.

Duration	Note	Rest
Half		<u> </u>
Quarter		=
Eighth		<u> </u>
Sixteenth		

RELATED LINKS

Inputting rests on page 241
Inputting notes on page 219
Deleting rests on page 1254
Note and rest grouping on page 841
Rests within beams on page 839
Implicit rests in multiple-voice contexts on page 1251
Showing figured bass on rests on page 940

General placement conventions for rests

Rests are positioned at the rhythmic position at the start of their duration, and not in the middle of beats as this can cause confusion over when the rest begins and ends. Rests are aligned with other items at the same rhythmic position.

The only exception is whole bar rests, which are positioned at the visual center of bars. This way, they are clearly distinguishable from half note and whole note rests that are followed by notes in the same bar.

Rests stay within the staff wherever possible. They do not move above or below the staff when the notes around them are very high or very low.

However, on staves with multiple voices, rests are placed higher on the staff, or above the staff, for up-stem voices and lower on the staff, or below the staff, for down-stem voices.



Example rest positions in a multiple-voice context

The precise vertical positioning of rests is limited, as their detailed shapes require specific positions relative to staff lines and staff spaces.

RELATED LINKS

Voices on page 1416

Inputting notes into multiple voices on page 227

Creating cross-staff beams/tremolos on page 832

Moving rests vertically on page 1253

Implicit vs. explicit rests

Implicit rests are automatically shown between the notes you input, and their duration automatically follows the time signature and their position in the bar. Explicit rests are rests that are explicitly entered during note input by forcing their duration, or rests that were imported from a MusicXML file.

Dorico Elements notates implicit rests according to the prevailing time signature; for example, different implicit rests are shown in 6/8 compared to 4/4. This also applies if you later change the time signature for existing notes and rests.

Therefore, it is not necessary to input rests in Dorico Elements, as implicit rests are automatically shown around the notes that you input. You can turn implicit rests into explicit rests by forcing their duration to be fixed.





A quarter note input at the fourth eighth note of the bar in a 6/8 time signature has a dotted quarter implicit rest at the start of the bar. A quarter note input at the fourth eighth note of the bar in a 4/4 time signature has two implicit rests, a quarter and an eighth, at the start of the bar.

Explicit rests cannot be suppressed when using the **Starts voice** and **Ends voice** properties to hide rests before the first note in voices and after the last note in voices.

You can show rest colors to see which rests are implicit and which are explicit in your project.

RELATED LINKS
Inputting rests on page 241
Inputting notes on page 219
Forcing the duration of notes/rests on page 257
Deleting rests on page 1254
Hiding/Showing rest colors on page 1253

Implicit rests in multiple-voice contexts

In Dorico Elements, implicit rests are shown automatically to fill in rhythmic positions around notes, including when there are multiple voices on the staff. However, in these contexts you might want more control over when and where rests are shown.

Usually, rests or notes are shown for whole bars when voices contain at least one note in the bar. This helps make the rhythmic position of every note in all voices in the bar immediately clear.

When there are multiple voices on a staff, implicit rests are shown in every bar in which there are notes of any duration in more than one voice. Bar rests are always shown for the first voice on a staff, including in bars that only contain notes in a slash voice.

However, there might be circumstances in which you do not want to show rests either before the first note in a voice or after the last note in a voice when there are multiple voices on the staff. For example, it can be useful to hide rests when a voice is being used to show passing notes within a bar that otherwise contains a single melodic line.



A second voice used to notate passing notes

You can choose when rests are shown in a number of different multiple-voice contexts in each flow independently on the **Rests** page in **Notation Options**.

You can also delete rests from selected passages.

TIP

By default, Dorico Elements consolidates rests when multiple voices have rests of the same duration at the same rhythmic position.

You can show multiple rests at individual rhythmic positions by changing the vertical position of rests. You can also change your per-flow settings for the consolidation of rests in multiple-voice contexts on the **Rests** page in **Notation Options**.





A phrase with multiple voices showing implicit rests.
The same phrase without implicit rests.

RELATED LINKS

Notation Options dialog on page 730 Moving rests vertically on page 1253 Deleting rests on page 1254 Slash voices on page 1236

Turning explicit rests into implicit rests

Implicit rests and explicit rests behave differently. For example, the notation of explicit rests does not update automatically if their position in the bar of the time signature changes.

PROCEDURE

- 1. In Write mode, select the explicit rests you want to turn into implicit rests.
- 2. Press Backspace or Delete.

RESULT

The selected explicit rests are now implicit rests. You can check this by showing rest colors.

RELATED LINKS

Hiding/Showing rest colors on page 1253 Deleting rests on page 1254

Per-flow notation options for rests

You can find per-flow options controlling how rests are positioned and notated, and when rests are shown, on the **Rests** page in **Notation Options**.

For example, you can change whether bar rests are shown in additional voices, when dotted rests are permitted, and the default positions of rests in different contexts. You can also change whether rests of the same duration and at the same rhythmic position in different voices are consolidated into a single rest.

Musical examples demonstrate how each option affects the appearance of your music.

RELATED LINKS

Notation Options dialog on page 730 Voices on page 1416 Stem direction on page 1055

Hiding/Showing rest colors

You can hide/show rest colors, which causes implicit rests and explicit rests to appear with different colors.

When rest colors are shown, implicit rests appear gray and explicit rests appear black. For example, this can help diagnose why rests do not disappear when you activate **Starts voice** and **Ends voice**, as these properties only hide implicit rests.

PROCEDURE

• Choose View > Note And Rest Colors > Implicit Rests.

RESULT

Rest colors are hidden/shown.

EXAMPLE





Rest colors hidden

Rest colors shown

AFTER COMPLETING THIS TASK

You can delete rests that you have identified as explicit rests. The implicit rests that replace them now respect the **Starts voice** and **Ends voice** properties.

RELATED LINKS

View options for notes and rests on page 1044

Moving rests vertically

You can change the vertical position of rests individually; for example, if you want to change the staff line from which a whole bar rest hangs, or you want to show rests for all voices at a particular rhythmic position. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

Moving rests vertically shows multiple rests at that rhythmic position if more than one voice on the staff has a rest of the same duration. By default, Dorico Elements consolidates coincident rests of the same duration in multiple-voice contexts and automatically positions rests in multiple-voice contexts to avoid collisions.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- 1. Select the rests whose vertical positions you want to change, or rests at the rhythmic positions where you want to see rests for every voice. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Rest pos.** in the **Notes and Rests** group.
- 3. Change the value in the value field.

RESULT

Increasing the value moves rests upwards, decreasing the value moves rests downwards. Position 0 is the middle line of the staff. If there are multiple voices on the staff with rests of the same duration at the same rhythmic position, multiple rests are now shown.

If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

TIP

- Deactivating **Rest pos.** returns the selected rests to their default positions.
- You can choose to show coincident rests of the same duration in every voice or only show one rest for all voices in Notation Options > Rests > Rest Positioning.
- You can choose to align rests in the same voice vertically in Notation Options > Rests > Rest
 Positioning.
- You can change the horizontal position of rests, and the spacing around them, in Engrave mode when **Note Spacing** is activated, in the same ways as changing the position of notes.

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490 Notation Options dialog on page 730 Note spacing on page 494

Deleting rests

You can delete both implicit rests and explicit rests; for example, if you want to hide rests before/ after notes in another voice used to show passing notes.

TIP

- If you want to delete rests because you want to remove the corresponding duration from the flow, you can instead delete bars/beats.
- If you want to delete rests because you do not want to show bar rests in empty bars, you can instead hide bar rests.
- If you want to delete rests because multiple rests of the same duration appear at the same position in multiple-voice contexts, you can choose to consolidate these rests in **Notation** Options > Rests > Rest Positioning.

PROCEDURE

1. In Write mode, select the rests you want to delete.

TIP

You can select rests individually, or make a larger selection that contains the rests you want to delete.

2. Choose Edit > Remove Rests.

RESULT

All rests in the selection are deleted. This is done by automatically activating **Starts voice** and **Ends voice** in the **Notes and Rests** group of the Properties panel on the notes or rests immediately to the right/left of deleted rests, so that no rests are shown in the selected regions.

NOTE

- You can show rests again later by selecting the notes or rests immediately to the right/left of
 deleted rests, then deactivating the corresponding Starts voice or Ends voice properties in
 the Notes and Rests group of the Properties panel.
- You can assign a key command for Remove Rests on the Key Commands page in Preferences.
- In layouts where no other notes, rests, or items with duration exist at rhythmic positions where you have deleted rests, Dorico Elements has nothing to use to calculate horizontal spacing. Therefore, such empty bars/beats can appear narrower.

EXAMPLE





A phrase with multiple voices showing implicit rests. The same phrase after deleting the rests.

RELATED LINKS

Notation Options dialog on page 730 Implicit vs. explicit rests on page 1250 Large selections on page 410 Deleting bars/beats on page 793 Changing the width of empty bars on page 796 Note spacing on page 494

Changing the horizontal justification of final systems on page 597

Hiding/Showing bar rests in empty bars

You can hide/show bar rests in empty bars in each layout independently. For example, you can hide bar rests in full score layouts but show bar rests in part layouts.

Bar rests are usually shown in empty bars in music to indicate to performers that they have nothing to play. However, there are contexts in which it is preferable to hide bar rests in empty bars, and instead leave the bar completely empty.

For example, hiding bar rests in empty bars is sometimes the preferred visual aesthetic in large scores, so that it is quicker to identify bars containing music. You can also hide bar rests in layouts where you want to include other instructions, such as verbal indications for performers to do something other than play notated pitches.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- 2. In the **Layouts** list, select the layouts in which you want to hide/show bar rests in empty bars.

By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, **Shift** -clicking adjacent layouts, and **Ctrl/Cmd** -clicking individual layouts.

- **3.** In the category list, click **Players**.
- In the Bar Rests and Multi-bar Rests section, activate/deactivate Show bar rests in empty bars.
- 5. Click Apply, then Close.

RESULT

All bar rests in empty bars in the selected layouts are shown when the checkbox is activated, and hidden when the checkbox is deactivated.

RELATED LINKS

Hiding/Showing multi-bar rests on page 1258

Hiding/Showing bar rests in additional voices

You can hide/show bar rests between notes or explicit rests in additional voices on a per-flow basis; for example, you might show bar rests in contrapuntal music to ensure each voice can be easily followed.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-N to open Notation Options.
- **2.** In the **Flows** list, select the flows in which you want to hide/show bar rests in additional voices.

By default, only the current flow is selected when you open the dialog. You can select other flows by clicking **Select All** in the action bar, clicking and dragging across multiple flows, **Shift** -clicking adjacent flows, and **Ctrl/Cmd** -clicking individual flows.

- 3. In the category list, click **Rests**.
- 4. In the Rests in Additional Voices section, choose one of the following options for Bar rests in additional voices:

- Show bar rests
- Omit bar rests
- 5. Optional: To show bar rests for each voice in empty bars, in the Rest Positioning section, choose Show every rest in each voice for Coincident rests of the same duration in opposing voices.
- 6. Click Apply, then Close.

RESULT

Bar rests are shown between notes and explicit rests in additional voices in the selected flows when you choose **Show bar rests**, and hidden when you choose **Omit bar rests**.

NOTE

- **Show bar rests** does not automatically show bar rests in empty bars before the first note or explicit rest in additional voices. For additional voices that do not start in the first bar, you must input a bar rest in the first bar manually.
- Omit bar rests does not hide bar rests in the primary voice on each staff.

RELATED LINKS

Implicit vs. explicit rests on page 1250 Inputting notes into multiple voices on page 227 Inputting bar rests into specific voices on page 242

Multi-bar rests

Multi-bar rests group two or more consecutive empty bars together into a single unit, commonly shown with a thick horizontal line positioned on the middle staff line, known as an "H-bar". They can reduce the horizontal space required by multiple empty bars and make it easier for players to find their place in the music.



A multi-bar rest representing four empty bars

NOTE

Multi-bar rests are automatically split by items positioned within their range, such as systemattached text, rehearsal marks, and holds and pauses. However, if items are positioned at the start of the first bar in a multi-bar rest, that bar remains part of the subsequent multi-bar rest.

You can hide/show multi-bar rests in each layout independently in Dorico Elements, and you can hide/show bar number ranges below them.

By default, the multi-bar rest bar counts only appear once between the staves of grand staff instruments.

RELATED LINKS

Hiding/Showing bar number ranges on multi-bar rests on page 810 Splitting multi-bar rests on page 1259

Hiding/Showing multi-bar rests

You can hide/show multi-bar rests in each layout independently, and choose whether or not to consolidate one-bar repeats. For example, you can hide multi-bar rests in full score layouts but show multi-bar rests in part layouts.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- 2. In the Layouts list, select the layouts in which you want to hide/show multi-bar rests.
 By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, Shift -clicking adjacent layouts, and Ctrl/Cmd -clicking individual layouts.
- **3.** In the category list, click **Players**.
- 4. In the Bar Rests and Multi-bar rests section, choose one of the following options for Consolidate:
 - None
 - Multi-bar Rests
 - Multi-bar Rests and Bar Repeats
- 5. Click Apply, then Close.

RESULT

- When you choose **None**, no multi-bar rests are shown in the selected layouts. Each empty bar is shown separately.
- When you choose Multi-bar Rests, any adjacent empty bars are consolidated into multi-bar rests in the selected layouts. However, bar repeats prevent the consolidation of multi-bar rests, even if there are no other notes in those bars.
- When you choose Multi-bar Rests and Bar Repeats, any adjacent empty bars or bars that
 only contain one-bar repeats are consolidated into multi-bar rests in the selected layouts.
 Multi-bar rest counts are also shown above consolidated one-bar repeats.

RELATED LINKS

Bar repeats on page 1224

Hiding/Showing bar number ranges on multi-bar rests on page 810

Changing the width of multi-bar rest H-bars

You can change the width of individual multi-bar rest H-bars. This allows you to control the exact positions of multi-bar rests; for example, when there are clef changes at the end of multi-bar rests.

PREREQUISITE

- The lower zone is shown.
- Properties
 is selected in the lower zone toolbar.
- **Graphic Editing !** is selected in the Engrave toolbox.

PROCEDURE

1. In Engrave mode, select the multi-bar rests whose width you want to change.

- 2. In the Properties panel, activate **H-bar width delta** in the **Multi-bar Rests** group.
- 3. Change the value in the value field.

RESULT

The width of the selected H-bars is changed. Increasing the value increases their width, decreasing the value decreases their width.

RELATED LINKS

Properties panel on page 646 Engrave toolbox on page 490 Casting off on page 612

Moving multi-bar rest H-bars

You can move individual multi-bar rest H-bars horizontally. This allows you to control the exact positions of multi-bar rests; for example, when there are clef changes at the end of multi-bar rests.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing 7** is selected in the Engrave toolbox.

PROCEDURE

- 1. In Engrave mode, select the multi-bar rests you want to move.
- 2. In the Properties panel, activate **H-bar X offset** in the **Multi-bar Rests** group.
- 3. Change the value in the value field.

RESULT

The selected H-bars are moved horizontally. Increasing the value moves H-bars to the right, decreasing the value moves H-bars to the left.

Splitting multi-bar rests

You can manually split multi-bar rests without showing any extra notation in the music. Splitting multi-bar rests affects all layouts in the project, including full scores and parts.

NOTE

Multi-bar rests are automatically split by items positioned within their range, such as system-attached text, rehearsal marks, and holds and pauses.

PREREQUISITE

- You have opened a layout in the music area that either has items in the bars where you want to split multi-bar rests or in which multi-bar rests are hidden. You cannot select rhythmic positions within multi-bar rests.
- Graphic Editing is selected in the Engrave toolbox.

PROCEDURE

- **1.** In Engrave mode, select an item at the rhythmic position where you want to split multi-bar rests.
- 2. Choose Engrave > Split Multi-bar Rest.

RESULT

All multi-bar rests in all layouts are split at the selected position. A signpost is shown at the position of the multi-bar rest split.

RELATED LINKS

Switching between layouts on page 42 Hiding/Showing multi-bar rests on page 1258 Engrave toolbox on page 490 Signposts on page 438

Slurs

Slurs are tapered, curved lines that join notes to indicate legato articulation and phrasing.

Depending on the context and the instrument to which they apply, slurs can have additional meanings to simply marking phrases. For example, for wind players, a slur indicates that all the notes in the phrase are played in the same breath and without re-tonguing or re-articulating any notes. For string players, a slur indicates that all the notes in the phrase are played legato and under one bow. For singers, slurs indicate that more than one note is sung to the same syllable.



Slurs both above and below the staff, including a cross-staff slur

Dorico Elements automatically determines the appropriate endpoint position and curvature direction for slurs based on the notes within their ranges, but you can change this manually.

You can input any number of nested slurs.

NOTE

Slurs must not be confused with ties, which look superficially similar, but instead join notes of the same pitch to indicate that they are played as a single note. In that sense, ties are part of rhythmic notation, while slurs are considered articulation.

RELATED LINKS

Inputting slurs on page 267
Inputting nested slurs on page 1273
Ties vs. slurs on page 1342
Elision slurs on page 1031
Slur endpoint positions on page 1264
Changing the position of slurs relative to tie chains on page 1262
MIDI Import Options dialog on page 84

General placement conventions for slurs

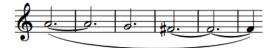
There are different conventions for the placement, endpoint position, shape, and curvature direction of slurs in various contexts.

Slur position relative to tie chains

There are different conventions for the position of slurs relative to tie chains in music for modern use and historical editions.

Modern practice is for slurs to start on the first note in tie chains, and end on the last note in tie chains. This makes the full length of the phrase visually clear to the performer, which helps their performance, and is the default in Dorico Elements.

However, in historical editions, slurs might end on the first note in a tie chain, and start on the last note in a tie chain. Both of these changes save vertical space, as shorter slurs do not extend as far above or below a staff.





Slur starting on the first note and ending on the last note in tie chains

Slur starting on the last note and ending on the first note in tie chains

Changing the position of slurs relative to tie chains

You can change the position of individual slurs relative to tie chains, including slurs starting on grace notes. For example, slurs that start on the last note in tie chains and end on the first note in tie chains are shorter and require less vertical space.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing ?** is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the slurs whose position relative to tie chains you want to change. You can do this in Write mode and Engrave mode.
- **2.** In the Properties panel, activate the following properties, individually or together, in the **Slurs** group:
 - Start pos. in tie chain
 - End pos. in tie chain
- **3.** Choose one of the following options for each property:
 - First note
 - Last note

RESULT

The position of the selected slurs relative to tie chains is changed.

RELATED LINKS

Properties panel on page 646 Engrave toolbox on page 490

Slur placement relative to grace notes

There are specific placement rules that affect slurs when they start from a grace note and end on a normal note immediately following the grace note.

These rules are:

- Slurs connect noteheads rather than stems.
- Slurs are scaled to match the proportions of grace notes.
- Slurs must not obscure ledger lines.
- Slurs are placed above notes if they would collide with the accidental of a standard note when placed below the notes.

Due to the general placement conventions of grace notes, slurs in Dorico Elements appear below grace notes and curve downwards by default. Slurs starting from grace notes only appear above notes and curve upwards in up-stem voices in multiple-voice contexts.





Slur curvature direction on grace notes in a singlevoice context

Slur curvature direction on grace notes in a multiplevoice context

You can change the automatic placement of grace note slurs by changing the stem direction of a grace note, changing the direction of a slur, and using the slur handles in Engrave mode to adjust the position of a slur in finer detail.

RELATED LINKS

Changing the curvature direction of slurs on page 1271
Changing the stem direction of notes on page 1057
General placement conventions for grace notes on page 983
Slurs in Engrave mode on page 1278
Changing the shape/angle of slurs on page 1280

Slur position relative to staff lines

Slur endpoints must not touch staff lines, and the high point of the arcs of slurs should not stop on staff lines.

This is the convention because a slur whose arc peaks on a staff line can create the appearance of a triangular wedge between the staff line and the curve of the slur. If a slur peaks on a staff line, you can adjust its height so that it peaks either above/below the staff.

NOTE

Although Dorico Elements automatically ensures slur endpoints do not touch staff lines, manual adjustments might be necessary to position the arcs of slurs correctly.

RELATED LINKS

Changing the height of slurs on page 1283

Slur endpoint positions

In order to avoid collisions, the default positions of slur endpoints vary depending on whether slurs are placed on the notehead side or stem side of notes, their position relative to staff lines, and whether articulations, ties, and other slurs exist at the same rhythmic position.

Slur endpoints relative to noteheads and stems

The default position of slur endpoints relative to noteheads is 1/2 space above a notehead in a space on the staff, and 1/4 space above a notehead on a line on the staff.

Slurs appear between the stems of unbeamed notes when placed on their stem side, and the default setting is for their endpoints to attach a short distance from the end of the stem.



Slurs between the stems of unbeamed notes

Slur endpoints relative to notes with different stem directions

For slurs between notes with different stem directions, Dorico Elements positions their endpoints close to the notehead by default so that the shape and curvature direction of slurs reflects the rising or descending pitch contour of phrases, including when they span multiple staves.





Slur endpoints near noteheads

Slur endpoints near stem ends

Slur endpoints relative to articulations

By default, articulations of force and stress are placed outside slur endpoints, and articulations of duration are placed inside slur endpoints, which automatically raises the endpoints. For example, accents and stress marks are placed outside the ends of slurs but staccato and tenuto marks are placed inside the ends of slurs.

Slurs are placed outside articulations on notes in the middle of slurs.

Slur endpoints relative to ties and other slurs

The default position of slur endpoints is 1/4 space above an existing slur that starts/ends on the same note.

RFLATED LINKS

Slurs in Engrave mode on page 1278
Cross-staff and cross-voice slurs on page 1272
Nested slurs on page 1273
Stem direction on page 1055
Changing the shape/angle of slurs on page 1280

Changing the placement of articulations relative to slurs on page 791

Slurs over system and frame breaks

Slurs automatically cross system breaks and frame breaks, appearing in two parts on either side of the break.

By default, the endpoints of slurs that cross system/frame breaks are positioned at least 1/2 space outside the outer staff line and at a suitable position based on the pitch contour of the phrase before/after the break; that is, indicating whether the phrase rises or falls after the break.

If multiple slurs cross the same system break or frame break, such as if a phrase split by a break contains nested slurs, the ends of the slurs are stacked automatically and spaced a minimum of 1/2 space apart vertically.



The end of a system showing the first slur part; the end on the right indicates a continuation to the next system.



The start of the next system showing the second slur part; the end on the left indicates a continuation from the previous system.

In Engrave mode, you can move and edit each slur part separately. This allows you to adjust the start/end height of each slur part independently on each system.

Slur collision avoidance

By default, Dorico Elements automatically adjusts the shape and position of slurs to avoid collisions with items under their arc.

This means that if a notehead under a slur is either higher than the others under a slur curving upwards, or lower than the others under a slur curving downwards, the curvature of the slur is adjusted to avoid the collision and keep the notehead under the slur. You can manually disable collision avoidance for individual slurs.



Slur with collision avoidance activated (default)



Slur with collision avoidance deactivated

RELATED LINKS

Cross-staff and cross-voice slurs on page 1272 Accidentals on page 775

Enabling/Disabling slur collision avoidance

You can allow or prevent individual slurs from automatically adjusting to avoid collisions. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing I** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- 1. In Engrave mode, select the slurs whose collision avoidance you want to enable/disable.
- 2. In the Properties panel, activate/deactivate Avoid collisions in the Slurs group.
- **3.** Activate/Deactivate the corresponding checkbox.

RESULT

The selected slurs avoid collisions when the checkbox is activated, and do not avoid collisions when the checkbox is deactivated. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490

Short slurs that cover large pitch ranges

When short slurs span large pitch ranges, they are significantly rotated to compensate. This can make the ends of short slurs appear too angular.

You can move the control point handles of slurs to improve their curves.

Of the three examples, the middle slur has the smoothest curve. The handles on the slur on the right have been moved poorly, making the curve far too angular.

In the bottom row, the positions of the handles are shown to indicate how each curve above was created.



Short slur spanning a large pitch range, without adjustment



The same slur with some shape adjustment, making the curve



The same slur again with poor adjustment, making the curve too angular



Default slur handle placement



Slur handle placement to create the corresponding slur



Slur handle placement to create the corresponding slur

TIP

When adjusting slur ends, you can achieve the best results using the following guidelines:

- The control point at the lower end of the slur does not extend outside the width of the slur, as marked by its neighboring endpoint.
- The control point at the higher end of the slur does not form an angle greater than 90 degrees relative to the endpoints. You can use the dashed lines to help you judge this.

You can adjust the shape of short slur ends in different ways:

- Individually, by activating Start handle offset and End handle offset in the Properties panel
 in Engrave mode, and changing their X values.
- Individually, by moving the handles of slurs in Engrave mode.

RELATED LINKS

Slurs in Engrave mode on page 1278 Changing the shoulder offset of slurs on page 1284 Changing the shape/angle of slurs on page 1280

Slur styles

There are different styles of slurs available in Dorico Elements, which indicate different meanings and have different use cases.

Solid

This is the default style for slurs. Slurs appear as tapered solid lines: thinner at the ends and thicker in the middle.



Dashed

Slurs appear as tapered dashed lines. Can be used to indicate an optional slur; for example, to recommend breathing/bowing patterns.



Dotted

Slurs appear as dotted lines. The dots are the same size and the same distance apart over the whole length of the slur.



Half-dashed start

The first halves of slurs appear as dashed lines, the second halves as solid lines. Used to denote that a slur was written incompletely in the source in critical editions.



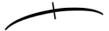
Half-dashed end

The first halves of slurs appear as solid lines, the second halves as dashed lines. Used to denote that a slur was written incompletely in the source in critical editions.



Editorial

Slurs appear as solid black lines, but with a smaller vertical line intersecting them exactly halfway along their length, perpendicular to the curve of the slur. Used to show that a slur was added by the editor and was not present in the original source.



Changing the style of slurs

You can change the style of individual slurs after they have been input. For example, to indicate editorial slurs, or to make specific slurs appear dashed. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** Select the slurs whose style you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Style** in the **Slurs** group.
- **3.** Select one of the following options from the menu:
 - Solid
 - Dashed
 - Dotted
 - Half-dashed start
 - Half-dashed end
 - Editorial

RESULT

The style of the selected slurs is changed. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490

Changing the size of dashes/dots in slurs

You can change the length of dashes and the size of dots in dashed/dotted slurs individually. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

NOTE

These steps only apply to dashed/dotted slurs.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing** I is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** In Engrave mode, select the dashed/dotted slurs whose dash length/dot size you want to change.
- **2.** In the Properties panel, activate one of the following properties in the **Slurs** group:
 - For dashed slurs, activate Dash length.
 - For dotted slurs, activate **Dot size**.
- 3. Change the value in the value field.

RESULT

Increasing the value makes dashes longer and dots bigger, decreasing the value makes dashes shorter and dots smaller. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

Changing the size of gaps in dashed/dotted slurs

You can change the length of gaps in dashed/dotted slurs individually. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing 3** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- 1. In Engrave mode, select the dashed/dotted slurs whose gap length you want to change.
- **2.** In the Properties panel, activate one of the following properties in the **Slurs** group:
 - For dashed slurs, activate **Dash gap length**.
 - For dotted slurs, activate **Dot gap length**.
- **3.** Change the values in the value fields.

RESULT

Increasing the values makes the gaps between dashes/dots larger. Decreasing the values makes the gaps between dashes/dots smaller. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

Changing individual slurs to flat slurs

Although they are not often used as standard, some publishers use flat slurs in order to reduce the vertical space occupied by slurs. You can change individual slurs to flat slurs. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

NOTE

Short slurs, that is, slurs between only a few notes, can look odd as flat slurs, so it may not be appropriate to select the flat curvature style project-wide. However, it would also be unusual only to use flat slurs once or twice in a project. Therefore, we recommend that you avoid changing the curvature style for only one or two slurs in a project.

It can be more effective to modify them rather than changing their curvature style; for example, by making an individual slur thicker/thinner, adjusting the shoulder offset of slurs, or adjusting their height using their slur height handles in Engrave mode.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing 1** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** Select the slurs whose curvature style you want to change. You can do this in Write mode and Engrave mode.
- **2.** In the Properties panel, activate **Curvature type** in the **Slurs** group.
- **3.** Choose one of the following options:
 - Normal (curved)
 - Flat

RESULT

The curvature style of the selected slurs is changed. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490 Changing the thickness of slurs on page 1282

Changing the height of slurs on page 1283

Changing the neight of stars on page 1205

Changing the shoulder offset of slurs on page 1284

Slur curvature direction

Slurs can curve upwards, downwards, or have a multi-segment S-shape. Dorico Elements automatically determines the appropriate curvature direction for slurs based on the notes within their ranges, but you can change the curvature direction of slurs manually.

A slur on a single staff always curves upwards and is placed above the notes, unless all of the notes under the slur are up-stem, in which case it curves downwards and is placed below the

notes. If a slur applies to a mixture of up-stem and down-stem notes, it is placed above the staff and curves upwards.



Examples of the slur direction changing according to the stem direction

The following options for slur curvature direction are available when you activate **Direction** in the **Slurs** group of the Properties panel:

Up



Forces slurs to curve upwards, and appear above notes.

Down



Forces slurs to curve downwards, and appear below notes.

Up/Down



Forces slurs to comprise two segments: the first curves upwards, the second curves downwards to create a mirrored S-shape. It is typically used when phrases start in the lower staff and end in the upper staff; for example, in piano parts.

Down/Up



Forces slurs to comprise two segments: the first curves downwards, the second curves upwards to create an S-shape. It is typically used when phrases start in the upper staff and end in the lower staff; for example, in piano parts.

TIP

- You can adjust the precise shapes of individual slurs, and each slur segment, in Engrave mode using the square handles on each slur.
- In jazz scores, slurs are sometimes treated as an articulation, so positioning all slurs above the staff is preferred.

RELATED LINKS

Slurs over system and frame breaks on page 1265 Changing the shape/angle of slurs on page 1280

Changing the curvature direction of slurs

You can change the curvature direction of individual slurs so that they curve upwards, downwards, or have a multi-segment S-shape. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.

- If you are in Engrave mode, **Graphic Editing ?** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** Select the slurs whose curvature direction you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Direction** in the **Slurs** group.
- **3.** Choose one of the following options:
 - Up 🦳
 - Down
 - **Up/Down** ∼ (mirrored S-shape)
 - Down/Up (S-shape)

RESULT

The curvature direction of the selected slurs is changed. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

TIP

You can adjust the precise shapes of slurs, and each slur segment, in Engrave mode using the handles on each slur.

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490 Slurs in Engrave mode on page 1278

Cross-staff and cross-voice slurs

Cross-staff slurs start on one staff and end on another staff, and cross-voice slurs start in one voice and end in another voice.



Cross-staff slurs between two piano staves

Dorico Elements positions cross-staff and cross-voice slurs in the same way as it positions standard slurs. This includes adjusting cross-staff slurs to avoid collisions.

You can move and lengthen/shorten cross-staff and cross-voice slurs in the same ways as standard slurs; however, they do not behave in the same way. For example, you cannot move cross-voice slurs to notes on the same staff in other voices, and you cannot lengthen cross-voice

slurs to notes on the same staff in other voices. You also cannot lengthen/shorten cross-voice slurs to notes in different voices to those in which the slur started/ended.

You can only move and lengthen/shorten cross-staff slurs to notes on the same staff as the corresponding endpoint. For example, if a cross-staff slur covers a phrase that starts on the bottom staff and ends on the upper staff, you can only shorten the cross-staff slur to the first note on the upper staff, you cannot shorten it to any notes on the bottom staff.

The different voices can be on the same staff, or on different staves.

RELATED LINKS

Inputting slurs on page 267
Lengthening/Shortening items on page 419
Slur collision avoidance on page 1265
Slur endpoint positions on page 1264
Moving notes/items rhythmically on page 448

Nested slurs

Nested slurs are two or more slurs used simultaneously, where the overarching slur shows the structure of the phrase and the inner slurs show the articulation within the phrase. They are also known as "slurs within slurs".

Depending on the stem directions within the overarching outer slur, inner slurs may appear on the opposite side of the staff to the outer slur.



A phrase with nested slurs

You can input nested slurs in the same ways as inputting standard slurs. By default, Dorico Elements makes automatic adjustments to their positioning to avoid collisions.

Inputting nested slurs

You can input nested slurs, both during note input and by adding them to existing notes. You can also add nested slurs to existing notes on multiple staves at the same time and to notes in different voices or on different staves belonging to the same instrument; for example, when phrases span both staves of grand staff instruments.

PROCEDURE

- **1.** In Write mode, do one of the following:
 - Start note input.
 - Select the notes you want to include in the outer slur.

TIP

- If you only select a single note, the slur connects that note to the next note in the same voice on the staff. To input slurs between notes in different voices, you must select both notes; for example, by selecting the first note then **Ctrl/Cmd** -clicking the second note.
- For instruments with multiple staves, such as piano and harp, you can select existing notes on multiple staves to create cross-staff slurs. However, you cannot create cross-staff slurs between different instruments.
- You can select notes on multiple staves to input slurs on those staves simultaneously.
- Optional: If you want to input slurs onto multiple staves at once, extend the caret to those staves.
- **3.** Input or start the outer slur in any of the following ways:
 - Press S.
 - In the Notes panel, click Slur _____.
 - In the Keyboard panel toolbar, click Slur ...
- **4.** Input the inner slur in one of the following ways:
 - When adding nested slurs to existing notes: Select the notes within the outer slur that you want to place under an inner slur and press **S** or click **Slur** in the Notes panel.
 - To start the inner slur on the same note as the outer slur during note input, press S or click Slur in the Notes panel.
 - To start the inner slur on a later note during note input, input notes or advance the caret manually to where you want the inner slur to start, then press **S** or click **Slur** in the Notes panel.

NOTE

If you added nested slurs to existing notes, stop here.

- **5.** During note input, input the notes you want to include in the inner slur. The slurs extend automatically as you continue inputting notes, even if there are rests between the notes you input.
- **6.** End the inner slur on the currently selected note in any of the following ways:
 - Press Shift-S.
 - In the Keyboard panel toolbar, click **Slur**.
- 7. Continue inputting notes.
- 8. Optional: Start/End other inner slurs.
- 9. End the outer slur on the currently selected note in any of the following ways:
 - Press Shift-S.
 - In the Keyboard panel toolbar, click **Slur**.

RESULT

During note input, slurs begin from the currently selected note on all staves across which the caret extends, not from the caret position. Slurs extend automatically as you input notes, and end on the currently selected note.

When adding slurs to existing notes, the selected notes are connected by slurs. For example, if you select two notes belonging to one instrument and two notes belonging to another, two slurs are input connecting the notes on each selected staff. If you selected notes on different staves belonging to the same instrument, a cross-staff slur is input.

Slurs are placed either above or below the notes, depending on the stem direction of the notes within the selection. Inner slurs can have different curvature directions to outer slurs. By default, Dorico Elements makes automatic adjustments to their positioning to avoid collisions.

TIP

You can input the outer slur and inner slurs in any order as Dorico Elements automatically adjusts slurs so that shorter slurs are positioned within longer slurs, and ensures they do not collide.

RELATED LINKS

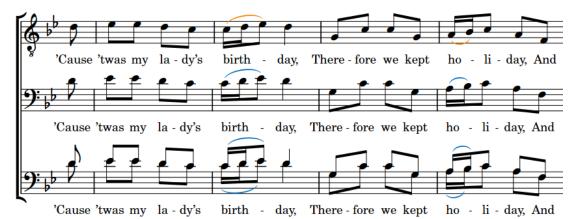
Changing the curvature direction of slurs on page 1271 Enabling/Disabling slur collision avoidance on page 1265

Linked slurs

Slurs of the same duration at the same rhythmic position on multiple staves can be linked together. This happens automatically when you copy and paste slurs or material including slurs between staves, or enter them simultaneously.

If slurs are linked, moving one slur in the linked group moves any slurs linked to it in the same way. Similarly, lengthening or shortening a slur in a linked group lengthens or shortens any slurs linked to it in the same way. However, deleting one slur in a linked group only deletes the slur selected, not the whole group.

Linked slurs appear highlighted when any slur in the linked group is selected.



Linked slurs with the top slurs selected

You can also manually link and unlink slurs.

RELATED LINKS

Inputting slurs on page 267 Linked dynamics on page 931

Disabling automatic linking of dynamics and slurs when pasting on page 447

Linking slurs together

Dorico Elements automatically links slurs of the same duration at the same rhythmic positions together when you copy and paste slurs or material including slurs between staves, or enter them simultaneously. However, you can also link slurs together manually.

PROCEDURE

1. In Write mode, select the slurs you want to link together.

NOTE

Only slurs that have the same duration and start at the same position can be linked together.

2. Choose **Edit** > **Notations** > **Slurs** > **Link**. You can also choose this option from the context menu.

RESULT

The selected slurs are linked together.

Unlinking slurs

You can unlink slurs, including slurs that were linked automatically. For example, if you want to lengthen/shorten slurs independently of each other.

PROCEDURE

- 1. In Write mode, select a slur in each linked group that you want to unlink.
- 2. Choose **Edit** > **Notations** > **Slurs** > **Unlink**. You can also choose this option from the context menu.

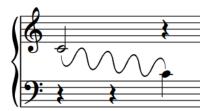
RESULT

All slurs in the linked groups are unlinked. This applies to all layouts in which the slurs appear.

Slur segments

A standard slur consists of one segment. You can make more elaborate shapes with slurs with multiple segments; for example, to allow you to create more complex slur shapes than are possible with a single curved segment.

Adding more segments to a slur by default creates evenly spaced waves within its length. Therefore, having more segments makes each wave shorter.



Slur with eight segments

In Engrave mode, you can move each segment graphically as each segment has its own set of five square handles. These allow you to form slurs into unusual and complicated shapes.

NOTE

- You may find that you need more segments than there are curves in your planned shape, as in many cases you need a segment for each significant change of angle. In Dorico Elements, you can increase/decrease the number of segments in existing slurs.
- Handles on multi-segment slurs are connected between adjacent segments. Moving a connected control point causes the control point at the start/end of the next/previous segment to move the same amount in the opposite direction.





An unusual slur shape created using five segments.

The same slur, showing the positions of the handles of all five segments.

Changing the number of segments in individual slurs

You can change the number of segments in individual slurs; for example, to allow you to create slurs with unusual shapes. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing I** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- 1. In Engrave mode, select the slurs whose number of segments you want to change.
- 2. In the Properties panel, activate **Number of segments** in the **Slurs** group.
- 3. Change the value in the value field.

RESULT

Increasing the value increases the number of slur segments. Decreasing the value decreases the number of slur segments. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

AFTER COMPLETING THIS TASK

You can adjust the shape of slur segments in more detail using their handles.

NOTE

Handles on multi-segment slurs are connected to the corresponding type of handle on adjacent segments. Moving handles causes any connected handles to move the same amount in the opposite direction.

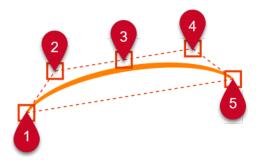
RELATED LINKS
Properties panel on page 646

Changing the property scope on page 648

Engrave toolbox on page 490

Slurs in Engrave mode

In Engrave mode, each slur has five square handles that you can move independently. Some handles are connected to others, meaning moving one can affect the position of neighboring handles.



Slurs have the following handles in Engrave mode:

- 1 Left endpoint
- **2** Left control point
- 3 Slur height
- 4 Right control point
- 5 Right endpoint

For example, moving the left endpoint moves both the start of a slur and the other handles apart from the right endpoint. However, moving the right control point only causes the slur height handle to move as well. This gives you fine control over the shape of slurs, while ensuring the end result remains curved and smooth.

NOTE

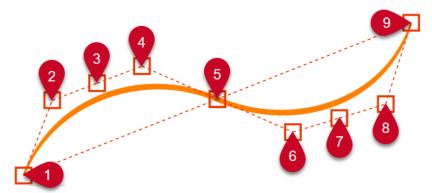
Multi-segment slurs have additional links between control point handles that affect how they move in relation to other handles moving.

You can move these handles to change the shape of slurs with the keyboard, with the mouse, and by using properties in the **Slurs** group of the Properties panel. You can also change the angle of slurs without changing their overall shape.

Multi-segment slurs in Engrave mode

In Engrave mode, each segment in multi-segment slurs, such as S-shaped slurs, has handles just like standard slurs. This allows you to edit each segment of multi-segment slurs independently as

if they were separate slurs, but in order to maintain a consistent shape, moving certain handles causes other handles to move simultaneously.



Multi-segment slurs have the following handles in Engrave mode:

- 1 Left endpoint
- 2 Left control point
- **3** Slur height
- 4 Right control point
- 5 Center control point
- 6 Left control point
- 7 Slur height
- 8 Right control point
- 9 Right endpoint

You can select and move each handle in the same ways as for standard slurs; however, handles on multi-segment slurs are connected between adjacent segments. Moving a connected control point causes the control point at the start/end of the next/previous segment to move the same amount in the opposite direction. This avoids tight corners, ensuring that multi-segment slurs are always as smoothly and symmetrically curved as possible.

In multi-segment slurs, right control points are connected to the left control point in the adjacent segment. If there is no adjacent segment, the right/left control points next to the right/left endpoints can be moved independently. For example, in the labeled diagram, control point 4 is connected to control point 6, but control points 2 and 8 are not connected to another control point.

Similarly, moving the slur height handle causes the slur height handle on any adjacent segments to move the same amount in the opposite direction. For example, if you move the slur height handle on the middle segment of a slur with three segments, all three slur height handles are moved.

EXAMPLE



The left control point is selected.



Moving the selected left control point upwards and to the left causes the right control point on the adjacent segment to move downwards and to the right.

Changing the shape/angle of slurs

You can move slurs and slur handles graphically, allowing you to change the shape and/or angle of individual slurs; for example, to adjust an endpoint relative to an individual notehead. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

Changing the angle of slurs is useful, for example, if you want one end of a slur to start higher after a system break than its default position, as you can change the rotation of the slur while keeping all slur handles on the slur in the same positions relative to each other.

PREREQUISITE

- **Graphic Editing 3** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** In Engrave mode, select the whole slurs or individual slur handles you want to move in any of the following ways:
 - **Ctrl/Cmd** -click multiple slurs.
 - Ctrl/Cmd -click individual handles on multiple slurs.
 - Select a whole slur and press **Tab** to cycle through the handles until the one you want to move is selected.
 - Click the handle you want to move.

NOTE

- To change the angle of slurs, select slur endpoints only.
- 2. Move the slurs or handles in any of the following ways:
 - To move them a standard amount to the right, left, up, or down, press Alt/Opt plus
 the corresponding arrow key. For example, press Alt/Opt-Left Arrow
 handles to the left. This moves slurs/handles by 1/8 space per press.
 - To move them a large amount, press Ctrl/Cmd plus the standard key command; for example, Ctrl/Cmd-Alt/Opt-Left Arrow. This moves slurs/handles by 1 space per press.
 - To move them a moderate amount, press **Shift** plus the standard key command; for example, **Shift-Alt/Opt-Left Arrow**. This moves slurs/handles by 1/2 space per press.

- To move them a small amount, press Ctrl/Cmd Shift plus the standard key command; for example, Ctrl/Cmd-Shift-Alt/Opt-Left Arrow. This moves slurs/handles by 1/32 space per press.
- Click and drag them in any direction.

TIP

To constrain movement either horizontally or vertically, start dragging, then press and hold **Shift**.

RESULT

The selected slurs or slur handles are moved. Depending on the handles you selected and the directions in which you moved them, this can change the shape, angle, and/or proportional size of the corresponding slurs. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

TIP

The following properties in the **Slurs** group of the Properties panel are activated automatically when you move the corresponding slur handles:

- **Start offset** moves the left endpoints of slurs. **X** moves them horizontally, **Y** moves them vertically.
- **End offset** moves the right endpoints of slurs. **X** moves them horizontally, **Y** moves them vertically.
- Start handle offset moves the left control points of slurs. X moves them horizontally, Y
 moves them vertically.
- End handle offset moves the right control points of slurs. X moves them horizontally, Y
 moves them vertically.

For example, if you move a whole slur upwards and to the right, all of its handles are moved so all properties are activated. You can also use these properties to change the shape of individual slurs by changing the values in the value fields.

Deactivating the properties resets the corresponding handles on the selected slurs to their default positions.

EXAMPLE



Slur with default angle and right endpoint selected



Slur with changed angle after moving the right endpoint downwards

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490 Inputting slurs on page 267 Slur shoulder offset on page 1284 Slurs over system and frame breaks on page 1265

Changing the thickness of slurs

You can change the thickness of individual slurs, including changing the thickness of the middle of slurs independently of the ends of slurs. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- Graphic Editing is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- 1. In Engrave mode, select the slurs whose thickness you want to change.
- **2.** In the Properties panel, activate the following properties, individually or together, in the **Slurs** group:
 - End thickness
 - Middle thickness
- **3.** Change the values in the value fields.

RESULT

Increasing the values makes the corresponding part of the selected slurs thicker, decreasing the values makes the corresponding part of the selected slurs thinner. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

Deactivating the properties returns the corresponding part of the selected slurs to their default thickness.

Slur height

The height of slurs determines how far above/below notes slurs extend vertically.

Increasing the height of slurs makes them extend further from the staff. This gives them a rounder shape, which takes up more vertical space. Where vertical space is limited, there should be a balance between how curved slurs are, which can help readability for players, and ensuring staves do not overlap.



A long slur with default height



A long slur with increased height



A long flat slur with default height



A long flat slur with increased height

TIP

You can change the height of individual slurs in Engrave mode.

RELATED LINKS

Slurs over system and frame breaks on page 1265

Changing the height of slurs

You can change the height of individual slurs; for example, to reduce the height of a particularly long slur. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- **Graphic Editing 3** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** In Engrave mode, select the slur height (middle) handle of the slurs whose height you want to change.
- **2.** Move the handles in any of the following ways:
 - To move them upwards/downwards a standard amount, press Alt/Opt plus the
 corresponding arrow key. For example, press Alt/Opt-Up Arrow to move handles
 upwards. This moves handles by 1/8 space per press.
 - To move them upwards/downwards a large amount, press Ctrl/Cmd plus the standard key command; for example, Ctrl/Cmd-Alt/Opt-Up Arrow. This moves handles by 1 space per press.
 - To move them upwards/downwards a moderate amount, press Shift plus the standard key command; for example, Shift-Alt/Opt-Up Arrow. This moves handles by 1/2 space per press.
 - To move them upwards/downwards a small amount, press Ctrl/Cmd Shift plus the standard key command; for example, Ctrl/Cmd-Shift-Alt/Opt-Up Arrow. This moves handles by 1/32 space per press.
 - Click and drag them upwards/downwards.

TIP

To constrain movement either horizontally or vertically, start dragging, then press and hold **Shift**.

RESULT

The height of the selected slurs is changed. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

NOTE

- To maintain a visually pleasing and symmetrical curve when changing the height of slurs manually, you may need to move slur height handles to the right/left by a small amount, as well as upwards/downwards.
- Moving slur height handles to the right/left affects the shape of the whole slur.

RELATED LINKS

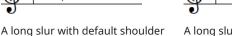
Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490 Changing the shape/angle of slurs on page 1280

Slur shoulder offset

Slur shoulders affect the angles of the curves of slurs as they taper towards an endpoint, because the tapered ends often approach noteheads at a steeper angle than that of a slur's arch.

Increasing the shoulder offset makes the onset of the curve shallower, whereas decreasing the shoulder offset makes the onset steeper. The shoulder offset must therefore be balanced with the height of the slur in order to achieve the ideal curved shape.







A long slur with increased shoulder offset of 1.5



A long slur with decreased shoulder offset of -1/2

You can adjust the shoulders of individual slurs in Engrave mode.

Changing the shoulder offset of slurs

You can adjust the shoulders of individual slurs by moving their control point handles. You can move each control point independently. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

offset of 1/3

- **Graphic Editing I** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- 1. In Engrave mode, select one of the control point handles on each of the slurs whose shoulders you want to adjust in any of the following ways:
 - Select a whole slur and press Tab to cycle through the handles until the one you want to move is selected.
 - Click the handle you want to move.
 - Ctrl/Cmd -click individual handles on multiple slurs.
- 2. Move the handles in any of the following ways:

- To move them a standard amount to the right, left, up, or down, press Alt/Opt plus the
 corresponding arrow key. For example, press Alt/Opt-Left Arrow to move handles to
 the left. This moves handles by 1/8 space per press.
- To move them a large amount, press **Ctrl/Cmd** plus the standard key command; for example, **Ctrl/Cmd-Alt/Opt-Left Arrow**. This moves handles by 1 space per press.
- To move them a moderate amount, press **Shift** plus the standard key command; for example, **Shift-Alt/Opt-Left Arrow**. This moves handles by 1/2 space per press.
- To move them a small amount, press Ctrl/Cmd Shift plus the standard key command; for example, Ctrl/Cmd-Shift-Alt/Opt-Left Arrow. This moves handles by 1/32 space per press.
- Click and drag them in any direction.

TIP

To constrain movement either horizontally or vertically, start dragging, then press and hold **Shift**.

3. Optional: Repeat steps 1 and 2 for the other control point handle on the slurs whose shoulders you want to adjust.

RESULT

The shoulder offset of the selected slurs is changed. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

TIP

The following properties in the **Slurs** group of the Properties panel are activated automatically when you move the corresponding slur handles:

- Start handle offset moves the left control points of slurs. X moves them horizontally, Y
 moves them vertically.
- **End handle offset** moves the right control points of slurs. **X** moves them horizontally, **Y** moves them vertically.

You can also use these properties to change the shoulder offset of individual slurs by changing the values in the value fields.

Deactivating the properties resets the corresponding handles on the selected slurs to their default positions.

RELATED LINKS

Properties panel on page 646 Slurs in Engrave mode on page 1278

Slurs in playback

Slurs trigger the legato playback technique. By default, this increases the length of the MIDI notes without affecting the notation of the music.

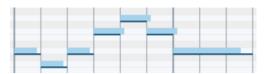
Slurred notes sound for 105% of the length indicated by their notated rhythm, as opposed to non-slurred notes which sound for 95% of their notated rhythm.

The final note of a slur sounds for 95% of its notated rhythm, as there is no slur after it and the legato technique is no longer required.

The example shows how MIDI note length, indicated by the filled, light-colored rectangles, is increased when slurs are used. The thin, darker rod shows the notated duration of each note. The first three notes are non-slurred, so the MIDI length rectangle is shorter than the line of the notated rhythm. The last four notes are slurred together, so the MIDI length is longer than the notated length in order to create the legato, slurred sound. However, the last note of the slurred group is not longer, as the last note of a slurred phrase is treated like a normal, non-slurred note.



A phrase in an instrument staff



The same phrase in the piano roll editor

TIP

- You can change the default values for the sounding duration of slurred notes on the **Timing** page in **Playback Options**.
- You can enable independent voice playback for individual instruments to hear different sounds in different voices simultaneously; for example, if you have slurs in one voice and staccatos in another voice.
- To ensure correct handling in playback, you can limit monophonic legato to music without chords in the **Expression Maps** dialog.

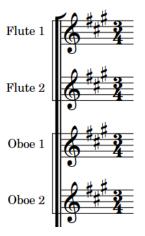
RELATED LINKS

Playback Options dialog on page 732
Played vs. notated note durations on page 671
Piano roll editor on page 661
Enabling independent voice playback on page 530
Playback techniques on page 770
Expression Maps dialog on page 745

Staff labels

Staff labels are used to identify the instruments playing the music on the corresponding staves, and are positioned to the left of systems, before the initial barline of each system. Staff labels are typically used in music containing multiple players.

It is usual to show instrument names in full in the staff labels for the first systems in each flow, and abbreviated instrument names in the staff labels of subsequent systems. Using abbreviated instrument names saves horizontal space, allowing you to include more music in each system.



Examples of staff labels on the first system in a flow

By default in Dorico Elements, staff labels show the instrument names set for each instrument. You can show player names in staff labels instead for each player in each layout independently; for example, for percussionists who play multiple instruments.

For players holding multiple instruments and showing instrument names in staff labels, the staff label shows the instrument they are currently playing. If the player changes instrument partway through a system, the name of the new instrument is shown above the staff at its first note and the staff label is updated at the start of the next system.

Dorico Elements includes the instrument transposition, or instrument pitch, in staff labels for transposing instruments by default. Transposing instruments are instruments whose sounding pitch is different to the notated pitch.

Part layouts by default do not show staff labels, as most parts only contain a single staff whose identity is clear from the context and the layout name. The layout name is shown at the top left of the first page in part layouts by default.

You can change when instrument transpositions, or instrument pitches, are shown in staff labels. You can also change whether the instrument transposition is shown before or after the instrument name in staff labels.

NOTE

- You do not need to number instruments in staff labels manually, as Dorico Elements automatically numbers instruments when there are multiple players of the same type holding instruments with identical names.
- Layout names are different to the instrument names used for staff labels.

• Staff labels do not show all instruments held by players; for example, in the staff label for the first system. You should include a comprehensive instrumentation list that shows any doubling at the front of your score.

Staff labels imported from MusicXML files

When exporting MusicXML files from Cubase and importing them into Dorico Elements, you can improve the accuracy of the automatic instrument selection by changing the instrument names in the Cubase **Score Editor** to the same English instrument names that Dorico Elements uses before exporting the file.

RELATED LINKS

Player, layout, and instrument names on page 176 Transposing instruments on page 130 Instrument numbering on page 129 Staff label paragraph styles on page 1296

Hiding/Showing staff labels

You can show full or abbreviated instrument/player names in staff labels, or hide all staff labels entirely, in each layout independently. The first system in each flow and all subsequent systems can have different staff label lengths.

By default, full staff labels are shown on the first system of each flow and abbreviated staff labels are shown on subsequent systems in full score layouts. In part layouts, staff labels are not shown on any systems.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- 2. In the Layouts list, select the layouts in which you want to hide/show staff labels.
 By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, Shift -clicking adjacent layouts, and Ctrl/Cmd -clicking individual layouts.
- 3. In the category list, click **Staves and Systems**.
- **4.** In the **Staff Labels** section, choose one of the following options for **Staff labels on first system**:
 - Full
 - Abbreviated
 - None
- 5. Choose one of the following options for **Staff labels on subsequent systems**:
 - Full
 - Abbreviated
 - None
- **6.** In the **Flows** subsection, choose one of the following options for **Show staff labels**:
 - On all flows
 - On first flow only

7. Click Apply, then Close.

RESULT

Staff labels are hidden/shown on the corresponding staves and flows in the selected layouts.

- None hides staff labels.
- **Full** and **Abbreviated** show staff labels using the corresponding instrument/player name length.

TIP

We recommend choosing settings that are appropriate for most flows in the layout, then changing the length of staff labels at other positions if required. For example, if you want to show full staff labels only on the first system of the first flow, with abbreviated staff labels on all other systems.

AFTER COMPLETING THIS TASK

- You can change the full and short names for each instrument.
- You can change whether staff labels show instrument or player names for each player in each layout independently.

RELATED LINKS

Changing instrument names on page 179

Showing instrument/player names in staff labels on page 1291

Hiding/Showing instrument change labels at the start of flows on page 138

Changing the minimum indent for systems with staff labels

You can change the minimum indent for all systems that show staff labels to optimize horizontal space in each layout independently.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- **2.** In the **Layouts** list, select the layouts whose minimum indent for systems with staff labels you want to change.
 - By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, **Shift** -clicking adjacent layouts, and **Ctrl/Cmd** -clicking individual layouts.
- **3.** In the category list, click **Staves and Systems**.
- **4.** In the **Staff Labels** section, change the value for **Minimum indent for systems with staff labels**.
- 5. Click Apply, then Close.

RESULT

The minimum indent on all systems that show staff labels is changed in the selected layouts.

RELATED LINKS

Changing the first system indent on page 1305

Moving the start/end of systems on page 500

Hiding/Showing staff labels at system/frame breaks

You can change whether staff labels at individual system/frame breaks show full, abbreviated, or no instrument/player names, independently of your per-layout settings. For example, if you want full staff labels at the start of the first flow but abbreviated staff labels at the start of subsequent flows, or if you want to show staff labels in choral music only on systems that contain more complicated parts, solo lines, or divisi lines.

PREREQUISITE

- You have inserted system/frame breaks at the positions where you want to hide/show staff labels
- Signposts are shown for system/frame breaks.
- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing 3** is selected in the Engrave toolbox.

PROCEDURE

- **1.** In Engrave mode, select the system/frame break signposts at the positions where you want to hide/show staff labels.
- 2. In the Properties panel, activate **Staff labels** in the **Format** group.
- **3.** Select one of the following options from the menu:
 - Full
 - Abbreviated
 - None

RESULT

Staff labels are hidden/shown on the corresponding systems to the selected system/frame breaks. Horizontal spacing is automatically adjusted so the system fills the width of the music frame.

- None hides staff labels.
- **Full** and **Abbreviated** show staff labels using the corresponding instrument/player name length.

Deactivating the property returns any selected system break signposts to your per-layout settings.

EXAMPLE







No staff labels shown

RELATED LINKS

Properties panel on page 646
Engrave toolbox on page 490
Inserting system breaks on page 617
Inserting frame breaks on page 621
Hiding/Showing signposts on page 438

Staff label contents

Staff labels can show the instrument names set for each instrument or the player name of the corresponding player. Staff labels can show full or short names.

Instrument numbers are automatically shown in both full and abbreviated staff labels that use instrument names.

- Full staff labels use full instrument/player names.
- Abbreviated staff labels use short instrument/player names.
- None shows no staff labels.

NOTE

- You can change the full and short names for each instrument and player.
- Renaming instruments and players does not change the name shown at the top of each part layout if you have already renamed the layout. You can rename layouts separately.

RELATED LINKS

Player, layout, and instrument names on page 176 Instrument numbering on page 129 Instrument changes on page 134 Staff label paragraph styles on page 1296

Showing instrument/player names in staff labels

You can change whether staff labels show instrument or player names for each player in each layout independently, and on either all systems or only the first system in each flow. For example, you can show the player names for percussionists in full score layouts and instrument names in percussion part layouts.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- **2.** In the **Layouts** list, select the layouts in which you want to change the contents of staff labels.

By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, **Shift** -clicking adjacent layouts, and **Ctrl/Cmd** -clicking individual layouts.

- 3. In the category list, click **Staves and Systems**.
- **4.** In the **Staff Labels** section, in the **Show player name instead of instrument names** list, activate the checkbox for each player whose player name you want to show in staff labels.
- **5.** Choose one of the following options for **Show player names**:
 - On all systems

• On first system only

6. Click Apply, then Close.

RESULT

Player names are shown for players when their checkbox is activated. Instrument names are shown for players when their checkbox is deactivated.

Full and short player names are used according to your staff label settings.

If you chose **On first system only**, activated player names are only shown on the first system in each flow, with instrument names shown on all other systems.

AFTER COMPLETING THIS TASK

You can change the full and short names for each instrument and player.

RELATED LINKS

Percussion kit presentation types on page 1406 Renaming groups in grid presentation percussion kits on page 148 Staff label paragraph styles on page 1296

Instrument transpositions in staff labels

Instrument transpositions indicate the interval between the note an instrument plays and the sounding note produced. Transposing instruments, such as Horn in F and Clarinet in Bb, are commonly shown with their transposition, also known as their "instrument pitch", as part of their instrument name or layout name.

Depending on the options set for **Show transposition** in the **Edit Instrument Names** dialog for each transposing instrument, they might show transpositions in staff labels even if you have hidden transpositions in staff labels in their layout.

Dorico Elements sets common transposing instruments, such as Clarinet in Bb and Trumpet in Bb, to follow your per-layout settings for hiding/showing instrument transpositions in staff labels.

To reduce the risk of confusion, uncommon transposing instruments, such as Clarinet in A or Trumpet in E, are set to show their transposition in staff labels always, even if you have hidden instrument transpositions in the layout.

RELATED LINKS

Transposing instruments on page 130
Player, layout, and instrument names on page 176
Changing the language for instrument names on page 56

Hiding/Showing instrument transpositions in staff labels

You can hide/show instrument transpositions in staff labels in each layout independently. For example, you can hide instrument transpositions in staff labels in full score layouts but show them in part layouts.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- **2.** In the **Layouts** list, select the layouts in which you want to hide/show instrument transpositions in staff labels.

By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, **Shift** -clicking adjacent layouts, and **Ctrl/Cmd** -clicking individual layouts.

- **3.** In the category list, click **Staves and Systems**.
- **4.** In the **Staff Labels** section, activate/deactivate the following options for **Instrument pitch or transposition**:
 - Show in full staff labels
 - Show in abbreviated staff labels
- 5. Click Apply, then Close.

RESULT

Instrument transpositions are shown in staff labels of the corresponding length in the selected layouts when the corresponding checkbox is activated, and hidden when the corresponding checkbox is deactivated.

NOTE

Depending on the options set for **Show transposition** in the **Edit Instrument Names** dialog for each transposing instrument, they might show transpositions in staff labels even if you have hidden transpositions in staff labels in their layout.

Changing the appearance/position of instrument transpositions in staff labels

You can change the appearance and position of instrument transpositions in staff labels in each layout independently. For example, if you want to show instrument transpositions on a separate line in part layouts, but on the same line and parenthesized in full score layouts.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- **2.** In the **Layouts** list, select the layouts whose instrument transposition appearance/position you want to change.
 - By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, **Shift** -clicking adjacent layouts, and **Ctrl/Cmd** -clicking individual layouts.
- 3. In the category list, click **Staves and Systems**.
- **4.** In the **Staff Labels** section, choose one of the following options for **Position of instrument** pitch in full staff labels:
 - Start
 - End
- **5.** Optional: If you chose **Start**, enter the characters you want to appear as separators into the **Separator between instrument pitch at start and name** field.
- **6.** Optional: If you chose **End**, activate/deactivate the following options:
 - Show on separate line
 - Show in parentheses

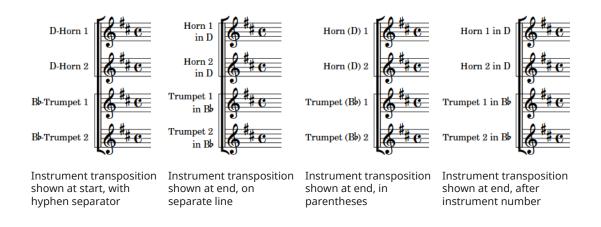
• Show instrument number before transposition

7. Click Apply, then Close.

RESULT

The appearance and position of instrument transpositions in staff labels is changed in the selected layouts.

EXAMPLE



RELATED LINKS

Changing the language for instrument names on page 56 Transposing instruments on page 130 Instrument numbering on page 129

Player group labels

Player group labels show the names of player groups as vertical text on vertical brackets to the left of staff labels. They allow you to identify groups of staves and are typically used in large-scale works, such as for orchestra and double choir.



Player group labels to the left of staff labels, showing sections in an orchestra

Player group labels show full player group names by default. Short player group names are used when the full player group name is longer than the bracket.

You can show player group labels in each layout independently.

TIP

Player group labels use the **Player Group Labels** paragraph style, which you can edit in the **Paragraph Styles** dialog.

RELATED LINKS

Player groups on page 163 Renaming player groups on page 166 Brackets and braces on page 845 Paragraph Styles dialog on page 739

Hiding/Showing player group labels

You can hide/show player group labels in each layout independently. For example, if you want to show player group labels for choirs in the full score layout but hide them in the vocal score layout.

PROCEDURE

1. Press Ctrl/Cmd-Shift-L to open Layout Options.

- 2. In the **Layouts** list, select the layouts in which you want to hide/show player group labels. By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
- 3. In the category list, click **Staves and Systems**.
- **4.** In the **Staff Labels** section, activate/deactivate **Show player group names**.
- 5. Click Apply, then Close.

RESULT

Player group labels are shown for player groups in the selected layouts when **Show player group names** is activated, and hidden when it is deactivated.

Staff label paragraph styles

Staff labels use paragraph styles to format their fonts, including their size, spacing, alignment, and other formatting options. When staff labels contain multiple separate parts, such as when the instrument name and instrument number have different vertical positions, you can format each part separately.



The following paragraph styles are used for staff labels:

- 1 Player Group Labels: Used for player group labels.
- 2 Staff Labels: The default style used for staff labels that have the instrument/player name and number aligned and next to each other. It is also used for the group labels on divisi staves, groups in grid presentation percussion kits, and for instrument/player names grouped between multiple identical instruments or between player numbers in staff labels on condensed staves.
- **3 Staff Labels (Inner)**: Used for individual staves within divisi groups, instrument numbers when instrument names are aligned between multiple identical instruments, and player numbers in staff labels on condensed staves.
- **Staff Labels (Percussion Grid)**: Used for individual instruments in grid presentation percussion kits.

You can edit each paragraph style independently of each other in the **Paragraph Styles** dialog; for example, if you want outer staff labels to be left-aligned but inner staff labels to be right-aligned.

TIP

You can make further changes to the appearance and alignment of staff labels on divisi staves at each individual divisi change.

RELATED LINKS

Paragraph Styles dialog on page 739
Player group labels on page 1295
Instrument change label paragraph styles on page 139
Percussion kit presentation types on page 1406

Staff labels for percussion kits

The staff labels shown for percussion kit staves depend on their percussion kit presentation type.

The following staff labels are shown for the corresponding percussion kit presentation type:

5-line staff

Single instrument name using the instrument name of the percussion kit.

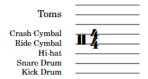


Grid

Multiple instrument names: one for each kit instrument, positioned at the staff position of the corresponding instrument.

Group names are centered between instruments in each group.

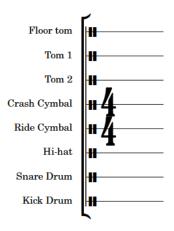
Staff labels for individual instruments in grids use a smaller font and a different paragraph style than used for standard instrument staff labels. Groups in grids use the standard staff label paragraph style.



Single-line instruments

Multiple instrument names: one for each kit instrument, positioned beside the corresponding single-line staff.

Staff labels for single-line instruments use the same font and paragraph style as used for standard instrument staff labels.



You can change the player names, layout names, and instrument names of percussion kits in the same ways as for other players and instruments. However, to change the staff labels for percussion kits, you must change kit instrument names in different ways for percussion kits, depending on your percussion kit presentation type:

- 5-line staff: Open the **Edit Instrument Names** dialog from the **Players** panel in Setup mode, or use the **Name** field in the **Edit Percussion Kit** dialog, to change the name of the kit.
- Grid/Single-line instruments: Open the **Edit Instrument Names** dialog from inside the **Edit Percussion Kit** dialog in Setup mode to change the names of individual instruments.

The same instrument name fields and options are available for kit instruments as for standard pitched instruments.

NOTE

Smaller staff labels for each line in grid presentations use the **Staff Labels (Percussion Grid)** paragraph style. You can edit this paragraph style in the **Paragraph Styles** dialog.

RELATED LINKS

Percussion kit presentation types on page 1406 Edit Percussion Kit dialog on page 140 Renaming groups in grid presentation percussion kits on page 148 Player, layout, and instrument names on page 176

Staff labels on condensed staves

Staff labels on condensed staves must reflect all the players included on the staff. Dorico Elements automatically consolidates identical instrument names in staff labels on condensed staves but always shows all the required player numbers.

On condensed staves containing different types of instruments or instruments with different names, all required instrument names are shown.



Staff labels on condensed brass staves

Because condensing can change frequently, staff labels on condensed staves can vary from one system to another. The staff labels for condensed divisi staves reflect the divisions at the start of the system and show instrument names.

Dorico Elements also shows player labels above/below condensed staves to identify the players to which notes on condensed staves belong, as condensing can change within a single system. For condensed divisi staves, Dorico Elements shows the player labels "div.", with any required qualifications, and your set unison indication where each division starts and ends respectively.

RELATED LINKS

Condensing on page 626

Player, layout, and instrument names on page 176

Staves

A staff is a line or group of lines on which musical notes are notated to indicate the pitch and rhythm of music. Pitched instruments use the traditional five-line staff and unpitched instruments often use a single-line staff.

Notes are positioned on the lines and in the spaces on five-line staves, and can also use ledger lines above/below the staff to represent pitches that cannot fit on the staff.





A phrase on a five-line staff

The same phrase on a single-line staff

The pitch and register of notes on five-line staves are determined by clefs, which can also be combined with octave lines to indicate what pitches performers play.

On five-line staves for unpitched percussion instruments, the different staff positions correspond to different percussion instruments.



Because it is often necessary to have different staff sizes in different layouts depending on their type, such as having smaller staves in full score layouts than in part layouts, in Dorico Elements you can change various aspects of staves in **Layout Options**.

RELATED LINKS

Page formatting on page 583

Staff labels on page 1287

Changing the default staff size on page 587

Changing the positions of system objects on page 1304

Hiding/Showing empty staves on page 590

Brackets and braces on page 845

Adding instruments to players on page 131

Condensing on page 626

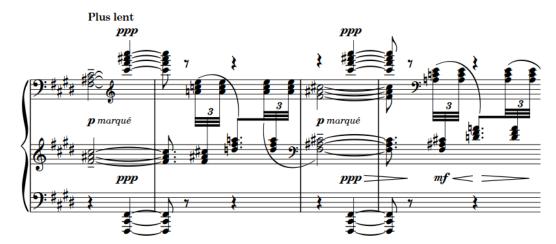
Divisi on page 1307

Percussion kit presentation types on page 1406

Extra staves

It is sometimes necessary to add extra staves to instruments; for example, to make complex contrapuntal music easier to read because it is spread out across more staves than usual for that instrument.

In Dorico Elements, you cannot add extra staves. However, extra staves are shown if you import or open a project that contains them.



An extract of Debussy's piano prelude "Feuilles mortes" with three staves

RELATED LINKS
Divisi on page 1307
Condensing on page 626
Voice-specific dynamics on page 913
Hiding/Showing blank staves after final flows on page 592
Signposts on page 438

Ossia staves

Ossia staves are smaller staves shown above/below the main staff of an instrument. They are used to show alternative phrases that can be played instead of the original phrase, such as suggestions for ornaments, alternative notations from other sources, or an easier version.

In Dorico Elements, you cannot add ossia staves. However, ossia staves are shown if you import or open a project that contains them.



An ossia staff below the left-hand piano staff shows an easier alternative

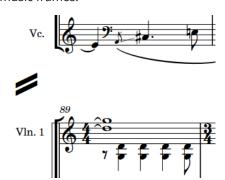
RELATED LINKS

Extra staves on page 1300

System dividers

System dividers are used to clarify the separation of different systems when they appear on the same page. They are usually shown as two thick, parallel angled lines positioned to the left of initial barlines.

In Dorico Elements, the outer edges of system dividers are aligned with the corresponding edges of music frames.



A system divider between two systems in a string quartet score

You can show system dividers in different circumstances and change their appearance in each layout independently.

Hiding/Showing system dividers

You can change the circumstances in which system dividers are shown, including specifying the minimum number of players required to show them, in each layout independently. For example, if you only want to show system dividers between systems that contain different numbers of staves.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- 2. In the Layouts list, select the layouts in which you want to hide/show system dividers. By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, Shift -clicking adjacent layouts, and Ctrl/Cmd -clicking individual layouts.
- **3.** In the category list, click **Staves and Systems**.
- **4.** In the **System Dividers** section, activate/deactivate **Show system dividers**.
- **5.** If you activated **Show system dividers**, choose one of the following options:
 - To show system dividers only between systems containing more than a set number of staves, choose **When min. staves exceeded**.
 - To show system dividers between all systems in flows that contain more than a set number of players, choose **When min. players exceeded**.
 - To show system dividers only between systems containing different numbers of staves,
 When number of staves differs.
- **6.** Optional: Do one of the following:

- If you chose When min. staves exceeded, change the value for Minimum number of staves in system.
- If you chose When min. players exceeded, change the value for Minimum number of players.
- 7. Click Apply, then Close.

RESULT

- If you deactivated Show system dividers, system dividers are hidden in the selected layouts.
- If you activated **Show system dividers**, system dividers are shown in the corresponding circumstances in the selected layouts.

RELATED LINKS

Hiding/Showing empty staves on page 590

Changing the length of system dividers

You can change the length of system dividers in each layout independently; for example, if you want to show longer system dividers in layouts that show full staff labels.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- 2. In the Layouts list, select the layouts in which you want to show system dividers. By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, Shift-clicking adjacent layouts, and Ctrl/Cmd -clicking individual layouts.
- **3.** In the category list, click **Staves and Systems**.
- 4. In the **System Dividers** section, choose one of the following options for **Appearance**:
 - Default
 - Long
 - Extra long
- 5. Click Apply, then Close.

System objects

System objects are items that apply to all staves in the system and appear in all layouts, but are not necessary to show on every staff in full score layouts. For example, tempo marks and rehearsal marks are important for all players to see in their parts, but would cause an orchestral full score to appear very cluttered if they were shown on every staff.

In Dorico Elements, the following items are considered system objects:

- Rehearsal marks
- Repeat endings
- Repeat markers
- System-attached text
- Tempo marks

- Time signatures shown above the staff
- Horizontal lines that apply to all staves

System objects automatically appear at least once in all layouts. You can show system objects at multiple positions in each system by showing them above multiple instrument families. For example, you might show them above the woodwind, brass, percussion, and string families. In an orchestral full score, this would ensure system objects are spread out evenly across the page, meaning no staff is very far from these important markings. You can also show rehearsal marks and repeat endings additionally below the bottom staff.

NOTE

- System objects are only shown above instrument families that are bracketed or braced together. You can change bracket grouping in each layout independently.
- If the size of system object font styles is set to **Staff-relative**, the staff size of the top staff in each instrument family group affects the size of system objects if they are shown above that bracketed group. Font styles that are set to **Absolute** are unaffected by staff size.

RELATED LINKS

Brackets according to ensemble type on page 847
Paragraph Styles dialog on page 739
Edit Font Styles dialog on page 737
Brackets and braces on page 845
Rehearsal marks on page 1196
Repeat endings on page 1210
Text items on page 1328
Tempo marks on page 1313
Large time signatures on page 1365
Lines on page 1174

Changing the positions of system objects

You can show system objects above different instrument families in each layout independently. Multiple items are categorized as system objects, including system-attached text, rehearsal marks, tempo marks, repeat markers, and repeat endings.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- **2.** In the **Layouts** list, select the layouts in which you want to change the instrument families above which system objects appear.
 - By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, **Shift** -clicking adjacent layouts, and **Ctrl/Cmd** -clicking individual layouts.
- **3.** In the category list, click **Staves and Systems**.
- **4.** In the **System Objects** section, activate the checkboxes for the instrument families above which you want system objects to appear.
- 5. Activate/Deactivate Show system objects above first soloist.
- **6.** Activate/Deactivate the following options for **Also show below bottom staff**:
 - Repeat endings
 - Rehearsal marks

7. Click Apply, then Close.

RESULT

System objects appear above the top staff in each bracketed group you select, provided a bracketed group for that instrument family is included in the selected layouts.

If you activated options for **Also show below bottom staff**, the corresponding notations additionally appear below the bottom staff.

NOTE

System objects are only shown above instrument families that are bracketed or braced together. You can change bracket grouping in each layout independently.

RELATED LINKS

Designating players as soloists on page 125

System indents

System indents control the distance between the left page margin and the start of systems of music. According to tradition, the first system in part layouts is indented, but in modern use this is not always necessary.

According to convention, coda sections at the start of new systems are also indented. Dorico Elements uses the same gap size before the start of codas whether they occur partway through systems or at the start of a new system.



A violin part with the first system indented

In Dorico Elements, system indents automatically adjust to accommodate staff labels. For example, if a system contains a staff label that is significantly longer than the minimum system indent, Dorico Elements increases the indent on that system to ensure the staff label remains legible and is not cut off on the left edge or collides with the music.

You can change both the minimum indent on systems with staff labels and the first system indent in each layout independently. You can also adjust the system indent at both the start and end of individual systems, independently of your per-layout settings.

Changing the first system indent

By default in Dorico Elements, the first system of each flow is indented in part layouts. You can change the indent for the first system of all flows in each layout independently.

PROCEDURE

1. Press Ctrl/Cmd-Shift-L to open Layout Options.

- 2. In the Layouts list, select the layouts whose first system indent you want to change.

 By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, Shift-clicking adjacent layouts, and Ctrl/Cmd-clicking individual layouts.
- 3. In the category list, click **Staves and Systems**.
- **4.** In the **Staff Labels** section, change the value for **Indent first system of flow by**.
- **5.** Activate/Deactivate **Apply indent when staff labels are shown**.
- 6. Click Apply, then Close.

RESULT

The indent of the first system of all flows is changed in the selected layouts.

If you deactivated **Apply indent when staff labels are shown**, first systems with staff labels are only indented by the space required for their staff labels.

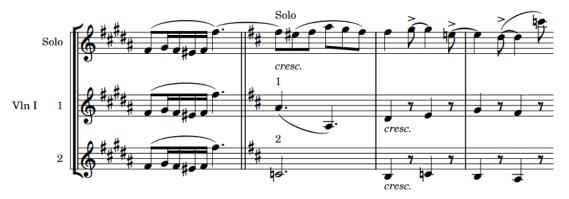
RELATED LINKS

Changing the minimum indent for systems with staff labels on page 1289
Changing the gap before codas on page 1221
Hiding/Showing staff labels on page 1288
Moving the start/end of systems on page 500
Changing the horizontal justification of final systems on page 597

Divisi

Divisi is when players split, or "divide", in order to play multiple lines of music, commonly for a limited passage, before returning to play together, or "tutti". Divisi passages can be notated with all lines on a single staff or across multiple staves.

Divisi is a technique most commonly used in orchestral string writing, as the string section typically contains a large number of players compared to the number of staves. For example, large orchestras commonly have twelve first violins all playing the same part most of the time. Dividing those players into multiple parts allows composers to write more complex contrapuntal music.



An example divisi change in a Violin I part, splitting it into two sections and a solo line

If the division is relatively simple, it is possible to write all parts on the same staff and label the section, with an indication of how many players are required for each line if necessary. If the parts have different rhythms at times, you can input them into separate voices on the same staff.

However, when a section is divided into multiple parts that are too different to be clearly written on a single staff, it is necessary to divide them onto multiple staves. In Dorico Pro, divisi changes allow you not only to divide sections into any number of parts with any number of staves, but also to include solo lines and group staves as required.

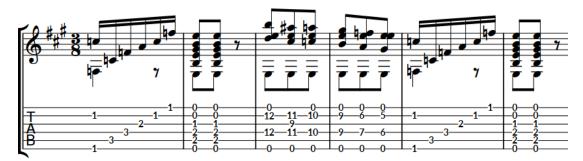
In Dorico Elements, you cannot input divisi changes. However, divisi changes are shown if you import or open a project that contains them.

RELATED LINKS

Extra staves on page 1300 Condensing on page 626 Inputting notes into multiple voices on page 227

Tablature

Tablature is an alternative notation to the five-line staff, and is used for fretted instruments. On tablature, pitches are indicated by fret numbers positioned on lines, each of which represents a string on the instrument. As tablature is commonly used for guitars, it usually shows six lines.



An extract of guitar music shown on both a notation staff and tablature

In Dorico Elements, you can show music for fretted instruments, such as the guitar or bass, on a regular notation staff and tablature together or only show one or the other. Notes and notations are linked between both presentations, meaning any changes you make to one, including inputting notes, automatically update the other.

On tablature, ties are automatically notated as round brackets around the second note/chord and all subsequent notes/chords in tie chains.

Any notes beyond the range of the instrument or impossible to calculate, such as below the nut on the lowest string or a natural harmonic without a suitable node, are shown on tablature as pink question marks. If two notes are allocated to the same string at the same rhythmic position, both notes appear beside each other and are colored green.

?

Note on tablature that cannot be calculated

The appropriate tablature is automatically shown for instruments according to their strings and tuning settings. There are default tunings stored for each instrument type in Dorico Elements, which you can customize in the **Edit Strings and Tuning** dialog.

RELATED LINKS

Hiding/Showing notation staves and tablature on page 1309
Fretted instrument tuning on page 150
Inputting notes on tablature on page 237
Changing music area colors on page 53
Harmonics on page 1062
Guitar bends on page 1103
Guitar techniques on page 1118
Ties on page 1341
Trills on page 1075

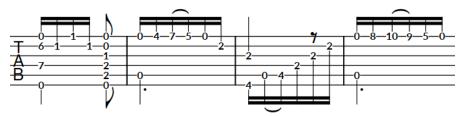
Capos on page 154

Rhythms on tablature

When notation staves and tablature are both shown, it is customary only to notate rhythms on the notation staff. However, when only tablature is shown, it is necessary to show rhythms on tablature.

The following items are shown to indicate rhythms on tablature:

- Time signatures
- Stems, stem flags, and beaming
- Rhythm dots



Rhythms shown on tablature

NOTE

Stems, stem flags, and beaming always appear stem-up on tablature in single-voice contexts, which means they can collide with guitar bends.

RELATED LINKS

Inputting notes on tablature on page 237

Hiding/Showing notation staves and tablature

You can show notation staves only, tablature only, or both in each layout independently and for each player holding at least one fretted instrument independently. For example, you can show only notation staves in the full score layout, but the notation staff and tablature in a guitar part layout.

When tablature is shown, it can appear with or without rhythms.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- 2. In the Layouts list, select the layouts in which you want to hide/show tablature. By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, Shift -clicking adjacent layouts, and Ctrl/Cmd -clicking individual layouts.
- 3. In the category list, click Players.
- **4.** In the **Fretted Instruments** section, choose one of the following options for each player holding at least one fretted instrument in your project:
 - To show only notation staves and hide tablature, choose Notation only.
 - To show both notation staves and tablature, choose **Notation and tablature**.

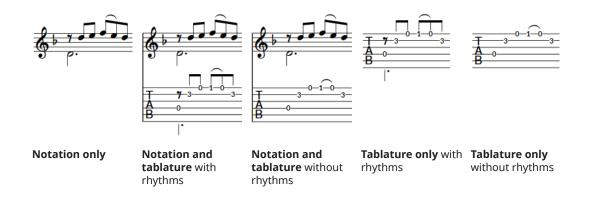
- To show only tablature and hide notation staves, choose **Tablature only**.
- **5.** Optional: If you chose **Notation and tablature** or **Tablature only**, activate/deactivate **Show rhythms in tablature**.
- 6. Click Apply, then Close.

RESULT

Notation staves and tablature are hidden/shown for the corresponding players in the selected layouts.

If tablature is shown, it appears with rhythms when **Show rhythms in tablature** is activated, and without rhythms when it is deactivated.

EXAMPLE



RELATED LINKS

Fretted instrument tuning on page 150 Guitar bends on page 1103 Guitar techniques on page 1118 Hiding/Showing empty staves on page 590 Changing instruments on page 132

Changing the allocated string for notes on tablature

You can change the string to which individual notes are allocated on tablature manually; for example, if you input the notes on the notation staff and want to change their default string allocation.

NOTE

You cannot allocate notes to a string on which they are impossible, such as if the note is lower than the open pitch of the string.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, Graphic Editing 3 is selected in the Engrave toolbox.

PROCEDURE

1. On tablature, select the fret numbers of notes whose allocated string you want to change. You can do this in Write mode and Engrave mode.

NOTE

You must select fret numbers on tablature, you cannot select the notes on notation staves.

- **2.** Change their allocated string in any of the following ways:
 - To move them up a string, press **N**.
 - To move them down a string, press M.
 - In the Properties panel, select a string from the **String** menu in the **Notes and Rests** group.

RESULT

The string to which the selected notes are allocated is changed. Using the key commands changes the string of the selected notes proportionally, whereas selecting a string from the **String** menu allocates all selected notes to the selected string.

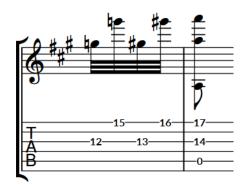
NOTE

- If they are now allocated to the same string as another note at that rhythmic position, both notes appear beside each other and are colored green.
- Deactivating the property resets the selected notes to their default string.

EXAMPLE



Notes allocated to the same string



After changing the strings for some notes to reduce the distance between frets

RELATED LINKS

Inputting notes on tablature on page 237 Engrave toolbox on page 490

Editing the tablature numbers font style

You can edit the formatting of the font used for all numbers on tablature project-wide; for example, if you want them to appear larger by default.

PROCEDURE

- 1. Choose **Library** > **Font Styles** to open the **Edit Font Styles** dialog.
- 2. In the font styles list, select **Tablature Numbers Font**.
- **3.** Activate the following options, individually or together, to change the corresponding aspect of the font:
 - Font family
 - Size
 - Style
 - Underlined
- 4. Click **OK** to save your changes and close the dialog.

RESULT

The formatting of the font used for numbers on tablature is changed project-wide.

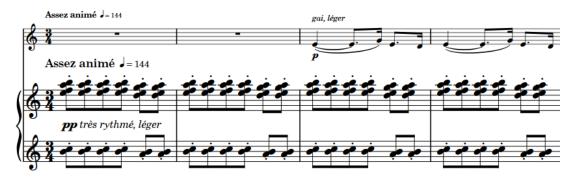
RELATED LINKS

Edit Font Styles dialog on page 737

Tempo marks

Tempo marks indicate how fast music is played, often with a combination of text instructions and metronome marks. They are also known as "tempo changes", "tempo indications", and "tempo markings".

A tempo mark can show text instructions, a metronome mark, or a combination of the two.



Tempo mark containing text instruction in French and metronome mark

Text instructions are traditionally expressed in Italian, such as *largo* or *allegretto*, but other languages, such as English, French, and German, have become widely accepted. The text instruction can express simply how fast the music is played, but can also suggest its character. For example, *grave* means slow but also solemn and sad, and *vivo* means fast but also lively and sprightly.

Metronome marks show the speed of the music, indicated in beats per minute, or "bpm". Metronome marks can show a fixed bpm or indicate a range of possible or acceptable values.

Gradual tempo changes indicate a change in tempo over a defined period of time. They can appear differently; for example, with/without a continuation line or with the text split into syllables and spread across their duration.

Tempo marks use a bold font with a large point size, so they are clearly noticeable on the page. They do not usually use an italic font.

In Dorico Elements, tempo marks are categorized as system objects. Therefore, tempo marks follow your per-layout settings for the visibility and positioning of system objects.

By default, the tempo marks you input set the tempo for playback and MIDI recording, but you can change the tempo mode if, for example, you want to use a single fixed tempo when recording MIDI. Gradual tempo changes also affect the playback tempo, and you can change the final tempo at the end of gradual tempo changes; for example, if you want to reach a specific bpm at the end. If you do not input any tempo marks into your project, the default playback tempo is 120 bpm.

RELATED LINKS

Input methods for tempo marks on page 286
Tempo mark font styles on page 1317
Tempo track on page 517
Tempo editor on page 689
Changing the tempo mode on page 528
Exporting text on page 101

Types of tempo marks

Dorico Elements groups tempo marks into different types according to their function and effect on the music.

In Dorico Elements, there are the following types of tempo marks:

Absolute Tempo Change

Indicates a defined change in tempo, and is often shown with a metronome mark. For example, "Adagio ≠76".

Absolute tempo changes can show tempo text and metronome marks, both individually and together.

Gradual Tempo Change

Indicates a change in tempo over a defined period of time, such as *rallentando* (slowing down) or *accelerando* (speeding up).

Relative Tempo Change

Indicates a change in tempo that is relative to the previous tempo, such as *mosso* (movement).

Relative tempo changes often include modifiers that qualify the change, such as *poco meno mosso* (a little less movement), and are not defined by a metronome mark. You can, however, set a relative metronome mark change as a percentage of the previous metronome mark that updates automatically if the previous metronome mark changes.

Reset Tempo

Returns the tempo to the previous tempo, such as *A tempo*, or a previously defined tempo, such as *Tempo primo* (return to the first tempo of the piece).

Tempo Equation

Indicates a change in the beat unit on which metronome marks are based. For example, if the time signature changes from 3/4 to 6/8, a tempo equation of indicates the same metronome mark value that applied to the quarter note beat unit in 3/4 now applies to the dotted quarter note beat unit in 6/8.

RELATED LINKS

Metronome marks on page 1319 Gradual tempo changes on page 1323 Tempo equations on page 1327 Input methods for tempo marks on page 286

Positions of tempo marks

Tempo marks are placed above the staff and at the same positions as other system objects, because they usually apply to all staves. They are placed above notations such as slurs, ties, and octave lines, and are often aligned with rehearsal marks to ensure clear readability.

By default in Dorico Elements, tempo marks align with either a time signature or the notehead/ rest at the rhythmic position to which they apply. For example, if there is a notehead with an accidental at the rhythmic position of a tempo mark, it is convention to align the tempo mark with the accidental.

If a repeat mark occurs mid-system and is not treated as a barline, tempo marks are aligned with the repeat mark.

When a tempo mark includes both text and a metronome mark, the text appears first, followed by the metronome mark.

You can move tempo marks to different rhythmic positions in Write mode. They are automatically positioned to avoid collisions.

You can move tempo marks graphically in Engrave mode, but this does not change the rhythmic positions to which they are attached.

In Engrave mode, each gradual tempo change has two square handles, one at the start and one at the end. You can move these handles to adjust the graphical position and length of gradual tempo changes. You cannot change the angle of gradual tempo changes.

If gradual tempo changes cross system and frame breaks, you can move the line segments on each side of the break independently.

Tempo marks are categorized as system objects in Dorico Elements, which you can show above the first bracket of selected instrument families. You can change the instrument families above which system objects appear in each layout independently; for example, if you want tempo marks to appear at multiple vertical positions in each system in the full score only.

RELATED LINKS

Changing the positions of system objects on page 1304 Moving notes/items rhythmically on page 448 Moving items graphically on page 501

Changing the end position of gradual tempo changes relative to barlines

You can change how the ends of individual gradual tempo change continuations are positioned relative to barlines. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

NOTE

This does not affect the appearance of gradual tempo changes with the text-only style.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, Graphic Editing 3 is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** Select the gradual tempo changes whose end position relative to barlines you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Barline interaction** in the **Tempo** group.
- **3.** Choose one of the following options:
 - Stop before
 - Continue

RESULT

The end position of the selected gradual tempo changes is changed. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

RELATED LINKS

Properties panel on page 646

Changing the property scope on page 648

Engrave toolbox on page 490

Changing the style of gradual tempo changes on page 1324

Changing the order of metronome marks on page 1322

Changing tempo text

You can change the text of existing tempo marks individually. For example, if you want to add "al fine" to a *ritardando* at the end of a flow.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** 3 is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the tempo marks whose tempo text you want to change. You can do this in Write mode and Engrave mode.
- **2.** In the Properties panel, enter the tempo text you want into the **Text** field in the **Tempo** group.
- 3. Press Return.

RESULT

The tempo text for the selected tempo marks is changed.

TIP

You can also change the tempo text by opening the tempo popover and changing the entry.

Showing abbreviated tempo text

You can show individual tempo marks with custom abbreviated text in some layouts; for example, if a long tempo mark extends beyond the page boundary in some part layouts but the abbreviated version fits within the boundary.

PREREQUISITE

- The lower zone is shown.
- Properties is selected in the lower zone toolbar.
- If you are in Engrave mode, Graphic Editing 3 is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- 1. In the music area, open the layout in which you want to show abbreviated tempo text. You can do this in Write mode and Engrave mode.
- 2. Select the tempo marks you want to show with abbreviated text.
- 3. In the Properties panel, activate **Abbreviation** in the **Tempo** group.
- 4. Enter the text you want into the value field.
- **5.** Activate **Abbreviate** in the **Tempo** group.
- **6.** Activate the corresponding checkbox.

RESULT

The selected tempo marks appear with abbreviated text when **Abbreviation** is activated and **Abbreviate** is deactivated, or when **Abbreviation** and both **Abbreviate** and its corresponding checkbox are all activated.

This allows you to switch between showing abbreviated/full text in different layouts without deleting your abbreviated text from the **Abbreviation** value field.

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490

Tempo mark font styles

There are different font styles for different types of tempo marks and tempo mark components. You can change different aspects of these fonts in the **Edit Font Styles** dialog, such as changing their font size to make tempo marks appear larger.



The following font styles are used for tempo marks:

- **1 Gradual Tempo Text Font**: Used for gradual tempo changes, such as "rallentando".
- 2 Immediate Tempo Text Font: Used for absolute tempo changes, such as "Adagio".
- 3 Metronome Music Text Font: Used for note value glyphs in metronome marks, such as "J". Must be SMuFL-compliant.
- **4 Metronome Text Font**: Used for equal signs and numbers in metronome marks, such as "=76"

NOTE

Changes made to font styles apply to the entire project, including part layouts.

RELATED LINKS

Edit Font Styles dialog on page 737

Hiding/Showing tempo marks

You can hide/show the different components in individual tempo marks without changing the speed of playback. This affects their appearance in all layouts.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** 3 is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the tempo marks you want to hide, or the signposts of tempo marks you want to show. You can do this in Write mode and Engrave mode.
- **2.** In the Properties panel, activate/deactivate the following properties in the **Tempo** group:
 - Text shown
 - Metronome mark shown

RESULT

When at least one of the properties is activated, the selected tempo marks are shown. They display components according to the properties that are activated.

When neither property is activated, the selected tempo marks are hidden. Signposts are shown at the position of each hidden tempo mark as they still affect the speed of playback.

TIP

You can input hidden tempo marks when using the tempo popover.

RELATED LINKS

Properties panel on page 646
Engrave toolbox on page 490
Input methods for tempo marks on page 286
Signposts on page 438
Changing the tempo mode on page 528
Muting notes/items individually on page 533

Parenthesizing tempo marks

You can show individual absolute tempo marks in parentheses; for example, to indicate metronome marks that are suggestions.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, Graphic Editing J is selected in the Engrave toolbox.

PROCEDURE

1. Select the absolute tempo marks you want to parenthesize. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate **Parenthesized** in the **Tempo** group.

RESULT

The selected tempo marks are shown in parentheses.

- When only either tempo text or metronome marks are shown, the visible component is parenthesized.
- When both tempo text and metronome marks are shown, metronome marks are parenthesized.

Metronome marks

Tempo marks often include a metronome mark value. Metronome marks show the speed of the music, indicated in beats per minute, or "bpm". For example, a bpm of 60 means one beat per second. The more beats per minute, the faster the music.

$$= 176 - 184$$

A metronome mark shown as a range

Metronome marks can be precise, such as J = 176, or can indicate an acceptable range, such as J = 152-176. They can also be shown in parentheses, which is useful if the metronome mark is intended as a guide rather than a fixed value.

By default, metronome marks appear as integers and do not show decimal places. If you input a metronome mark with a decimal place, it is rounded to the nearest integer. Metronome marks that you input in the Tempo editor appear as signposts by default.

The beat unit used in metronome marks commonly relates to the meter; for example, the metronome mark beat unit is often a quarter note in 4/4 but a dotted quarter note in 6/8.

In Dorico Elements, metronome marks can appear as an individual value or as a range. Depending on the type and appearance of metronome marks, the bpm value can indicate a fixed tempo or an approximate tempo.

RELATED LINKS

Input methods for tempo marks on page 286
Tempo mark font styles on page 1317
Tempo equations on page 1327
Tempo track on page 517
Tempo editor on page 689

Changing the metronome mark value

You can change the metronome mark value of individual absolute tempo marks after they have been input, including changing the beat unit.

NOTE

These steps do not apply to gradual tempo changes or reset/relative tempo marks.

PREREQUISITE

• The lower zone is shown.

- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the absolute tempo marks whose metronome mark values you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, change the value for **Tempo (bpm)** in the **Tempo** group.
- 3. Press Return.
- **4.** Choose the appropriate note duration and rhythm dot, if applicable, for **Beat unit**.

RESULT

The metronome mark value and beat unit is changed for the selected absolute tempo marks. This affects the tempo of playback, even if no metronome mark component is shown for those tempo marks.

NOTE

- By default, any decimals you enter are hidden and the displayed metronome mark value appears as the nearest integer. However, metronome marks always reflect their exact values in playback.
- You can also change the metronome mark value by opening the tempo popover and changing the entry.

RELATED LINKS

Properties panel on page 646 Engrave toolbox on page 490

Showing the metronome mark value as a range

You can show the metronome mark value of individual absolute tempo marks as a range. For example, you can use this to indicate that any speed within the given range is musically appropriate for the piece.

NOTE

These steps do not apply to gradual tempo changes or reset/relative tempo marks.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing ?** is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the absolute tempo marks whose metronome mark values you want to show as a range. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Tempo range (bpm)** in the **Tempo** group.
- **3.** Change the value in the value field.

RESULT

The tempo range, expressed as beats per minute, is changed for the selected tempo marks. By default, metronome mark ranges use a dash separator.

NOTE

Depending on the values set for each property, both **Tempo (bpm)** and **Tempo range (bpm)** can be the minimum/maximum tempo in the range, as Dorico Elements automatically arranges metronome mark ranges with the lower value first. However, the metronome mark used for playback is always **Tempo (bpm)**, regardless of whether that is the higher/lower value in the range.

Showing metronome marks as approximate

You can show individual metronome marks as approximate, and change the appearance of the approximate indication.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing 3** is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the metronome marks that you want to show as approximate. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Is approximate** in the **Tempo** group.
- 3. Optional: Change the appearance of the approximate indication in any of the following ways:
 - Activate Approximate appearance, then select the approximate appearance you want from the menu.
 - Activate **Show equals sign**, then activate/deactivate the corresponding checkbox.

RESULT

The selected metronome marks are shown as approximate.

Changing the relative tempo mark value

You can change the tempo of individual relative tempo marks, expressed as a percentage of the previous tempo mark.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing ?** is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the relative tempo marks whose value you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, change the value for **Relative %** in the **Tempo** group.

3. Press Return.

RESULT

The tempo at the relative tempo mark is changed. For example, if the previous tempo was 100 bpm, and you change a relative tempo mark to 90, the new tempo is 90% of 100 bpm, which is 90 bpm.

Changing the order of metronome marks

You can change the order of metronome marks relative to tempo text for individual tempo marks. For example, if you want to show metronome marks before tempo text in some tempo marks but after tempo text in others.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing 3** is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the tempo marks whose metronome mark order you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Metronome mark order** in the **Tempo** group.
- **3.** Choose one of the following options:
 - Before
 - After

RESULT

The order of metronome marks relative to tempo text in the selected tempo marks is changed.

EXAMPLE



Metronome mark before tempo text



Metronome mark after tempo text

RELATED LINKS

Properties panel on page 646 Engrave toolbox on page 490

Gradual tempo changes

Gradual tempo changes indicate a change in tempo over a defined period of time, such as *rallentando*, which indicates slowing down, and *accelerando*, which indicates speeding up.



Rallentando with dashed line

Gradual tempo changes are considered a type of tempo mark in Dorico Elements, meaning you can input them in the same ways as for tempo marks.

Because gradual tempo changes have a different metronome mark value at the start/end, you can change the final tempo at the end of individual gradual tempo changes.

In Dorico Elements, you can show gradual tempo changes with different styles, such as with a continuation line or with syllables spread across their duration. You can also show gradual tempo changes with different line styles, such as dotted or dashed.

NOTE

You cannot change the angle of gradual tempo changes.

RELATED LINKS

Input methods for tempo marks on page 286 Tempo mark font styles on page 1317 Lengthening/Shortening items on page 419 Exporting text on page 101

Adding poco a poco text to gradual tempo changes

You can add *poco a poco* text immediately after individual gradual tempo changes.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** 3 is selected in the Engrave toolbox.

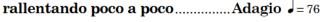
PROCEDURE

- **1.** Select the gradual tempo changes to which you want to add *poco* α *poco* text. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Poco a poco** in the **Tempo** group.

RESULT

Poco a poco text is shown immediately after the text in the selected gradual tempo changes. Deactivating **Poco a poco** (**little by little**) removes *poco a poco* text from the selected gradual tempo changes.

EXAMPLE





Rallentando with poco a poco text

Changing the style of gradual tempo changes

You can change the style of individual gradual tempo changes. Gradual tempo changes can appear as text only with no continuation line, text with a continuation line, or with the word spread across their duration.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing 3** is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the gradual tempo changes whose style you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Gradual style** in the **Tempo** group.
- **3.** Select one of the following options from the menu:
 - rit.
 - rit...
 - rit ar dan do

RESULT

The style of the selected gradual tempo changes is changed.

NOTE

Only gradual tempo changes with valid full text appear separated into syllables; for example, *ritenuto* or *accelerando*. Gradual tempo changes automatically have valid full text when you input them using the panel or select a suggested entry from the menu when using the popover. You can also change the text of existing gradual tempo changes, including adding hyphens manually to control how they are separated into syllables.

EXAMPLE

rallentando rallentando..... ral . len . tan . do .

rit.: Text only rit...: Text with a continuation line rit - ar - dan - do: Syllables in the text spread across the duration of

the gradual tempo change

RELATED LINKS

Properties panel on page 646 Engrave toolbox on page 490

Changing the line style of gradual tempo changes

You can change the line style of individual gradual tempo changes whose style includes a continuation line.

NOTE

This does not affect the appearance of gradual tempo changes with the text-only style.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing 1** is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the gradual tempo changes whose line style you want to change. You can do this in Write mode and Engrave mode.
- **2.** In the Properties panel, activate **Line style** in the **Tempo** group.
- **3.** Select one of the following options from the menu:
 - Solid
 - Dotted
 - Dashed

RESULT

The line style of the selected gradual tempo changes is changed.

Changing the final tempo at the end of gradual tempo changes

You can change how significantly gradual tempo changes affect the tempo in playback, expressed as a percentage of the tempo at the start of the gradual tempo change.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the gradual tempo changes whose final tempo you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, change the value for **Final tempo** % in the **Tempo** group.
- 3. Press Return.

RESULT

The final tempo at the end of the selected gradual tempo changes is changed.

For example, if you change the value to 20 on a gradual tempo change that started at 100 bpm, the final tempo is 20% of 100 bpm, which is 20 bpm. If you change the value to 120 on a gradual tempo change that started at 100 bpm, the final tempo is 120% of 100 bpm, which is 120 bpm.

Lengthening/Shortening gaps and dashes in gradual tempo changes

You can change the length of dashes and the gaps between dashes in individual gradual tempo changes. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

NOTE

These steps only apply to gradual tempo changes with dashed lines.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing 3** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** In Engrave mode, select the gradual tempo changes with dashed lines whose dash length you want to change.
- **2.** In the Properties panel, activate the following properties, individually or together, in the **Tempo** group:
 - Line dash length
 - Line dash gap
- **3.** Change the values in the value fields.

RESULT

Increasing **Line dash length** makes dashes in gradual tempo changes longer, decreasing the value makes dashes shorter.

Increasing **Line dash gap** makes gaps between dashes in gradual tempo change lines longer, decreasing the value makes gaps shorter.

If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490

Changing the line thickness of gradual tempo changes

You can change the thickness of dashed and solid lines in individual gradual tempo changes. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

NOTE

These steps only apply to gradual tempo changes with dashed and solid lines.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing ?** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- 1. In Engrave mode, select the gradual tempo changes whose thickness you want to change.
- 2. In the Properties panel, activate Line thickness in the Tempo group.
- 3. Change the value in the value field.

RESULT

Increasing the value makes dashed and solid lines thicker, decreasing the value makes dashed and solid lines thinner. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

Tempo equations

Tempo equations indicate a change in the beat unit on which metronome marks are based. They are often used to maintain a consistent pulse across multiple different meters.

For example, if the time signature changes from 6/8 to 3/4, a tempo equation of 4=1 indicates the same metronome mark value that applied to the dotted quarter note beat unit in 6/8 now applies to the quarter note beat unit in 3/4.



Tempo equations are considered a type of tempo mark in Dorico Elements, meaning you can input them in the same ways as for tempo marks.

NOTE

Tempo equations do not yet include tuplet durations. This is planned for future versions.

RELATED LINKS

Input methods for tempo marks on page 286

Text items

Text items exist at rhythmic positions within flows and allow you to display generic text in the music.

You can customize the formatting of text in text items using the available text editor options, such as by applying different paragraph styles to each line of text and different character styles to each character.



* Il faut bien fair ressortir la cloche dans tout le morceau.

A text item below a piano staff

In Dorico Elements, there are the following types of text items:

Staff-attached text

Text items that apply to individual staves and only appear on those staves.

System-attached text

Text items that apply to all staves and appear in all applicable layouts. In Dorico Elements, system-attached text is categorized as a system object. Therefore, system-attached text follows your per-layout settings for the visibility and positioning of system objects.

NOTE

- You can only use tokens in text frames. You cannot use tokens in text items. Full text frame functionality is only available in Dorico Pro.
- There are dedicated features for other types of text that often appear in musical scores, such as tempo marks and dynamics.

RELATED LINKS

Inputting text items on page 378
Text editor options in Write mode on page 379
Tokens on page 638
System objects on page 1303
Changing the default font family on page 743
Paragraph Styles dialog on page 739
Exporting text on page 101

Types of text

Generic text in Dorico Elements can exist as text items, either staff-attached or system-attached, or in text frames, which are fixed to the page rather than the music. There are dedicated features for other types of text that often appear in musical scores, such as tempo marks and dynamics.

In Dorico Elements, there are the following types of text:

Text items

Text items exist at rhythmic positions within flows. They can display any text you enter, apart from tokens. You can customize the formatting of text in text items using the available text editor options, such as by applying different paragraph styles to each line of text and different character styles to each character.

Text items can apply either to individual staves, which is known as "staff-attached text", or to all staves, which is known as "system-attached text".

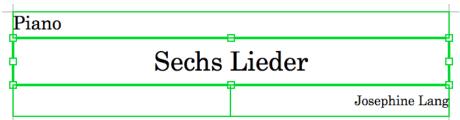


* Il faut bien fair ressortir la cloche dans tout le morceau.

A text item below a piano staff

Text in text frames

Text frames exist on pages independently of rhythmic positions within flows. They can display any text you enter, including tokens. You can customize the formatting of text in text frames using the available text editor options, such as by applying different paragraph styles to each line of text and different character styles to each character.



Text frames on the first page in a piano part layout, with the project title frame selected

NOTE

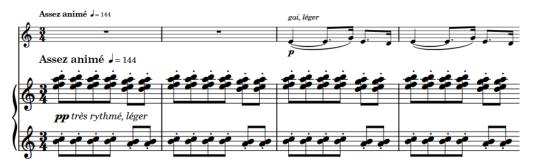
The project title, page numbers, and running headers that are automatically shown in layouts exist in text frames. Their contents and formatting come from page templates, which you cannot edit or create in Dorico Elements. Editing text frames in layouts is considered a page template override. Pages with page template overrides are not automatically deleted, even if they are empty because the layout became shorter.

If you want to change the information shown at the tops of pages, we recommend that you do so in the **Project Info** dialog to avoid page template overrides. The default page templates display different information according to their type.

Tempo marks

Tempo marks indicate how fast music is played, often with a combination of text instructions and metronome marks.

For example, A tempo, Larghetto, ritardando, and accelerando are all tempo marks.



Tempo mark containing text instruction in French and metronome mark

Rehearsal marks

Rehearsal marks are ordered sequences of letters or numbers that provide useful reference points. They are often shown in a rectangular enclosure.



A rehearsal mark, showing the letter G

Playing techniques

The term "playing techniques" covers a wide range of instructions intended to tell performers to modify the sound of the notes they are playing; for example, by changing their embouchure or changing the position of their bow, or by modifying their instrument, such as adding a mute or depressing a pedal.

For example, *pizzicato*, *flutter-tongue*, *con sordino*, and "snares on" are all playing techniques.



Dynamics

Dynamics indicate the loudness of the music and can be combined with expressive text to give further clarification about how to perform the music. Dynamics can indicate an immediate change in volume or a gradual change over a specified duration.

For example, pp, f, and "crescendo" are all dynamics.



A phrase with multiple different dynamics

Lyrics

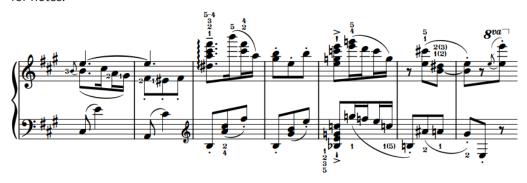
In Dorico Elements, the term "lyrics" is used for all text that is sung by singers. Lyrics are organized into lyric lines, with different types of lyric lines available for lyrics with different purposes. For example, lyrics in a chorus line are shown in an italic font by default.



Lyrics for a soprano duet with basso continuo accompaniment

Fingering

Fingerings use numbers and letters to recommend which fingers players should use for notes.



Piano music containing multiple fingerings, including a substitution fingering and alternative fingerings

Figured bass

Figured bass is a shorthand that uses figures to specify the harmony above the notated bass notes. Figures use a combination of Arabic numbers, accidentals, and horizontal hold lines to specify both the intervals above the bass note that make up the chord and its duration.



A basso continuo part with figured bass below the staff

Chord symbols

Chord symbols describe the vertical harmony of the music at a specific moment. They are frequently used in jazz and pop music, where players often improvise around chord progressions.

For example, "Gm7", "Dsus4", and "C6/9" are all chord symbols.

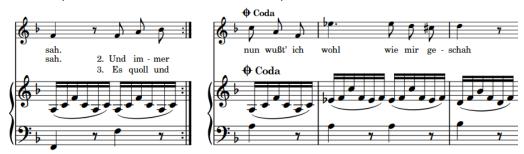


Chord symbols shown above slashes on the Clarinet and Piano staves to help the players improvise around the notated Cornet melody.

Repeat markers

Repeat markers show that musical material is to be repeated. They often involve jumping to different positions and sections in the music instead of moving through the music consecutively.

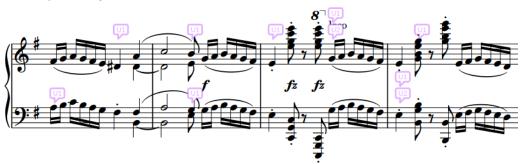
For example, D.C. al Coda, D.S., and Fine are all repeat markers.



A mid-system coda section

Comments

Comments are notes or instructions added at precise positions in a project without affecting the music. They are considered annotations in Dorico Elements, meaning they are not printed by default.



A passage with comments and replies

RELATED LINKS

Tokens on page 638

Text formatting on page 736

Changing the default font family on page 743

Editing text in text items on page 381

Exporting text on page 101

Flow headings on page 634

Page numbers on page 1130 Tacets on page 623 Tempo marks on page 1313 Rehearsal marks on page 1196 Playing techniques on page 1160 Dynamics on page 903 Lyrics on page 1010 Fingering on page 952 Figured bass on page 938 Chord symbols on page 852

Repeat markers on page 1216

Comments on page 481

Staff labels on page 1287

Instrument changes on page 134

Player group labels on page 1295

Changing the paragraph style of text items

You can change the paragraph style that is applied to individual text items; for example, if you want to use different paragraph styles according to the information included in different text items

PROCEDURE

- 1. In Write mode, select the text items whose paragraph style you want to change.
- 2. Choose Edit > Notations > Text > Change Paragraph Style to open the Change Paragraph **Style** dialog. You can also choose this option from the context menu.
- **3.** Select a paragraph style from the **Paragraph style** menu.
- **4.** Click **OK** to save your changes and close the dialog.

RESULT

The paragraph style applied to the selected text items is changed. The formatting of the selected text items now follows the paragraph style, such as its font size, font style, or horizontal alignment.

NOTE

If you override the paragraph style of text in an individual text item or text frame, such as by making text bold, any changes you later make to corresponding parameters of the paragraph style are not applied to the overridden text. However, font size overrides are combined with the font size in the paragraph style.

RELATED LINKS

Paragraph Styles dialog on page 739 Types of page templates on page 631 Removing page template overrides on page 633 Selecting more items of the same type on page 413

Aligning text items with the start of systems

You can align individual text items whose rhythmic position is at the start of systems with the systemic barline rather than the first note/rest, independently of the system alignment setting for their paragraph style. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** 3 is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** Select the text items you want to align with the start of systems. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Align with system start** in the **Text** group.
- **3.** Activate/Deactivate the corresponding checkbox.

RESULT

The selected text items are aligned with the start of systems when the checkbox is activated, and aligned with the first note/rest in systems when the checkbox is deactivated. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

When the property is deactivated, text items follow the system alignment setting of their paragraph style.

TIP

You can change the default alignment of each paragraph style relative to the start of systems in the **Paragraph Styles** dialog.

EXAMPLE



Text aligned with the first note in the system



Text aligned with the start of the system

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490 Inputting text items on page 378 Moving items graphically on page 501

Enabling/Disabling text collision avoidance

You can change whether individual text items automatically move to avoid collisions. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

Text items with collision avoidance disabled do not contribute to automatic staff spacing calculations.

NOTE

These steps do not apply to text in text frames.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing !** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- 1. In Engrave mode, select the text items whose collision avoidance you want to enable/disable.
- 2. In the Properties panel, activate **Avoid collisions** in the **Text** group.
- **3.** Activate/Deactivate the corresponding checkbox.

RESULT

The selected text items avoid collisions when the checkbox is activated, and do not avoid collisions when the checkbox is deactivated. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

RELATED LINKS

Staff spacing on page 604

Adding borders to text items

You can add borders to individual text items; for example, if you want to make the boundaries of text items clear. You can show borders on text items in addition to erasing their backgrounds.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing !** is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the text items to which you want to add borders. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Border** in the **Text** group.

RESULT

Borders are added to the selected text items.

TIP

Deactivating Border removes borders from the selected text items.

 You can show borders on text items automatically by using paragraph styles set to show borders by default.

EXAMPLE

Text

Text

Text with no border

Text with border shown

AFTER COMPLETING THIS TASK

- You can change the style and thickness of text item borders.
- You can change the padding between text items and each edge of their borders.

RELATED LINKS

Properties panel on page 646
Engrave toolbox on page 490
Paragraph Styles dialog on page 739
Hiding/Showing borders on layout names on page 982
Instrument change label paragraph styles on page 139

Changing the style of text item borders

You can change the style of borders shown on individual text items; for example, if you want to show rectangle borders on some text items but capsule borders on others. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing ?** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- 1. Select the text items whose border style you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Border style** in the **Text** group.
- **3.** Select one of the following options from the menu:
 - Rectangle
 - Rounded rectangle
 - Capsule
 - Angled ends rectangle

RESULT

The border style of the selected text items is changed. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

TIP

You can change the border style used by each paragraph style by default in the **Paragraph Styles** dialog.

EXAMPLE

Bridge

 $\left(\text{Bridge} \right)$

Bridge

 $\langle \mathrm{Bridge} \rangle$

Rectangle

Rounded rectangle

Capsule

Angled ends rectangle

Changing the thickness of text item borders

You can change the thickness of borders around individual text items.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing 1** is selected in the Engrave toolbox.

PROCEDURE

- 1. In Engrave mode, select the text items whose border thickness you want to change.
- 2. In the Properties panel, activate **Border thickness** in the **Text** group.
- 3. Change the value in the value field.

RESULT

The thickness of borders around the selected text items is changed.

Changing the padding around text items

You can change the padding around text items individually, and for each edge independently. This affects the distance between text and erased backgrounds and borders. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing ?** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- 1. In Engrave mode, select the text items whose padding you want to change.
- **2.** In the Properties panel, activate the **Erasure padding** properties, individually or together, in the **Text** group.

- L changes the padding between text items and their left edge.
- R changes the padding between text items and their right edge.
- T changes the padding between text items and their top edge.
- **B** changes the padding between text items and their bottom edge.
- 3. Change the values in the value fields for the edges whose padding you want to change.

RESULT

The padding around the selected text items is changed. Increasing the values increases the padding, decreasing the values decreases the padding. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

TIP

You can change the default padding between text and each border edge for individual paragraph styles in the **Paragraph Styles** dialog. However, paragraph style border padding settings are only used when **Border** is activated for the corresponding paragraph style.

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490 Paragraph Styles dialog on page 739

Erasing the background of text items

You can erase the background of individual text items; for example, to ensure the text remains legible when crossing barlines. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing !** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** In Engrave mode, select the text items whose backgrounds you want to erase.
- **2.** In the Properties panel, activate **Erase background** in the **Text** group.

RESULT

The backgrounds of the selected text items are erased. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

TIP

- You can show borders on text items in addition to erasing their backgrounds.
- Deactivating **Erase background** returns the selected text items to the default non-erased background.

EXAMPLE





Text with non-erased background

Text with erased background

AFTER COMPLETING THIS TASK

You can change the padding between text items and each edge of their erased areas.

Hiding/Showing text items

You can hide/show individual text items. You can do this for the current layout and frame chain only, or for all layouts and frame chains. For example, you can show specific text items in part layouts but hide them in full score layouts.

PREREOUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- 1. Select the text items you want to hide, or the signposts of text items you want to show. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate/deactivate **Hide** in the **Text** group.

RESULT

The selected text items are hidden when **Hide** is activated, and shown when it is deactivated. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

Signposts are shown at the position of each hidden text item. However, signposts are not printed by default.

TIP

- You can hide/show text signposts by choosing View > Signposts > Text.
- You can assign a key command for Hide/Show Item on the Key Commands page in Preferences.

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490 Signposts on page 438 Key Commands page in the Preferences dialog on page 58 Annotations on page 581

Ties

A tie is a curved line that joins two notes of the same pitch. When notes are longer than the maximum duration of a bar in the prevailing time signature, they automatically appear in Dorico Elements as tie chains; that is, a sequence of adjacent notes joined with ties.

Each sequence of ties, whether they join two notes or ten notes together, represents a single note with the duration of all the tied notes combined. A performer plays the notes as one note, without re-striking, re-blowing, or re-bowing the note at any point within the rhythmic duration of the tie chain.



A tie chain across several bars on the bottom piano staff

On tablature, tied notes appear as parenthesized fret numbers at the start of subsequent bars by default. When tablature is shown with rhythms, ties within the same bar are indicated with stems rather than bracketed noteheads.



A phrase on tablature with some ties within bars and The same phrase on a notation staff a chord tied across two bars

In Dorico Elements, most ties are created automatically. Rhythms are notated according to the prevailing beat grouping, which is normally set by the time signature. Therefore, notes that cannot be notated using a single duration are automatically drawn as tie chains. For example, if you input a dotted whole note at the start of a bar in a 4/4 time signature, it is automatically notated as a whole note tied to a half note in the next bar. If the time signature changes, tie chains are automatically adjusted to remain correct in the new meter.

Dorico Elements automatically determines the appropriate endpoint position and curvature direction for ties to avoid collisions, according to the context.

NOTE

- Slurs must not be confused with ties, which look superficially similar, but instead join notes of the same pitch to indicate that they are played as a single note. In that sense, ties are part of rhythmic notation, while slurs are considered articulation.
- In Write mode, you can only select whole tie chains because Dorico Elements considers each tie chain to be a single note. However, you can still input notations, such as dynamics, in the middle of tie chains by activating the caret and moving it to the required rhythmic position within the tie chain.

- In Engrave mode, you can select individual notes and ties within tie chains and edit them independently.
- When you tie existing notes together, they might be consolidated into fewer or more notes within a tie chain, depending on the musical context, the time signature, and the position of the start of the note in the bar.
- Articulations can only appear once on each tie chain, either at the start or the end, depending on the type of articulation. For example, staccato marks appear at the end whereas accents appear at the start. You can change the positions of articulations relative to individual tie chains.

RELATED LINKS

Inputting ties on page 243

Time signatures on page 1359

Hiding/Showing ties across beat boundaries on page 841

Changing the positions of articulations on tie chains on page 790

Hiding/Showing or parenthesizing accidentals on page 776

Bracketed noteheads on page 1047

Numbered bar regions on page 1231

Caret on page 214

Ties vs. slurs

Ties and slurs look superficially similar but differ in meaning.

Ties indicate that a note should not be re-struck. They are used to join notes of the same pitch together. For example, ties can be used to extend notes across multiple bars. Although multiple notes can be included in a single tie chain, each tie in the chain only joins one notehead to the next notehead on the staff.

Articulations on tied notes only affect the attack at the start of the tie chain and the release at the end of the tie chain.





Two long notes tied together

Two phrases with slurs

Slurs indicate articulation, such as bowing or breathing, and normally group notes of different pitches together. Slurs can join two noteheads together with any number of pitches in between. They often indicate the shaping of phrases.

Slurs can also be used in conjunction with articulation. Unlike ties, articulation within slurs can affect the sound throughout the phrase. For example, staccato articulations on repeated notes of the same pitch within a slur indicate that notes should be played on a stringed instrument using the same bow direction, but stopping the bow between each note.

RELATED LINKS

Slurs on page 1261

Tie styles

There are different styles of ties available in Dorico Elements, which you can use to indicate different meanings.

Solid

This is the default style for ties. Ties appear as tapered solid lines: thinner at the ends and thicker in the middle.



Dashed

Ties appear as tapered dashed lines. Can be used to denote optional or suggested ties; for example, in vocal music where some verses have more syllables than others and therefore require more notes.



Dotted

Ties appear as dotted lines. The dots are the same size and the same distance apart over the whole length of the tie. Can also be used to denote optional or suggested ties.



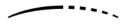
Half-dashed start

The first halves of ties appear as dashed lines, the second halves as solid lines. Used to denote that a tie was written incompletely in the source in critical editions.



Half-dashed end

The first halves of ties appear as solid lines, the second halves as dashed lines. Used to denote that a tie was written incompletely in the source in critical editions.



Editorial

Ties appear as solid black lines, but with a smaller vertical line intersecting them exactly halfway along their length. Used to show that ties were added by the editor and were not present in the source.



Changing the style of ties

You can change the style of individual ties. For example, to show dashed ties for notes with different lyrics in some verses. You can do this for the current layout and frame chain only, or for all layouts and frame chains. By default, all ties are solid.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** Is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

1. Select the ties whose style you want to change. You can do this in Write mode and Engrave mode.

NOTE

In Write mode, you can only select whole tie chains. In Engrave mode, you can select individual ties within tie chains.

- 2. In the Properties panel, activate **Style** in the **Ties** group.
- **3.** Select one of the following options from the menu:
 - Solid
 - Dashed
 - Dotted
 - Half-dashed start
 - Half-dashed end
 - Editorial

RESULT

The style of the selected ties is changed. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490

Changing the size of dashes/dots in ties

You can change the size of the dashes/dots in dashed/dotted ties individually. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

NOTE

These steps only apply to dashed/dotted ties.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

1. Select the dashed/dotted ties whose dash/dot size you want to change. You can do this in Write mode and Engrave mode.

NOTE

In Write mode, you can only select whole tie chains. In Engrave mode, you can select individual ties within tie chains.

- 2. In the Properties panel, activate **Dash/dot** in the **Ties** group.
- 3. Change the value in the value field.

RESULT

Increasing the value makes dashes/dots bigger, decreasing the value makes dashes/dots smaller. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

Changing the size of gaps in dashed/dotted ties

You can change the size of the gaps in dashed/dotted ties individually. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing 3** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** In Engrave mode, select the individual dashed/dotted ties whose gap size you want to change.
- 2. In the Properties panel, activate **Gap** in the **Ties** group.
- 3. Change the value in the value field.

RESULT

Increasing the value makes the gaps between dashes/dots larger. Decreasing the value makes the gaps between dashes/dots smaller. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490

Tie curvature direction

The direction of tie curvatures is determined by the stem direction of the notes/chords at each end of the tie, the number of notes in chords at each end, and the number of voices on the staff.

Tied single notes in single-voice contexts

If a single voice is active and a tie joins two single notes, tie curvature direction is determined by the stem directions of the notes at either end of the tie.

- If the stem directions match, the tie curves away from the notes and is positioned on the notehead side.
- If the stem directions differ, the tie curves upwards by default.

Tied chords in single-voice contexts

If a tie joins two chords, the direction of the ties is determined by the number of tied notes in the chords.

- For an even number, the ties are equally split between curving towards the notehead end and curving towards the stem end.
- For an uneven number, the majority of ties curve towards the notehead end.

In chords that contain both tied and untied notes, ties curve towards the stem end by default.

Tied notes in multiple-voice contexts

Ties are positioned on the stem side and are curved as follows:

- For up-stem voices, ties curve upwards.
- For down-stem voices, ties curve downwards.
- For overlapping/interlocking pitches in multiple voices, the rules for tied chords in single-voice contexts apply. All notes in all voices are treated as if they belong to a single voice.

TIP

You can change the curvature direction of ties individually.

RELATED LINKS

Tie height on page 1354

Tie shoulder offset on page 1356

Changing the curvature direction of ties

You can change the curvature direction of ties individually, including individual ties within tie chains. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, Graphic Editing 3 is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

1. Select the ties whose curvature direction you want to change. You can do this in Write mode and Engrave mode.

NOTE

In Write mode, you can only select whole tie chains. In Engrave mode, you can select individual ties within tie chains.

2. In the Properties panel, activate **Direction** in the **Ties** group.

- **3.** Choose one of the following options:
 - Up 🙃
 - Down

RESULT

The curvature direction of the selected ties is changed. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

TIP

You can adjust the precise shapes of tie chains, and of each tie within tie chains, in Engrave mode using the square handles on each tie.

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490 Changing the shape/angle of ties on page 1352

Non-standard ties

Usually, ties join two notes of the same pitch in the same staff. However, ties can also cross system breaks and frame breaks, clef changes, or time signature changes. These types of ties are all positioned automatically in Dorico Elements.

Ties can also join non-adjacent notes, notes in different voices, or notes in different staves together. In Dorico Elements, you must input these types of ties manually.

Ties across system/frame breaks

The ends of ties that cross system/frame breaks are automatically positioned in Dorico Elements.

Their vertical position remains the same, as both ends are centered on the noteheads to which they are attached. Their behavior also remains the same, as selecting one note in a tie chain that crosses a system/frame break in Write mode selects all notes in the tie chain.

The horizontal space for the parts of ties shown to the left of notes at the start of new systems/ frames may not be sufficient to show an ideal tie curve. In such cases, you can use **Note Spacing** in Engrave mode to adjust the spacing of individual notes at the start of systems/frames to give ties more space.





The start of a tie chain before a system break

The end of the same tie chain after a system break

Tied notes with accidentals across system/frame breaks

The ends of ties for tied notes with accidentals across system/frame breaks are also automatically positioned.

As tied notes in Dorico Elements are treated as one note notated to fit in time signatures, cautionary accidentals at the start of new systems/frames are not shown by default. If you choose to show accidentals beside notes in tie chains at the start of new systems/frames, the position of the notes is changed to accommodate accidentals. However, this automatic position might not leave sufficient room for the part of the tie to the left of the notes to be shown with an ideal curve.



The start of a tie chain before a system break



The end of the same tie chain, with a cautionary accidental in parentheses



The end of the same tie chain after adjusting note spacing to give the tie beside the accidental more space

Ties across time signature changes

Ties are automatically positioned between notes that span a time signature change. If ties crossing a time signature change are joining notes in the middle of a staff, the top or bottom of the time signature change is partially obscured by the ties. However, as ties are curved, the time signature is unlikely to be completely obscured.

Ties across clef changes

Ties are automatically positioned between notes that span a change of clef. Ties across clef changes are not horizontal, as the same pitch is positioned differently in each clef.

The result of cross-clef ties is likely to be visually and musically confusing, as they can be misread as slurs. In this case, consider moving the change of clef to before/after the tied note.

Ties between non-adjacent notes

You can input ties between notes of the same pitch that are not directly beside each other and between grace notes and normal notes. This can be useful when inputting ties between multiple notes before a chord, for example.



Tied notes building up a chord



Notes tied to the following chord



Multiple grace notes tied to the following chord

Ties between different voices

You can input ties between notes of the same pitch in different voices belonging to the same instrument.

Ties between notes on different staves

You can input ties between notes of the same pitch in different staves belonging to the same instrument, such as the two staves of a piano.

Laissez vibrer ties

Laissez vibrer ties are short ties that indicate a note should be left to ring, and should not be stopped. They extend a small amount to the right of the note to which they apply, but do not connect to another note.

You can add *laissez vibrer* ties to any note. You can edit *laissez vibrer* ties in Engrave mode like any other tie.

RELATED LINKS

Inputting ties on page 243
Hiding/Showing or parenthesizing accidentals on page 776
Hiding/Showing or parenthesizing cautionary accidentals on page 784
Note spacing on page 494

Hiding/Showing laissez vibrer ties

You can add *laissez vibrer* ties to any note; for example, to specify which notes must not be stopped after being played but instead left to ring.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** 3 is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the notes on which you want to add a *laissez vibrer* tie. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate/deactivate Laissez vibrer tie in the Notes and Rests group.

RESULT

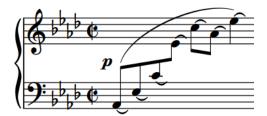
Laissez vibrer ties are added to the selected notes when the property is activated, and are removed when the property is deactivated. *Laissez vibrer* ties are positioned automatically.

TIP

- You can edit the length and shape of *laissez vibrer* ties individually like any other tie in Engrave mode.
- You can assign a key command for Toggle Laissez Vibrer Tie on the Key Commands page in Preferences.

EXAMPLE





Phrase without laissez vibrer ties

Phrase with laissez vibrer ties

RELATED LINKS

Properties panel on page 646 Engrave toolbox on page 490 Changing the shape/angle of ties on page 1352

Hiding/Showing ties across beat boundaries on page 841

Deleting ties

You can delete ties without deleting the notes to which they are attached.

NOTE

Deleting ties from tie chains removes all ties in the tie chain. If you want to remove single ties from longer tie chains, you can split the tie chain.

PROCEDURE

- 1. In Write mode, select the tie chains from which you want to delete all ties.
- **2.** Delete all ties in any of the following ways:
 - Press U.
 - In the Notes toolbox, click **Scissors** \square.

RESULT

All ties in the selected tie chains are deleted. Notes previously in the tie chain remain at their rhythmic positions.

RELATED LINKS

Notes toolbox on page 192

Changing the duration of notes on page 255

Splitting tie chains

You can split tie chains at specified positions; for example, if you want to change the pitch halfway through a tie chain or delete individual ties within tie chains. This does not remove any other ties in the tie chain.

NOTE

If you want to split ties because Dorico Elements notated notes differently than you expected, you can change the default note and rest grouping settings according to different meters. You can also set custom beat groupings for individual time signatures.

PROCEDURE

- **1.** In Write mode, double-click the staff where you want to split a tie chain to start note input at that position.
- **2.** Optional: Move the caret to where you want to split the tie chain.
 - To move the caret according to the current rhythmic grid resolution, press
 Right Arrow / Left Arrow .
 - To advance the caret according to the note value currently selected, press Space or click
 Advance Caret → in the Keyboard, Fretboard, or Drum Pads panel toolbar.
 - To move the caret to the next/previous bar, press Ctrl/Cmd-Right Arrow / Ctrl/Cmd-Left Arrow .
- **3.** Split the tie chain in any of the following ways:
 - Press U.
 - In the Notes toolbox, click Scissors \(\rightarrow\).
- **4.** Optional: If you want to split the same tie chain in multiple places, move the caret to the next rhythmic position where you want to split the tie chain and repeat step 3.
- **5.** Stop note input in any of the following ways:
 - Press Esc or Return.
 - In the Notes toolbox, click **Start Note Input** ...

RESULT

The tie chain is split at the caret position.

RELATED LINKS

Note and rest grouping on page 841

Beam grouping according to meters on page 822

Creating custom beat groupings for meters on page 842

Splitting notes by duration on page 256

Notes toolbox on page 192

Caret on page 214

Moving the caret manually on page 218

Rhythmic grid on page 212

Keyboard panel on page 202

Fretboard panel on page 204

Drum Pads panel on page 205

Ties in Engrave mode

In Engrave mode, each tie has five square handles that you can move independently. Some handles are connected to others, meaning moving one can affect the position of neighboring handles.



Ties have the following handles in Engrave mode:

- 1 Left endpoint
- 2 Left control point
- 3 Tie height
- 4 Right control point
- 5 Right endpoint

For example, moving the left endpoint moves both the start of a tie and the other handles apart from the right endpoint. However, moving the right control point only causes the tie height handle to move as well. This gives you fine control over the shape of ties, while ensuring the end result remains curved and smooth.

RELATED LINKS

Slurs in Engrave mode on page 1278

Changing the shape/angle of ties

You can change move ties and tie handles graphically, allowing you to change the shape and/or angle of individual ties; for example, to adjust an endpoint relative to an individual notehead. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- **Graphic Editing 1** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** In Engrave mode, select the whole ties or individual tie handles you want to move in any of the following ways:
 - Ctrl/Cmd -click multiple ties.
 - Ctrl/Cmd -click individual handles on multiple ties.
 - Select a whole tie and press **Tab** to cycle through its handles until the one you want to move is selected.
 - Click the handle you want to move.

NOTE

- To change the angle of ties, select tie endpoints only.
- You cannot move whole ties to the right/left, you can only move them upwards/ downwards.

- 2. Move the ties or handles in any of the following ways:
 - To move them a standard amount to the right, left, up, or down, press **Alt/Opt** plus the corresponding arrow key. For example, press **Alt/Opt-Left Arrow** to move handles to the left. This moves ties/handles by 1/8 space per press.
 - To move them a large amount, press **Ctrl/Cmd** plus the standard key command; for example, **Ctrl/Cmd-Alt/Opt-Left Arrow**. This moves handles by 1 space per press.
 - To move them a moderate amount, press **Shift** plus the standard key command; for example, **Shift-Alt/Opt-Left Arrow**. This moves handles by 1/2 space per press.
 - To move them a small amount, press Ctrl/Cmd Shift plus the standard key command; for example, Ctrl/Cmd-Shift-Alt/Opt-Left Arrow. This moves handles by 1/32 space per press.
 - Click and drag whole ties upwards/downwards.
 - Click and drag them in any direction.

TIP

To constrain movement either horizontally or vertically, start dragging, then press and hold **Shift**.

RESULT

The selected ties or tie handles are moved. Depending on the handles you selected and the directions in which you moved them, this can change the shape, angle, and/or proportional size of the corresponding ties. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

TIP

The following properties in the **Ties** group of the Properties panel are activated automatically when you move the corresponding tie handles:

- **Start offset** moves the left endpoints of ties. **X** moves them horizontally, **Y** moves them vertically.
- **End offset** moves the right endpoints of ties. **X** moves them horizontally, **Y** moves them vertically.
- Start handle offset moves the left control points of ties. X moves them horizontally, Y
 moves them vertically.
- End handle offset moves the right control points of ties. X moves them horizontally, Y
 moves them vertically.

You can also use these properties to change the shape of individual ties by changing the values in the value fields.

Deactivating the properties resets the corresponding handles on the selected ties to their default positions.

EXAMPLE

Moving the left endpoint moves both the start of a tie and the other handles apart from the right endpoint. This allows you to change the angle and/or width of the tie without changing its overall shape.

Moving the left control point causes the tie height handle to move but does not affect the position of the left and right endpoints or right control point. This gives you fine control over the shape of ties while ensuring that the end result remains curved and smooth.

Changing the thickness of ties

You can change the thickness of individual ties, including changing the thickness of the middle of ties independently of the ends of ties. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing 3** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- 1. In Engrave mode, select the ties whose thickness you want to change.
- **2.** In the Properties panel, activate the following properties, individually or together, in the **Ties** group:
 - End thickness
 - Middle thickness
- 3. Change the values in the value fields.

RESULT

Increasing the values makes the corresponding part of the selected ties thicker, decreasing the values makes the corresponding part of the selected ties thinner. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

Deactivating the properties returns the corresponding part of the selected ties to their default thickness.

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490

Tie height

The height of ties determines how far above/below their endpoints ties extend vertically.

To avoid the end points or curve apexes of ties starting or ending on staff lines, Dorico Elements automatically makes small changes to the curvature shape, height, and vertical position of ties. These changes are small, but the placement of ties is subtly different depending on the position of notes relative to staff lines.



A tie outside noteheads



When transposed one note down, the tie appears with a steeper curve to avoid reaching its apex on the staff line.



A tie between noteheads, with the ends slightly above the vertical center of the noteheads to avoid the tie appearing too close to the staff line at its ends or apex.

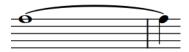


When transposed up, the ends of the tie are now positioned at the vertical center of the notehead, as there is no staff line with which it could collide.

You can change the height of individual ties in Engrave mode.

Increasing the height of ties makes them extend further from the vertical position of their endpoints, which gives them a rounder shape and means they take up more vertical space. Ties generally do not need to be as curved as slurs, as they join notes of the same pitch instead of arching over or above a range of pitches.

Where vertical space is tight, a balance must be found between how curved ties are and ensuring staves do not overlap.



A long tie with default height



A long tie with increased height

Changing the height of ties

You can change the height of individual ties; for example, to save vertical space on tightly-spaced pages. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREOUISITE

- **Graphic Editing 1** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** In Engrave mode, select the tie height (middle) handle of the ties whose height you want to change.
- 2. Move the handles in any of the following ways:
 - To move them upwards/downwards a standard amount, press Alt/Opt plus the
 corresponding arrow key. For example, press Alt/Opt-Up Arrow to move handles
 upwards. This moves handles by 1/8 space per press.

- To move them upwards/downwards a large amount, press Ctrl/Cmd plus the standard key command; for example, Ctrl/Cmd-Alt/Opt-Up Arrow. This moves handles by 1 space per press.
- To move them upwards/downwards a moderate amount, press Shift plus the standard key command; for example, Shift-Alt/Opt-Up Arrow. This moves handles by 1/2 space per press.
- To move them upwards/downwards a small amount, press Ctrl/Cmd Shift plus the standard key command; for example, Ctrl/Cmd-Shift-Alt/Opt-Up Arrow. This moves handles by 1/32 space per press.
- Click and drag them upwards/downwards.

TIP

To constrain movement either horizontally or vertically, start dragging, then press and hold **Shift**.

RESULT

The height of the selected ties is changed. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

NOTE

- To maintain a visually pleasing and symmetrical curve when changing the height of ties
 manually, you may need to move tie height handles to the right/left by a small amount, as
 well as upwards/downwards.
- Moving tie height handles to the right/left affects the shape of the whole tie.

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490

Tie shoulder offset

Tie shoulders affect the angles of the curves of ties as they taper towards an endpoint, as the tapered ends often approach noteheads at a steeper angle than that of a tie's arch.

Increasing the shoulder offset makes the onset of the curve shallower, whereas decreasing the shoulder offset makes the onset steeper.





A long tie with default shoulder offset

A long tie with increased shoulder offset

You can change the shoulder offset of ties individually by moving their control point handles in Engrave mode.

Changing the shoulder offset of ties

You can change the shoulder offset of individual ties. For example, you might want to change the shoulder offset of a few very short or very long ties in your project to improve their shape. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- **Graphic Editing 3** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- 1. In Engrave mode, select one of the control point handles on each of the ties whose shoulders you want to adjust in any of the following ways:
 - Select a whole tie and press Tab to cycle through the handles until the one you want to move is selected.
 - Click the handle you want to move.
 - Ctrl/Cmd -click individual handles on multiple ties.
- 2. Move the handles in any of the following ways:
 - To move them a standard amount to the right, left, up, or down, press Alt/Opt plus the
 corresponding arrow key. For example, press Alt/Opt-Left Arrow to move handles to
 the left. This moves handles by 1/8 space per press.
 - To move them a large amount, press **Ctrl/Cmd** plus the standard key command; for example, **Ctrl/Cmd-Alt/Opt-Left Arrow**. This moves handles by 1 space per press.
 - To move them a moderate amount, press **Shift** plus the standard key command; for example, **Shift-Alt/Opt-Left Arrow**. This moves handles by 1/2 space per press.
 - To move them a small amount, press Ctrl/Cmd Shift plus the standard key command; for example, Ctrl/Cmd-Shift-Alt/Opt-Left Arrow. This moves handles by 1/32 space per press.
 - Click and drag them in any direction.

TIP

To constrain movement either horizontally or vertically, start dragging, then press and hold **Shift**.

3. Optional: Repeat steps 1 and 2 for the other control point handle on the ties whose shoulders you want to adjust.

RESULT

Moving tie offset handles further apart reduces the shoulder offset, while moving them closer together increases the shoulder offset. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

TIP

The following properties in the **Ties** group of the Properties panel are activated automatically when you move the corresponding tie handles:

Start handle offset moves the left control points of ties. X moves them horizontally, Y
moves them vertically.

End handle offset moves the right control points of ties. X moves them horizontally, Y
moves them vertically.

You can also use these properties to change the shoulder offset of individual ties by changing the values in the value fields.

Deactivating the properties resets the corresponding handles on the selected ties to their default positions.

RELATED LINKS

Properties panel on page 646 Changing the property scope on page 648 Engrave toolbox on page 490

Time signatures

Time signatures indicate the meter of music, and apply to all bars from where they first appear until a subsequent change of time signature. Meter describes the rhythmic pulse of music, and its division into beats and bars.

A time signature is made up of two parts: numerator on top, and denominator underneath. These are the same mathematical terms as are used for fractions due to their similar arrangement.



1 Numerator

Specifies the number of beats in each bar for the time signature. The duration of beats is specified by the denominator.

2 Denominator

Specifies the beat duration for the time signature. The denominator doubles for every halving of the beat duration: 1 is a whole note (breve), 2 is a half note (minim), 4 is a quarter note (crotchet), 8 is an eighth note (quaver), and so on.

For example, a 4/4 time signature tells you the bar is made up of four beats, and each of those beats is a quarter note in length. A time signature of 4/2 contains four half notes in each bar, and 4/8 contains four eighth notes (quavers) in each bar. Both 3/4 and 6/8 contain six eighth notes, but it is understood that a 3/4 bar contains three quarter note beats, whereas a 6/8 bar contains two dotted quarter note beats.

Bars are rhythmic groups, divided according to the time signature, and they make following the music much more practical and easier to read. Notes are beamed differently in different time signatures for the same reasons.

By default, time signatures apply to all staves. However, there are certain situations, such as in polymetric music, where some parts require their own time signature, independently of the rest of the ensemble. You can input time signatures that apply to all staves or only apply to single staves in Dorico Elements.

Time signatures apply until the next time signature change or the end of the flow, whichever comes first.

Time signatures traditionally use a unique, heavy font that ensures they stand out against staff lines, and fill the height of a single staff. For some types of music, particularly film music, it is typical to use large time signatures that span several staves.

NOTE

- You can input notes without inputting a time signature.
- Beat lengths are fixed across all staves in your project, regardless of the time signature. For
 example, if you have a 2/4 time signature on one staff and a 6/8 time signature on another
 staff, then one quarter note in the 2/4 time signature equals one quarter note in the 6/8 time
 signature, meaning their barlines do not match.

• Dorico Elements does not automatically add beats to fill bars when you input time signatures unless Insert mode is activated.



A 5/8 time signature input before an existing 4/4 time signature without Insert mode activated, leaving only three eighth note beats in the second 5/8 bar.

RELATED LINKS

Input methods for time signatures and pick-up bars on page 277
Beam grouping according to meters on page 822
Note and rest grouping on page 841
Creating custom beat groupings for meters on page 842
Bars on page 793
Insert mode on page 439

Types of time signatures

There are different types of time signatures, which can indicate various and complex meters.

NOTE

Dorico Elements uses the definitions for meters commonly used in American English. These definitions, such as which meters are considered simple and compound, might be different in other languages.

Simple

In simple time signatures, each beat is divided by two into equal groups of notes. Simple time signatures can be simple duple, such as 2/4, simple triple, such as 3/4, or simple quadruple, such as 4/4.



Compound

In compound time signatures, each beat is divided by three into equal groups of dotted notes, such as 6/8, which contains two dotted quarter note beats, or 9/4, which contains three dotted half note beats.



Irregular

Irregular time signatures, such as 5/4 or 7/8, cannot be subdivided into equal beat groups. Because the numerator is odd, these time signatures must be divided into unequal beat groups. For example, 5/4 usually contains a half note beat and a dotted half note beat.



Additive

Additive time signatures show how bars are subdivided into beat groups. You can show beat group numerators for any type of time signature. For example, instead of 7/8, you could show an additive time signature of 2+3+2/8.



Alternating

An alternating time signature indicates a regular pattern that switches every bar between two or more time signatures, in the indicated order. For example, for a phrase with twelve eighth notes that needs to be emphasized 3+3+2+2+2, an alternating time signature of 6/8+3/4 might allow the two meters to be read more clearly.



Interchangeable

An interchangeable time signature indicates a set of time signatures at the start of the piece that can be used during the piece, such as 3/4–2/4. Unlike alternating time signatures, interchangeable time signatures do not require a fixed pattern; any bar in the piece can follow any of the time signatures in the set without having to restate the time signature.

NOTE

You must manually input the appropriate time signatures where you want them, as unlike alternating time signatures, there is no fixed pattern for them. Any time signatures you input after an interchangeable time signature that are specified in it are hidden automatically until you end the interchangeable time signature.

They can have different separator styles in Dorico Elements, which you can change for individual time signatures.



Aggregate

An aggregate time signature shows two or more meters within the same bar, such as 2/4+3/8+5/4. Dorico Elements automatically shows dashed barlines to indicate the divisions between the different meters, but you can also specify that you do not want to show dashed barlines when you input aggregate time signatures with the popover.



Open

An open time signature has no restrictions on meter, beaming, or beats. Any number of notes can be added, with any beaming. For example, open time signatures might be used for cadenza passages.

NOTE

In open meters, you must input barlines and add beats manually. You can also extend open meter bars by inputting notes with Insert mode activated and set to a global scope.



Non-power of two

A non-power of two time signature is one such as 5/6, which indicates five sextuplet quarter notes (crotchets) where the sextuplet overall equals a whole note (semibreve). Examples of time signatures like this can be found in the music of Adès.



NOTE

Some composers, such as Boulez, have written fractional time signatures. Dorico Elements does not currently support fractional time signatures.

RELATED LINKS

Input methods for time signatures and pick-up bars on page 277
Input methods for bars, beats, and barlines on page 294
Changing the beat grouping for cut common time signatures on page 844
Ending interchangeable time signatures on page 1375
Combining aggregate time signatures on page 1372

Cautionary time signatures

When a time signature change occurs at a system break, either in the score or in a part, the new time signature is shown at the end of the first system as well as at the start of the new system.

This is sometimes considered a "cautionary time signature", because it warns performers of an upcoming change of time signature before it takes effect. It is also known as a "courtesy time signature".

In Dorico Elements, the time signatures shown at the end of one system and at the start of the next system are the same item, not separate items. You can hide cautionary time signatures, either individually or by default in each flow.

TIP

We recommend using flows for separate spans of music. Dorico Elements does not show cautionary key signatures or time signatures between flows.

RELATED LINKS
Flows on page 167
Splitting flows on page 487
System breaks on page 617
Cautionary key signatures on page 1005
Repeat markers on page 1216
Clefs on page 889

Hiding/Showing cautionary time signatures

You can hide/show individual cautionary time signatures shown at the ends of systems when time signature changes occur at system breaks, independently of your per-flow setting. For

example, to save horizontal space when using additive time signatures. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** 3 is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- 1. Select the cautionary time signatures that you want to hide/show. You can do this in Write mode and Engrave mode.
- **2.** In the Properties panel, activate **Cautionary at end of system** in the **Time Signatures** group.
- **3.** Choose one of the following options:
 - Hide
 - Show

RESULT

The selected cautionary time signatures are hidden/shown at the ends of systems. This does not affect time signatures shown at the start of systems.

If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

TIP

You can hide/show cautionary time signatures by default in each flow independently on the **Time Signatures** page in **Notation Options**.

RELATED LINKS

Properties panel on page 646
Changing the property scope on page 648
Engrave toolbox on page 490
Hiding/Showing time signatures on page 1374
System breaks on page 617
Notation Options dialog on page 730

Pick-up bars

Pick-up bars allow you to include music before the first full bar. They are also known as an "upbeat" or "anacrusis". Often, pick-up bars only comprise a few beats whose main purpose is to lead in to the start of the piece.



Pick-up bar of four eighth notes at the start of a piece in 9/8

Pieces that start with a pick-up bar have time signatures that are positioned at the start of the system as normal. However, the first full bar of the time signature occurs after the first barline and not before. Therefore, pick-up bars do not contribute to the bar number count. Bar numbers are counted from the first full bar in the flow.

Because pick-up bars are linked to the number of notes/rests in the music, in Dorico Elements they are linked to time signatures. However, you can hide time signatures you do not want to show in the music.

TIP

- Time signatures with pick-up bars are indicated by signposts.
- You can use the **Global Adjustment of Current Bar** Insert mode scope to create and delete pick-up bars by deleting notes/rests in the first bar in the flow. You can also use it to shorten the last bar in flows that start with a pick-up bar.

RELATED LINKS

Input methods for time signatures and pick-up bars on page 277
Hiding/Showing time signatures on page 1374
Insert mode scopes on page 440
Signposts on page 438
Bar numbers on page 808
Track overview on page 506
Turning grace notes into normal notes on page 985

Defining partial bars as pick-up bars or irregular bars

You can change whether explicit irregular bars at the start of time signatures are defined as pick-up bars. This affects how notes in the bars are beamed and grouped.

Notes in irregular bars defined as pick-up bars are beamed/grouped backwards from the end of the bar, while notes in irregular bars not defined as pick-up bars are beamed/grouped forwards from the start of the bar.

NOTE

You must input explicit irregular bars and pick-up bars as part of a time signature, such as by entering **4/4,1.5** into the time signatures popover to input a 4/4 time signature with a pick-up bar containing 1.5 quarter note beats, or three eighth notes.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** 3 is selected in the Engrave toolbox.

PROCEDURE

- 1. Select the time signatures or the signposts of time signatures starting with an explicit irregular bar whose pick-up definition you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Group first bar as pick-up** in the **Time Signatures** group.
- **3.** Activate/Deactivate the corresponding checkbox.

RESULT

Irregular bars at the start of the selected time signatures are defined as pick-up bars when **Group first bar as pick-up** and its corresponding checkbox are both activated, and defined as normal irregular bars when the corresponding checkbox is deactivated.

When the property is deactivated, Dorico Elements uses internal heuristics to define them as either pick-up bars or normal irregular bars automatically.

EXAMPLE





Irregular bar defined as pick-up into common time

Irregular bar defined as normal irregular bar, not a pick-up

Large time signatures

Large time signatures are scaled-up time signatures that appear much larger than normal relative to the staff size. They can be helpful in orchestral scores, as the smaller staff size in such scores means standard time signatures are small and harder for conductors to read.

Large time signatures are also very commonly used in film scores, as conductors rarely have much time to prepare the scores before recording sessions. Having large time signatures makes changes in meter more visually clear on the page, especially when music contains multiple changes in meter.

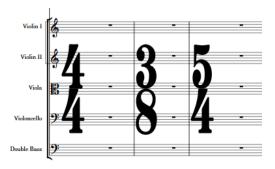
In Dorico Elements, you can show large time signatures at the following positions:

- Once per bracketed group
- Above the staff and at system object positions

Time signatures shown once per bracketed group

Instead of showing a time signature on every staff that is the same height as the staff, you can instead show a single large time signature on each bracketed group of staves. When shown once per bracketed group, time signatures are scaled up in size according to the number of staves in

the bracketed group. The largest time signatures are shown on bracketed groups containing four or more staves. When shown on single staves, they extend a small amount above and below the staff, which is commonly used for parts for film music recording sessions.



Narrow, serif time signatures shown once per bracketed group

Large time signatures shown on bracketed groups occupy horizontal space, which can be a significant amount when they are especially large and use the standard time signature design. Therefore, we recommend that you use one of the narrow designs in layouts that show large time signatures on bracketed groups.

Time signatures shown at system object positions

Similar to showing large time signatures once per bracketed group, you can also show time signatures only at system object positions and above the staff. Therefore, their positions in each system are controlled by the same options that control the positions of other system objects, such as rehearsal marks and tempo marks.



Normal time signatures shown at system object positions

Time signatures shown at system object positions do not occupy horizontal space, meaning it is less important to use a narrow font style. This also reduces the horizontal distance between notes either side of time signatures. Because of this reduced disruption to note spacing, this placement of time signatures has become popular in contemporary art music since the 20th Century.

When using the note denominator style for time signatures shown at system object positions, the note is shown to the right of the numerator rather than below.

By default, time signatures at system object positions are twice the size of normal time signatures and force other items at the same position to appear to the right.

RELATED LINKS

Input methods for time signatures and pick-up bars on page 277
Changing the design of time signatures on page 1375
Hiding bar numbers at time signatures shown at system object positions on page 816
Time signature font styles on page 1376
System objects on page 1303

Changing the size and position of time signatures

You can change the size of time signatures in each layout independently, including changing their vertical position. For example, you can show large time signatures centered on each bracket in full score layouts but standard-sized time signatures on each staff in part layouts.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- **2.** In the **Layouts** list, select the layouts in which you want to change the size of time signatures.

By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, **Shift** -clicking adjacent layouts, and **Ctrl/Cmd** -clicking individual layouts.

- **3.** In the category list, click **Time Signatures**.
- **4.** Choose one of the following options for **Time signature position and size**:
 - Show on every staff
 - Show once per bracket
 - Show at system object positions
- 5. Click Apply, then Close.

RESULT

The size and position of time signatures in the selected layouts is changed.

Showing large time signatures above the staff at system object positions means they do not occupy any rhythmic or horizontal space, whereas the other options do cause time signatures to occupy horizontal space.

RELATED LINKS

Positions of time signatures on page 1372

Changing the design of time signatures on page 1375

Hiding bar numbers at time signatures shown at system object positions on page 816

Time signature styles

Dorico Elements allows you to show time signatures in a variety of styles. For example, you can show denominators as a number or as a note value.

Numerator styles

The numerator is always one or more numbers, and can either show the total number of beats in the bar as a single number, or show how the total duration of the bar is subdivided into beat groups.



Number numerator



Beat group numerator

Denominator styles

The denominator can appear as a number, as a note indicating the equivalent duration, or not appear at all.



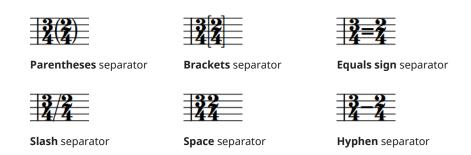
Open meter styles

Open time signatures can be shown as an X, Penderecki's symbol, or be hidden with no symbol. Open time signatures with no symbol are indicated by signposts.



Interchangeable time signature separator styles

Interchangeable time signatures can have different separator styles. You can specify the separator style when inputting interchangeable time signatures using the popover and for individual interchangeable time signatures after they have been input.



RELATED LINKS

Inputting time signatures with the popover on page 281 Changing the design of time signatures on page 1375 Types of time signatures on page 1360 Signposts on page 438

Changing the numerator style of time signatures

You can choose whether the numerators of individual time signatures show the total number of beats in each bar, or the subdivision of beats in each bar.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** 3 is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the time signatures whose numerator style you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Numerator style** in the **Time Signatures** group.
- **3.** Choose one of the following options:
 - Number
 - Beat group

RESULT

The numerator style of the selected time signatures is changed.

RELATED LINKS

Properties panel on page 646 Engrave toolbox on page 490

Changing the denominator style of time signatures

You can change the denominator style of individual time signatures; for example, if you want to show the denominator as a note instead of a number.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing 3** is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the time signatures whose denominator style you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Denominator style** in the **Time Signatures** group.
- **3.** Choose one of the following options:
 - Number
 - Note
 - None

RESULT

The denominator style of the selected time signatures is changed.

Changing the open meter style of time signatures

You can change the open meter style of individual time signatures.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the open meter time signatures whose style you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, choose one of the following options for **Open style** in the **Time Signatures** group:
 - No symbol NONE
 - X X
 - Penderecki's symbol

RESULT

The open meter style of the selected time signatures is changed. **No symbol** open time signatures are indicated by signposts.

RELATED LINKS

Properties panel on page 646 Engrave toolbox on page 490 Signposts on page 438

Changing the separator style of interchangeable time signatures

You can change the separator shown in interchangeable time signatures individually.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** 3 is selected in the Engrave toolbox.

PROCEDURE

1. Select the interchangeable time signatures whose separator you want to change. You can do this in Write mode and Engrave mode.

NOTE

In the Properties panel, **Separator** in the **Time Signatures** group is automatically activated for interchangeable time signatures.

- **2.** Select one of the following options from the **Separator** menu:
 - Parentheses <a> □
 - Brackets
 - Equals sign =
 - Slash //
 - Space
 - Hyphen

RESULT

The separator style of the selected interchangeable time signatures is changed.

TIP

- You can specify the separator style when inputting interchangeable time signatures using the popover.
- Although they might look similar to interchangeable time signatures, aggregate time signatures behave differently. Aggregate time signatures are separated by a + sign, whereas interchangeable time signatures can be shown with six different separators but not a + sign.

Therefore, although you can activate **Separator** and choose from the available options for aggregate time signatures, the property only affects the appearance of interchangeable time signature separators.

RELATED LINKS

Inputting time signatures with the popover on page 281

Changing the appearance of common/cut common time signatures

You can show individual common/cut common time signatures with either common/cut common symbols or with a numerator and denominator, such as 2/2 or 4/4.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing ?** is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the common/cut common time signatures whose appearance you want to change. You can do this in Write mode and Engrave mode.
- **2.** In the Properties panel, activate/deactivate **Common/Cut common** in the **Time Signatures** group.

RESULT

The selected time signatures appear with common/cut common symbols when **Common/Cut common** is activated, and with a numerator and denominator when it is deactivated.

EXAMPLE



9: ¢

9:4

9:3

Common time signature symbol

Cut common time signature symbol

Common time signature, appearing as 4/4

Cut common time signature, appearing as 2/2

RELATED LINKS

Properties panel on page 646

Engrave toolbox on page 490

Changing the beat grouping for cut common time signatures on page 844

Combining aggregate time signatures

You can combine aggregate time signatures with the same denominator into a single time signature, while retaining dashed barlines for meter divisions. For example, to show a 4/8+2/8+7/8 aggregate time signature as 13/8.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** 3 is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the aggregate time signatures that you want to combine. You can do this in Write mode and Engrave mode.
- **2.** In the Properties panel, activate **Combine compatible aggregates** in the **Time Signatures** group.
- **3.** Activate the corresponding checkbox.

RESULT

The selected aggregate time signatures are combined into a single time signature, provided that all denominators in each aggregate time signature are the same.

The combined numerator indicates the total number of denominator beats in each bar.

EXAMPLE





Uncombined aggregate time signature

Combined aggregate time signature

RELATED LINKS

Types of time signatures on page 1360

Positions of time signatures

Standard time signatures are positioned on staves with the middle staff line, or only staff line for single-line staves, passing through their center. Large time signatures can be positioned in the middle or at the top of bracket groups, or above staves at system object positions.

Dorico Elements automatically positions time signatures after clefs, key signatures, and barlines.

You can move time signatures to different rhythmic positions in Write mode. They are positioned automatically to avoid collisions.

You can also change the position of time signatures in each layout independently; for example, if you want to show time signatures above the staff and at system object positions in some layouts but only once per bracket in other layouts.

RELATED LINKS

Changing the positions of system objects on page 1304

Large time signatures on page 1365
Cautionary time signatures on page 1362
Input methods for time signatures and pick-up bars on page 277

Moving time signatures graphically

You can move individual time signatures to new graphical positions without affecting the positions of any other items.

NOTE

- These steps do not apply to time signatures shown at system object positions, which you can move when **Graphic Editing** is selected in the Notes toolbox.
- You cannot move time signatures shown at the start of systems. You can only move time signature changes that occur partway through systems or at the end of systems.

PREREQUISITE

Note Spacing ⋈ is selected in the Engrave toolbox.

PROCEDURE

1. In Engrave mode, select a square note spacing handle at the rhythmic position of the time signature you want to move.



A circular handle appears beside the time signature.

2. Press **Tab** to select the circular handle.



- **3.** Move the handle in any of the following ways:
 - To move it a standard amount to the right or left, press Alt/Opt plus the corresponding arrow key. For example, press Alt/Opt-Left Arrow to move handles to the left.
 - To move it a large amount, press Ctrl/Cmd plus the standard key command; for example, Ctrl/Cmd-Alt/Opt-Left Arrow.
 - To move it a moderate amount, press Shift plus the standard key command; for example, Shift-Alt/Opt-Left Arrow.
 - To move it a small amount, press Ctrl/Cmd Shift plus the standard key command; for example, Ctrl/Cmd-Shift-Alt/Opt-Left Arrow.

NOTE

You cannot move note spacing handles with the mouse, you can only move them using the keyboard.

RESULT

The time signature is moved graphically to the right/left.

TIP

You can also change the value for **Spacing offset** in the **Time Signatures** group of the Properties panel to move time signatures horizontally. However, this also affects global note spacing around the rhythmic position of the time signature.

The **Spacing offset** value is independent of note spacing changes.

RELATED LINKS

Engrave toolbox on page 490 Note spacing on page 494 Moving items graphically on page 501

Hiding/Showing time signatures

You can hide/show time signatures without deleting them from your project. This hides/shows them in all layouts, not just the one currently open in the music area.

PREREQUISITE

- The lower zone is shown.
- Properties is selected in the lower zone toolbar.
- If you are in Engrave mode, Graphic Editing 3 is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the time signatures you want to hide, or the signposts of time signatures you want to show. You can do this in Write mode and Engrave mode.
- **2.** In the Properties panel, activate/deactivate **Hide time signature** in the **Time Signatures** group.

RESULT

The selected time signatures are hidden in all layouts when **Hide time signature** is activated, and shown when it is deactivated.

Signposts are shown at the position of each hidden time signature. However, signposts are not printed by default.

NOTE

- Hidden time signatures do not take up any horizontal space, so hiding/showing time signatures affects note spacing.
- You can hide/show time signature signposts by choosing View > Signposts > Time Signatures.
- You can assign a key command for Hide/Show Item on the Key Commands page in Preferences.

RELATED LINKS

Properties panel on page 646 Engrave toolbox on page 490 Signposts on page 438

Hiding/Showing cautionary time signatures on page 1362

Input methods for time signatures and pick-up bars on page 277

Annotations on page 581

Ending interchangeable time signatures

Any time signatures you input after an interchangeable time signature that are specified in it are hidden automatically. You can end interchangeable time signatures from selected time signatures, which shows them.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing 3** is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the barlines or signposts of time signatures from which you want to end interchangeable time signatures. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **End interchangeable** in the **Time Signatures** group.

RESULT

Interchangeable time signatures are ended at the selected time signatures. The selected time signatures and all subsequent time signatures specified in the prevailing interchangeable time signature are shown until the next existing interchangeable time signature or the end of the flow, whichever comes first.

Changing the design of time signatures

You can change the design of time signatures in each layout independently, including changing the font style used for them; for example, if you want to use a plain font for time signatures in full score layouts but the standard time signature font in part layouts.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- **2.** In the **Layouts** list, select the layouts in which you want to change the design of time signatures.

By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, **Shift** -clicking adjacent layouts, and **Ctrl/Cmd** -clicking individual layouts.

- **3.** In the category list, click **Time Signatures**.
- **4.** Choose one of the following options for **Time signature design**:
 - Normal
 - Narrow, serif
 - · Narrow, sans serif
 - Plain font
- 5. Click Apply, then Close.

RESULT

The design of time signatures in the selected layouts is changed. If you choose **Plain font**, time signatures use a different font style than the one used for the other options.

Time signature font styles

Different time signature designs use different font styles. You can edit the formatting of fonts used for time signatures in the **Edit Font Styles** dialog.

The following font styles are used for time signatures:

- **Time Signature Font**: Used for standard time signatures and large time signatures that use the **Normal**, **Narrow**, **serif**, or **Narrow**, **sans serif** design types. Must use a SMuFL-compliant font family.
- **Time Signature Plain Font**: Used for time signatures using the **Plain font** design type. Can use any font family, but we recommend that you use narrow fonts for large time signatures.

NOTE

Changes made to font styles apply to the entire project, including part layouts.

RELATED LINKS

Edit Font Styles dialog on page 737 Large time signatures on page 1365 Changing the default font family on page 743

Tremolos

Tremolos are thick, slanted lines that cross individual stems or are positioned between multiple stems. They are used to indicate that notes are repeated, either individually or in sequences of multiple notes.

Using tremolo strokes instead of notating each notehead can save horizontal space and make fast passages easier to read.



The number of tremolo strokes indicates both how many times notes are repeated and how fast they are. In measured tremolos, for example, one tremolo stroke on the stem of a quarter note (crotchet) indicates two eighth notes (quavers) are played, whereas three tremolo strokes on the stem of a quarter note indicates eight 32nd notes are played.





Quarter note with a one-stroke single-note tremolo and its equivalent notation

Quarter note with a three-stroke single-note tremolo and its equivalent notation

There are different types of tremolos:

Single-note tremolos

Individual notes are repeated. Single-note tremolos are positioned on note stems.



Two-stroke single-note tremolos added to four quarter notes

Multi-note tremolos

Multiple notes, usually two, are played in sequence, similar to a trill. However, trills usually indicate a fast alternation between two adjacent notes, such as G and A, whereas multi-note tremolos can be between any notes, limited only by the capabilities of the instrument.

All notes in multi-note tremolos indicate the total duration of the tremolo. For example, two quarter notes joined by a multi-note tremolo both appear as half notes.

Multi-note tremolos are positioned between the stems of two or more notes.





Four quarter notes without tremolos

Multi-note tremolos input between those quarter notes, in two pairs

Tuplet tremolos

Multiple notes in tuplets are repeated in the notated sequence. Tuplet tremolos are positioned between all the notes in the tuplet.





Quarter notes in two different tuplets without tremolos

Multi-note tuplet tremolos input across those tuplets

Depending on the musical context, tremolos can be either measured or unmeasured. There is no visual difference between measured/unmeasured tremolos, so composers/arrangers often specify how they want tremolos to be played, such as an indication in the front matter of the score or as a text instruction in the score.

Measured tremolos

The number of tremolo strokes corresponds to a precise rhythm in the prevailing tempo and meter.

Unmeasured tremolos

There is no link between the number of strokes and rhythm. Instead, unmeasured tremolos are played as fast as possible, whatever the tempo.

Unmeasured tremolos often use three or more tremolo strokes, and can also be accompanied by a "trem." text indication.

RELATED LINKS

Input methods for repeats and tremolos on page 395
Tremolos in tie chains on page 1379
Changing the speed of tremolos on page 1381
Tremolos in playback on page 1383
MIDI Import Options dialog on page 84

General placement conventions for tremolos

Single-note tremolos are positioned on note stems, whereas multi-note tremolos are positioned between the stems of two or more notes. When multi-note tremolos cross three or more notes, the tremolo strokes are positioned between all the notes.

Tremolo strokes are slightly thinner than beams, so that the gaps between strokes are large enough and the number of strokes can be instantly recognized.

Dorico Elements automatically avoids collisions between tremolo strokes and ledger lines or stem flags.

Tremolo strokes within the staff are positioned so that they are at least one staff space clear of noteheads, and at valid positions relative to staff lines and staff spaces. This means that tremolo strokes might not move every time you change the pitch of notes.



The positions of the tremolo strokes on the first two notes and the last two notes are the same, although the pitches are all different.

In Dorico Elements, the angle of single-note tremolo strokes is always the same, no matter the direction of the phrase. The angles of multi-note tremolo strokes are determined by the height of the stems to which the multi-note tremolos apply. You can change the angles of multi-note tremolo strokes individually by lengthening/shortening the stems at the start/end of the tremolo.

Tremolos in tie chains

By default, single-note tremolos appear either on all notes in tie chains, or on all notes apart from the first or last note. Deleting tremolo strokes from tied notes removes tremolo strokes from all notes in tie chains.

In Dorico Elements, we use "tremolo with attack" and "tremolo with release" to refer to single-note tremolos that appear on all notes in tie chains apart from the first and last note, respectively.





Single-note tremolo added to tie chain

Tremolo with release added to tie chain

In Dorico Elements, tremolos are considered measured by default, so the number of tremolo strokes shown is automatically adjusted on subsequent notes in tie chains as required. For example, if an eighth note with two tremolo strokes is tied to a quarter note, the quarter note has three tremolo strokes. This is because tremolo strokes function like beams, so two tremolo strokes and an eighth note stem flag is the equivalent of three tremolo strokes.





The default number of tremolo strokes in a tie chain where the second note is longer than the first.

The number of tremolo strokes on the second note has been changed to match the first.

However, there might be circumstances in which you want all notes to have the same number of tremolo strokes, whatever their duration. You can also start tremolos partway through tie chains, or stop tremolos partway through tie chains.

You can change the number of tremolo strokes shown on individual notes independently in Engrave mode.

RELATED LINKS

Ties on page 1341

Input methods for repeats and tremolos on page 395

Deleting tremolos on page 1381

Changing the number of tremolo strokes on individual notes in tie chains

Dorico Elements automatically changes the number of tremolo strokes on subsequent notes in tie chains according to their duration, but you can manually change the number of single-note tremolo strokes shown on each note in tie chains individually to represent your intended rhythm. For example, if you want all notes in a tie chain to have the same number of tremolo strokes, whatever their duration.

TIP

If you want to remove tremolo strokes from the first or last notes in tie chains, you can input tremolos with an attack or release, respectively.

PREREQUISITE

- The lower zone is shown.
- Properties is selected in the lower zone toolbar.
- **Graphic Editing 3** is selected in the Engrave toolbox.

PROCEDURE

- **1.** In Engrave mode, select the noteheads of the notes whose number of tremolo strokes you want to change.
- 2. In the Properties panel, activate **Single stem tremolo** in the **Notes and Rests** group.
- **3.** Select one of the following options from the menu:
 - None
 - One stroke
 - Two strokes
 - Three strokes
 - Four strokes
 - Buzz roll

RESULT

The number of tremolo strokes shown on the selected notes is changed.

EXAMPLE





The default number of tremolo strokes in a tie chain where the second note is longer than the first.

The number of tremolo strokes on the second note has been changed to match the first.

RELATED LINKS

Properties panel on page 646 Engrave toolbox on page 490

Changing the speed of tremolos

You can change the speed of tremolos after they have been input by changing the number of strokes.

PROCEDURE

In Write mode, select the notes with tremolos whose speed you want to change.
 The buttons with the number of tremolo strokes corresponding to your selection are highlighted in the **Tremolos** section of the Repeat Structures panel.

NOTE

Select single-note tremolos and multi-note tremolos separately.

2. Click the button with the number of tremolo strokes you want in the **Tremolos** section of the Repeat Structures panel.

For example, click **Two Strokes Single-note Tremolo** to input single-note tremolos with two strokes, or click **Three Strokes Multi-note Tremolo** to input multi-note tremolos with three strokes.

RESULT

The number of tremolo strokes on the selected notes is changed, which changes the speed of the tremolos.

RELATED LINKS

Tremolos in playback on page 1383

Deleting tremolos

You can remove single-note tremolos and multi-note tremolos from notes separately without affecting the notes to which they applied.

PROCEDURE

- 1. In Write mode, select the notes whose tremolo strokes you want to delete.
- 2. In the Notations toolbox, click **Panels** (a), then **Repeat Structures** (b) to show the Repeat Structures panel.
- **3.** In the **Tremolos** section, click one or both of the following buttons, depending on the types of tremolos selected:
 - Remove Single-note Tremolo J
 - Remove Multi-note Tremolo

RESULT

The corresponding types of tremolo strokes are deleted.

TIP

You can also delete tremolos by entering **0** or **clear** into the repeats popover.

RELATED LINKS

Notations toolbox on page 197

Repeat Structures panel on page 398 Repeats popover on page 395

Rhythmic positions of notes with tremolos

You can move notes with single-note tremolos and multi-note tremolos to new rhythmic positions in the same ways as normal notes. However, if you move multi-note tremolos across barlines, the tremolo strokes are deleted automatically.

You can move single-note tremolos to new rhythmic positions and across barlines without affecting their tremolo strokes. The notes are automatically respelled as tie chains if required by their new rhythmic positions and time signature, in the same ways as normal notes.

NOTE

If tie chains with single-note tremolos contain notes of different durations, the number of tremolo strokes on each note in the tie chain is different. You can change the number of tremolo strokes shown on each note in tie chains individually.

RELATED LINKS

Moving notes/items rhythmically on page 448

Moving tremolo strokes

You can move tremolo strokes upwards/downwards graphically. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

NOTE

- You cannot move tremolo strokes to the right/left.
- You cannot move tremolo strokes rhythmically, as they apply to specific notes, but you can
 move notes with tremolos to different rhythmic positions. Notes with single-note tremolos
 can cross barlines; however, multi-note tremolo strokes are deleted automatically when their
 notes cross barlines.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing 3** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- 1. In Engrave mode, select the tremolo strokes you want to move.
- 2. Move the tremolo strokes in any of the following ways:
 - To move them upwards/downwards a standard amount, press Alt/Opt plus the
 corresponding arrow key. For example, press Alt/Opt-Up Arrow to move tremolo
 strokes upwards. This moves tremolo strokes by 1/8 space per press.
 - To move them upwards/downwards a large amount, press Ctrl/Cmd plus the standard key command; for example, Ctrl/Cmd-Alt/Opt-Up Arrow. This moves tremolo strokes by 1 space per press.

- To move them upwards/downwards a moderate amount, press **Shift** plus the standard key command; for example, **Shift-Alt/Opt-Up Arrow**. This moves tremolo strokes by 1/2 space per press.
- To move them upwards/downwards a small amount, press Ctrl/Cmd Shift plus the standard key command; for example, Ctrl/Cmd-Shift-Alt/Opt-Up Arrow. This moves tremolo strokes by 1/32 space per press.
- Click and drag them upwards/downwards.

RESULT

The selected tremolo strokes are moved upwards/downwards. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

NOTE

- Moving multi-note tremolo strokes also changes the length of the stems to which they
 are attached. You can change the angles of multi-note tremolo strokes individually by
 lengthening/shortening the stems at the start/end of the tremolo.
- When you first move tremolo strokes graphically, they may appear to move in the wrong direction or by a larger increment than you expected. This is because their positions are reset when you override those positions by moving them.
- The following properties in the **Beaming** group of the Properties panel are activated automatically when you move the start/end of multi-note tremolo strokes:
 - **Start Y offset** moves the start of multi-note tremolo strokes vertically by moving the end of the corresponding stem.
 - **End Y offset** moves the end of multi-note tremolo strokes vertically by moving the end of the corresponding stem.

Tremolo Y in the **Notes and Rests** group of the Properties panel is activated automatically when you move single-note tremolo strokes. It moves single-note tremolo strokes vertically.

For example, if you move a whole multi-note tremolo stroke upwards, both stem handles are moved so both properties are activated. You can also use these properties to move tremolo strokes by changing the values in the value fields. However, you must select the noteheads rather than the tremolo strokes in order to see the relevant groups in the Properties panel.

Deactivating the properties resets the selected stem handles, and therefore tremolo strokes, to their default positions.

RELATED LINKS

Changing the property scope on page 648
Engrave toolbox on page 490
Input methods for repeats and tremolos on page 395
Deleting tremolos on page 1381

Tremolos in playback

You can control the playback of unmeasured tremolos by specifying the minimum number of tremolo strokes that are interpreted as unmeasured tremolos. This considers both the number of tremolo strokes and the number of beam lines that would be used for the note.

• You can do this on the **Timing** page in **Playback Options**.

For example, if the option is set to require three tremolo strokes, an eighth note with two tremolo strokes is played as unmeasured, because the single beam of the eighth note is included in the calculation.

You can also specify the default length of notes in unmeasured tremolos. You express the duration of notes as a fraction of the length of a quarter note played at 120 quarters per minute in the **Tremolos** section.

The number of tremolo strokes determines the note value of the repeated notes. For example, one stroke indicates an eighth note, two strokes indicate a 16th note, and so on.

If your sound library includes samples for unmeasured tremolo playback, Dorico Elements loads the required samples using playback techniques. For sound libraries that do not provide unmeasured tremolo samples, Dorico Elements generates tremolos.

TIP

You can enable independent voice playback for individual instruments to hear different sounds in different voices simultaneously; for example, if you have tremolos in one voice and slurs in another voice.

RELATED LINKS

Playback techniques on page 770 Playback Options dialog on page 732 Enabling independent voice playback on page 530

Changing the duration of tremolos in playback

You can change both the default length of each note in unmeasured tremolos in playback, and the minimum number of tremolo strokes required to indicate tremolos should be unmeasured in playback.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-P to open Playback Options.
- 2. In the category list, click **Timing**.
- 3. Optional: In the **Tremolos** section, change the value for **Minimum number of strokes for playback of unmeasured tremolos**.
- 4. Change the value for **Default unmeasured tremolo length**.

For example, to set the default length of unmeasured tremolo notes to 0.5 seconds, change the value to **1**.

TIP

If you hover over either of the arrows beside the value field, a small box appears that displays the current fraction as a decimal.

5. Click Apply, then Close.

RESULT

The sounding duration of each note in unmeasured tremolos in playback is changed projectwide. Changing the value for **Minimum number of strokes for playback of unmeasured tremolos** changes the minimum number of tremolo strokes required for tremolos to be unmeasured in playback.

Tuplets

Tuplets indicate where a beat is divided into a different number of subdivisions than is usually expected according to the current meter. They can be used to fit more notes or fewer notes in a beat than usually exist in a beat, according to the usual pattern of subdivision.



Because these subdivisions are not standard but tuplet notes use the same rhythmic notation as normal notes, tuplets must be clearly marked to show that their rhythmic duration is different. Tuplet numbers/ratios indicate the number of notes in the tuplet, and tuplet brackets show the duration of tuplets that are not joined by beams.

In Dorico Elements, tuplets function like containers into which you can input notes of any duration, such as inputting a quarter note at the start of an eighth note triplet.

When tuplets extend across barlines, Dorico Elements automatically notates them correctly, such as a sextuplet appearing as two triplets. You can also allow tuplets to span barlines without division.

During tuplet input, tuplets are sticky when you input notes with the keyboard, meaning that Dorico Elements continues inputting notes as the specified tuplet until you stop tuplet input or note input.

You can show tuplets with different combinations of tuplet brackets and tuplet numbers/ratios. You can also show note symbols indicating the note value of the tuplet alongside tuplet numbers/ratios.

RELATED LINKS

Inputting tuplets on page 249
Tuplet brackets on page 1391
Tuplet numbers/ratios on page 1394
Allowing/Disallowing tuplets to span barlines on page 1389
Moving notes/items rhythmically on page 448

Nested tuplets

Nested tuplets are tuplets within larger tuplets that are often used to create complex rhythms. In Dorico Elements, there is no limit to the number of levels you can have in nested tuplets.



Nested tuplets

Inputting nested tuplets

You can input nested tuplets on empty staves and select existing tuplets and input nested tuplets within them.

PROCEDURE

- 1. In Write mode, start note input.
- 2. Open the tuplets popover in any of the following ways:
 - Press ;.

When inputting tuplets with the keyboard, Dorico Elements automatically continues inputting notes as the specified tuplet.

NOTE

You can skip steps 3 and 4 if you are inputting nested tuplets into existing tuplets.

3. Optional: If inputting nested tuplets on an empty staff, enter the ratio for the outer tuplet into the popover.

For example, enter **3:2q** to input quarter note triplets.

- **4.** Optional: Press **Return** to close the popover and input the outer tuplet.
- **5.** Press; to open the tuplets popover again.
- **6.** Enter the ratio for the inner tuplet into the popover.

For example, enter **5:4e** to input eighth note quintuplets.

- **7.** Press **Return** to close the popover and input the inner tuplet.
- 8. Input the notes you want.

When inputting tuplets with the keyboard, Dorico Elements automatically continues inputting notes as the specified tuplet.

- **9.** Stop inputting nested tuplets in one of the following ways:
 - To stop the inner tuplet and continue inputting the outer tuplet, press: once.
 - To stop both tuplets and return to inputting normal notes, press: twice or move the caret with the arrow keys.
 - To stop note input completely, press Esc.

RESULT

Notes are input as nested tuplets, starting from the caret position.

If multiples of the inner tuplet fit exactly inside the outer tuplet, you can continue inputting notes as the specified nested tuplet until you stop the tuplets manually.

If multiples of the inner tuplet do not fit exactly inside the outer tuplet, the inner tuplet stops automatically at the end of the last tuplet that fits in the outer tuplet. After that, the outer tuplet continues until you stop it manually.

NOTE

You can also input nested tuplets by clicking and holding **Tuplets** in the Notes toolbox, then clicking the tuplet you want. However, the inner tuplet you click must fit inside the outer tuplet, based on the currently selected note duration.

RELATED LINKS

Tuplets popover on page 251
Notes toolbox on page 192
Inputting notes on page 219
Selecting note/rest durations on page 254

Turning existing notes into tuplets

You can turn any existing notes into tuplets; for example, if you need to fit extra notes into an existing duration.

PROCEDURE

- 1. In Write mode, select the notes on a single staff that you want to turn into tuplets.
- 2. Open the tuplets popover in any of the following ways:
 - Press ;.
 - In the Notes toolbox, click and hold **Tuplets 32**, then click **x:y 32**.

The popover is automatically populated with a suggested ratio based on your selection.

- 3. Optional: Change the ratio in the popover. For example, enter 3:2 to input triplets.
- 4. Press Return to close the popover.

RESULT

The selected notes are turned into tuplets according to the ratio in the popover. For example, if you select five eighth notes and enter **5:4** into the popover, the selected notes become quintuplet eighth notes.

If the selected notes fit into a single tuplet of the specified ratio, only a single tuplet is created. If the selected notes do not fit into a single tuplet, as many tuplets as required are created automatically.

TIP

You can also turn existing notes into tuplets by clicking and holding **Tuplets** in the Notes toolbox, then clicking the tuplet you want.

RELATED LINKS

Inputting tuplets on page 249

Turning existing notes into grace notes on page 985

Turning tuplets into normal notes

You can turn any existing tuplet notes into normal notes; for example, if you want to turn tuplet eighth notes into standard eighth notes.

PROCEDURE

1. In Write mode, select just the brackets, numbers/ratios, or signposts of the tuplets you want to turn into normal notes.

NOTE

You must not select any of the noteheads in the tuplets.

- **2.** Optional: If you want the selected tuplets to push subsequent notes to later rhythmic positions if required, press **I** to activate Insert mode.
- **3.** Optional: If you activated Insert mode, choose the appropriate Insert mode scope.
- 4. Press Backspace or Delete.

RESULT

The selected tuplets are deleted. All notes previously in the tuplets are unscaled and appear as normal notes with the same notated duration; for example, a tuplet quarter note becomes a standard quarter note.

When Insert mode is activated, all notes in the tuplets are retained and any subsequent existing notes are pushed to later rhythmic positions to accommodate the extra rhythmic durations required. When Insert mode is deactivated, the earliest selected tuplets expand and overwrite subsequent notes and tuplets.

RELATED LINKS

Tuplet numbers/ratios on page 1394
Tuplet brackets on page 1391
Inputting notes on page 219
Turning grace notes into normal notes on page 985
Insert mode on page 439
Insert mode scopes on page 440

Allowing/Disallowing tuplets to span barlines

You can allow tuplets to span barlines; for example, in Renaissance music, you might want tuplets to span tick barlines without affecting their notation. By default, Dorico Elements automatically splits tuplets over barlines so that both the durations of bars and the divisions in tuplets are clear.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing ?** is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the tuplet brackets or tuplet numbers/ratios of the tuplets you want to allow/disallow to span barlines. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate/deactivate **Spans barline** in the **Tuplets** group.

RESULT

The selected tuplets span barlines when **Spans barline** is activated, and are automatically split at barlines when it is deactivated.

EXAMPLE





A 16th note sextuplet across a barline, notated as two triplets

The same sextuplet allowed to span the barline

AFTER COMPLETING THIS TASK

You can beam notes in the selected tuplets together.

RELATED LINKS

Barlines on page 798
Beaming notes together manually on page 822
Tuplet brackets on page 1391
Tuplet numbers/ratios on page 1394
Engrave toolbox on page 490

Tuplet beams

Tuplet beams join notes in tuplets that can be joined with beams just like non-tuplet beams. You can make the same changes to tuplet beams that you can make to any other beam.

For example, duplet eighth notes do not need a bracket as they can be joined by a beam and notated using only a tuplet number/ratio.





A 6/8 bar with the standard subdivision of six eighth notes $% \left(1\right) =\left(1\right) \left(1\right)$

A 6/8 bar with a subdivision of four duplet eighth notes in the space of six regular eighth notes

RELATED LINKS

Beaming on page 821

Tuplets within beams on page 838

Changing the direction of partial beams on page 836

Changing beam slants on page 828

Tuplet brackets

Tuplet brackets show the duration of tuplets that are not joined by beams, such as triplet quarter notes, by showing the notes within the tuplet under a bracket.

EXAMPLE



A 4/4 bar with the standard subdivision of four quarter notes



A 4/4 bar with a subdivision of six triplet quarter notes in the space of four regular quarter notes

You can change the precise positions and shapes of tuplet brackets individually in Engrave mode.

Each tuplet bracket has four handles that can be moved graphically.



- The two upper handles set the position of the start/end of the tuplet bracket. These handles
 can be moved independently of each other to create angled tuplet brackets.
- The two lower handles set the length of the tuplet bracket hooks. Moving either of these handles changes the length of both hooks.

NOTE

You can use properties in the **Tuplets** group of the Properties panel to edit individual tuplet brackets; however, the **Tuplets** group is only shown if you select tuplet numbers/ratios or brackets. It is not shown if you select notes within the tuplet, or notes within the tuplet and the tuplet number/ratio or bracket.

RELATED LINKS

Moving items graphically on page 501 Lines on page 1174

Hiding/Showing tuplet brackets

You can hide/show tuplet brackets for individual tuplets, and independently of tuplet numbers/ ratios. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- Properties
 is selected in the lower zone toolbar.
- If you are in Engrave mode, Graphic Editing 3 is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

1. Select the tuplet brackets you want to hide, or the signposts of tuplets whose brackets you want to show. You can do this in Write mode and Engrave mode.

- 2. In the Properties panel, activate **Bracket** in the **Tuplets** group.
- **3.** Choose one of the following options:
 - Hidden 3
 - Shown -3¬

RESULT

Brackets on the selected tuplets are hidden/shown. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

Signposts are shown at the position of each hidden tuplet; that is, tuplets with no numbers/ratios or brackets shown.

AFTER COMPLETING THIS TASK

If you want to hide indications of tuplets entirely, you might also need to hide the tuplet numbers/ratios.

RELATED LINKS

Signposts on page 438

Hiding/Showing tuplet numbers/ratios on page 1394

Engrave toolbox on page 490

Changing the property scope on page 648

Copying property settings to other layouts/frame chains on page 629

Changing the staff-relative placement of tuplet brackets

You can show individual tuplet brackets and tuplet numbers/ratios above or below the staff or between staves. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- 1. Select the tuplet brackets and tuplet numbers/ratios whose staff-relative placement you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Placement** in the **Tuplets** group.
- **3.** Choose one of the following options:
 - Above -3-
 - Below <u>-3-</u>
 - Cross-staff above ►₃¬
 - Cross-staff below -3-

RESULT

The placement of the selected tuplet brackets is changed. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

TIP

- Deactivating Placement returns the selected tuplets to their default placement.
- You can also switch selected tuplets between being above/below the staff or cross-staff above/cross-staff below by pressing F.

RELATED LINKS

Tucking index properties on page 504

Changing the rhythmic end position of tuplet brackets

You can change the rhythmic end position of tuplet brackets relative to individual notes individually. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing 1** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** Select the tuplet brackets whose end position you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **End position** in the **Tuplets** group.
- **3.** Choose one of the following options:
 - End at right-hand side of final note
 - End immediately before following note 7.7.
 - End at position of final tuplet division

RESULT

The end position for the selected tuplet brackets is changed. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

Deactivating the property returns the selected tuplets to your default settings.

RELATED LINKS

Engrave toolbox on page 490
Changing the property scope on page 648
Copying property settings to other layouts/frame chains on page 629
Moving items graphically on page 501

Forcing tuplet brackets to be horizontal

You can change the angle of individual tuplet brackets so that they appear horizontal. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

• The lower zone is shown.

- **Properties I** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- 1. Select the tuplet brackets whose angle you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate Force horizontal in the Tuplets group.

RESULT

The selected tuplet brackets appear horizontal when the property is activated. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

Tuplet numbers/ratios

Tuplet numbers and ratios are very similar: both indicate the number of equal notes included in the tuplet, such as 3 for triplets, but tuplet ratios also include the number of normal notes into whose duration the tuplet fits, such as 3:2 for triplets.

Additionally, tuplet ratios can include a note glyph that indicates the duration of notes in the tuplet.



A triplet with a ratio and note value indication

Tuplet numbers/ratios help performers quickly identify the type of tuplet and how they must fit the number of notes indicated into the prevailing tempo and meter.

NOTE

You can use properties in the **Tuplets** group of the Properties panel to edit individual tuplet numbers/ratios; however, the **Tuplets** group is only shown if you select tuplet numbers/ratios or brackets. It is not shown if you select notes within the tuplet, or notes within the tuplet and the tuplet number/ratio or bracket.

Hiding/Showing tuplet numbers/ratios

You can hide/show tuplet numbers/ratios for individual tuplets, and independently of tuplet brackets. You can do this for the current layout and frame chain only, or for all layouts and frame chains. When showing tuplet numbers/ratios, you can choose a different type for each tuplet individually.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing 3** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- 1. Select the tuplet brackets whose numbers/ratios you want to hide/change, or the signposts of tuplets whose numbers/ratios you want to show. You can do this in Write mode and Engrave mode.
- **2.** In the Properties panel, activate **Number** in the **Tuplets** group.
- **3.** Choose one of the following options:
 - None
 - Number 3-
 - Ratio r3:21
 - Ratio+note 1324

RESULT

The tuplet number/ratio shown for the selected tuplets is changed. If you selected **None**, the tuplet numbers/ratios for the selected tuplets are hidden. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

Signposts are shown at the position of each hidden tuplet; that is, tuplets with no numbers/ratios or brackets shown.

Deactivating **Number** returns the selected tuplets to the default setting.

AFTER COMPLETING THIS TASK

If you want to hide indications of tuplets entirely, you might also need to hide the tuplet brackets.

RELATED LINKS

Hiding/Showing tuplet brackets on page 1391

Engrave toolbox on page 490

Changing the property scope on page 648

Copying property settings to other layouts/frame chains on page 629

Changing the position of tuplet numbers/ratios

You can show individual tuplet numbers/ratios at either the visual or rhythmic horizontal center of tuplets. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** Select the tuplets or the signposts of tuplets whose tuplet number/ratio horizontal position you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Center** in the **Tuplets** group.
- **3.** Choose one of the following options:
 - Visual

Rhythmic

RESULT

The horizontal position of tuplet numbers/ratios on the selected tuplets is changed. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

- **Visual** positions tuplet numbers/ratios at the visual center of the tuplet.
- **Rhythmic** positions tuplet numbers/ratios at the rhythmic center of the tuplet, which might be visually off-center.

EXAMPLE



RELATED LINKS

Tuplet brackets on page 1391 Moving items graphically on page 501 Signposts on page 438

Unpitched percussion

The term "unpitched percussion" covers all percussion instruments that are not tuned to specific pitches. This includes instruments such as bass drum, guiro, maracas, cymbals, and shakers.

Dorico Elements provides comprehensive support for unpitched percussion notation, with flexible options for combining music for multiple instruments into percussion kits that can then be displayed differently in different layouts. You can also define percussion kits as drum sets, which changes the default stem directions of notes.

You can also customize and create new playing technique-specific noteheads for unpitched percussion. This allows you to indicate how notes are played by using different noteheads for different playing techniques on each instrument in percussion kits.

RELATED LINKS

Percussion kits and drum sets on page 140
Percussion kit presentation types on page 1406
Staff labels for percussion kits on page 1297
Defining percussion kits as drum sets on page 145
Inputting notes for unpitched percussion on page 233
Playing techniques for unpitched percussion instruments on page 1398
Playing technique-specific noteheads on page 1399
Showing brackets on noteheads on page 1048
Percussion editor on page 663

Percussion kits vs. individual percussion instruments

Percussion kits allow you to show multiple unpitched percussion instruments held by a single player at the same time in different ways. Multiple percussion instruments not combined into kits are shown on a single line that only shows the instrument currently being played by default.

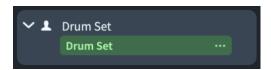
One common type of percussion kit is a drum set. A drum set consists of a number of separate instruments mounted together on a frame, and is typically written on a regular five-line staff. Each instrument has its own position on the staff, and sometimes its own notehead type. Similarly, a pair of bongos is a percussion kit by default in Dorico Elements, consisting of the two bongo drums, typically written on a grid with two lines: the smaller drum shown on the top line, and the larger drum shown on the bottom line.

Showing individual percussion instruments separately can be appropriate if a player only has one or two percussion instruments. However, combining percussion instruments into a kit gives you more flexibility over the presentation of music, which you can vary in each layout independently. Kits also give you greater control over the labeling of instruments.

In layouts where instrument changes are enabled, Dorico Elements changes from one unpitched percussion instrument to the next, just as it does for pitched instruments.

Kit instruments in player cards in the **Players** panel in Setup mode are colored green, whereas individual percussion instruments not part of percussion kits are colored the same light blue as all other instruments.

EXAMPLE



A single player holding a percussion kit in the **Players** panel in Setup mode



A single player holding an unpitched percussion instrument in the **Players** panel in Setup mode

RELATED LINKS

Players panel on page 108

Instruments on page 128

Percussion kits and drum sets on page 140

Allowing/Disallowing instrument changes on page 135

Importing drum set patterns from Groove Agent SE on page 93

Playing techniques for unpitched percussion instruments

Playing techniques for unpitched percussion instruments, both as individual instruments and within percussion kits, can be notated in different ways, including using different notehead designs and positions.

You can indicate playing techniques for unpitched percussion instruments in any of the following ways:

- Use playing technique-specific noteheads, including positioning notes above/below their normal staff line
- Add articulations or single-note tremolos
- Add playing techniques in the same ways as for pitched instruments

For example, you can add open and closed techniques for hi-hats as playing techniques and use playing technique-specific cross noteheads for side stick notes for the snare drum.

You can select playing technique-specific noteheads for unpitched percussion instruments when inputting notes and change the playing technique-specific noteheads of existing notes. You can input playing techniques during note input and by adding them to existing music.

RELATED LINKS

Playing techniques on page 1160

Articulations on page 787

Tremolos on page 1377

Edit Percussion Kit dialog on page 140

Defining how combinations of articulations and single-note tremolos sound in playback on page 769

Inputting notes for unpitched percussion on page 233

Input methods for playing techniques, pedal lines, string indicators, and harp pedal diagrams on page 358

Playing technique-specific noteheads

Playing technique-specific noteheads use the design and position of noteheads to indicate different playing techniques for unpitched percussion instruments, both as individual instruments and within percussion kits.

For example, side stick notes on the snare drum notes are typically notated using cross noteheads. Other techniques might use the staff positions above or below the single-line staff to indicate different playing techniques.



Multiple different playing technique-specific noteheads for snare drum

You can edit the set of playing technique-specific noteheads and staff positions defined for each unpitched percussion instrument in the **Percussion Instrument Playing Techniques** dialog.

You can select playing technique-specific noteheads for unpitched percussion instruments when inputting notes and change the playing technique-specific noteheads of existing notes.

RELATED LINKS

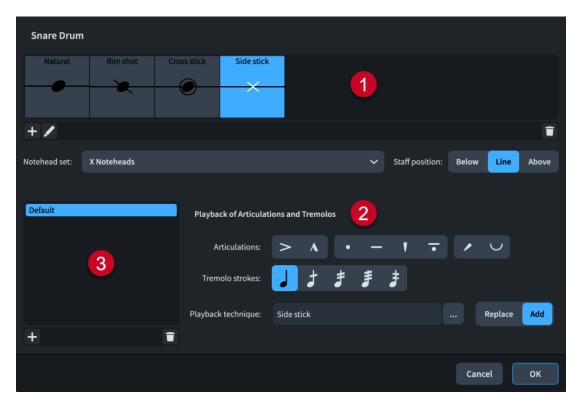
Inputting notes for unpitched percussion on page 233 Changing playing technique-specific noteheads on page 1402

Percussion Instrument Playing Techniques dialog

The **Percussion Instrument Playing Techniques** dialog allows you to edit the set of playing technique-specific noteheads defined for each unpitched percussion instrument.

You can open the Percussion Instrument Playing Techniques dialog in the following ways:

- For an individual percussion instrument: In Setup mode, in the Players panel, click
 the instrument menu in the instrument label, and choose Edit Percussion Playing
 Techniques from the menu.
- For percussion instruments that are part of percussion kits: In Setup mode, in the Players panel, click the instrument menu in the kit instrument label, and choose Edit Percussion Kit to open the Edit Percussion Kit dialog. In the main editing area, select the instrument whose playing techniques you want to edit, then click Edit Percussion Playing Techniques.



1 Playing technique-specific noteheads list

Contains the main playing technique-specific noteheads currently defined for the selected percussion instrument, showing the notehead set and the staff position corresponding to the playing technique as applicable.

You can add new playing technique-specific noteheads for unpitched percussion instruments. Normally, percussion instruments define at least the **Natural** playing technique, which is usually shown using the default notehead set.

2 Playback of Articulations and Tremolos

Allows you to define how combinations of articulations and tremolo strokes affect or override the playback of playing techniques.

For example, you can define an entirely different playing technique for a playing techniquespecific notehead for when an accent is added to it.

3 Overrides of articulations and tremolos list

Displays any overrides of articulations and tremolos you define.

EXAMPLE



Three different snare drum playing technique-specific noteheads followed by two clash cymbal playing technique-specific noteheads

RELATED LINKS

Edit Percussion Kit dialog on page 140

Defining how combinations of articulations and single-note tremolos sound in playback on page 769

Inputting notes for unpitched percussion on page 233

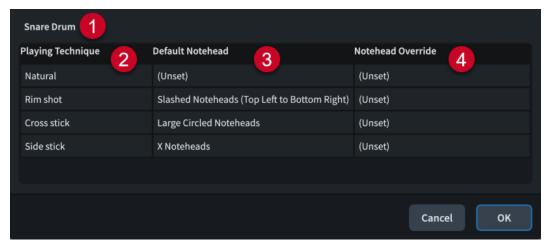
Exporting percussion kits on page 149 Importing percussion kits on page 150

Override Percussion Noteheads dialog

The **Override Percussion Noteheads** dialog lists the playing technique-specific noteheads defined for the selected instrument in the **Percussion Instrument Playing Techniques** dialog, shows the notehead type mapped for each technique, and allows you to override those noteheads for five-line staff kit presentations only.

For example, the same notehead can indicate different playing techniques for different instruments. When those instruments are presented on the same five-line staff, this can cause confusion, so you can use the **Override Percussion Noteheads** dialog to disambiguate the notes for one instrument from another in five-line staff kit presentations only.

You can open the Override Percussion Noteheads dialog from inside the Edit Percussion
 Kit dialog by selecting an instrument, then clicking Edit Noteheads.



The **Override Percussion Noteheads** dialog comprises the following:

1 Instrument name

Displays the name of the percussion instrument whose noteheads are listed in the dialog.

2 Playing Technique

Displays the playing technique associated with the notehead in the corresponding row of the table.

3 Default Notehead

Displays the notehead used by default for the playing technique in the corresponding row of the table.

4 Notehead Override

Displays the notehead override used in five-line staff presentations for the playing technique in the corresponding row of the table.

You can change the notehead override by clicking the corresponding field, then selecting another notehead from the menu.

RELATED LINKS

Edit Percussion Kit dialog on page 140 Notehead set designs on page 1034 Inputting notes for unpitched percussion on page 233 Percussion kit presentation types on page 1406

Changing playing technique-specific noteheads

You can change the playing technique-specific noteheads of notes belonging to unpitched percussion instruments after they have been input; for example, to switch selected snare drum notes to the side stick technique and corresponding notehead.

PREREQUISITE

The unpitched percussion instruments whose playing techniques you want to change have at least two playing technique-specific noteheads defined in the **Percussion Instrument Playing Techniques** dialog.

PROCEDURE

1. In Write mode, select the notes whose playing technique-specific notehead you want to change.

TIP

If you select a single note in percussion kits using five-line staff or grid presentations, the current playing technique is shown above the rhythmic grid.

- **2.** Cycle through the available playing techniques for the selected unpitched percussion instruments in any of the following ways:
 - To cycle upwards, press Shift-Alt/Opt-Up Arrow.
 - To cycle downwards, press Shift-Alt/Opt-Down Arrow.

RESULT

The playing techniques of the selected unpitched percussion notes are changed. Their notehead design and/or staff position might be changed.

RELATED LINKS

Inputting notes for unpitched percussion on page 233

Moving notes to other instruments in percussion kits on page 452

Percussion editor on page 663

Defining how combinations of articulations and single-note tremolos sound in playback on page 769

Input methods for playing techniques, pedal lines, string indicators, and harp pedal diagrams on page 358

Showing brackets on noteheads on page 1048

Changing the notehead design of individual noteheads on page 1038

Creating new playing technique-specific noteheads

You can define new playing technique-specific noteheads for unpitched percussion instruments, which are saved for that type of percussion instrument in your project. You can also export playing technique-specific noteheads from your project and import them into other projects.

PROCEDURE

- 1. Open the Percussion Instrument Playing Techniques dialog in any of the following ways:
 - For an individual percussion instrument: In Setup mode, in the Players panel, click
 the instrument menu in the instrument label, and choose Edit Percussion Playing
 Techniques from the menu.

- For percussion instruments that are part of percussion kits: In Setup mode, in the Players panel, click the instrument menu in the kit instrument label, and choose Edit Percussion Kit to open the Edit Percussion Kit dialog. In the main editing area, select the instrument whose playing techniques you want to edit, then click Edit Percussion Playing Techniques.
- 2. In the playing technique-specific noteheads list, click Add Playing Technique 1.
- **3.** Select the playback technique you want to use in the dialog that opens.
- Click OK to add the selected playback technique as a new playing technique-specific notehead.
- **5.** From the **Notehead set** menu, select the notehead you want for the playing technique-specific notehead.

NOTE

To use the default notehead set, leave **Notehead set** as **(Unset)**.

- **6.** Choose one of the following options for **Staff position**:
 - Below
 - Line
 - Above

RESULT

A new playing technique-specific notehead is added to the selected unpitched percussion instrument.

RELATED LINKS

Percussion Instrument Playing Techniques dialog on page 1399

Defining how combinations of articulations and single-note tremolos sound in playback on page 769

Input methods for playing techniques, pedal lines, string indicators, and harp pedal diagrams on page 358

Overriding the appearance of playing technique-specific noteheads

It might be necessary to override the appearance of playing technique-specific noteheads in order to disambiguate the notes for one instrument from another if they share a staff position in five-line staff kit presentations.

PROCEDURE

- 1. In Setup mode, in the **Players** panel, expand the card of the player holding the kit whose playing technique-specific noteheads you want to override.
- 2. In the kit instrument label, click the instrument menu and choose **Edit Percussion Kit** to open the **Edit Percussion Kit** dialog.
- **3.** Select the instrument whose noteheads you want to override.
- 4. Click Edit Noteheads to open the Override Percussion Noteheads dialog.
- **5.** Click in the **Notehead Override** column for the appropriate playing technique, then select a new notehead type from the menu.
- **6.** Click **OK** to save your changes and close the dialog.

RESULT

The playing technique-specific notehead is overridden for the selected instrument in five-line staff kit presentations.

NOTE

This does not affect the appearance of playing technique-specific noteheads in grid and single-line instrument kit presentation types.

RELATED LINKS

Players panel on page 108 Edit Percussion Kit dialog on page 140 Override Percussion Noteheads dialog on page 1401

Per-flow notation options for unpitched percussion

You can find options for how notes in percussion kits are notated in each flow independently on the **Percussion** page in **Notation Options**.

For example, you can choose to notate all notes in a percussion kit in a single voice rather than in multiple voices.

RELATED LINKS

Notation Options dialog on page 730

Notations on notes in percussion kits

You can add notations to notes and use different rhythms in percussion kits in the same ways as for normal notes; however, they can behave differently.

Articulations

You can add articulations to percussion instruments in all kit presentation types in the same ways as for other instruments.

However, in grid and five-line staff presentations, any articulations you add apply to all instruments in the same voice that have notes at that rhythmic position. For example, if both a snare drum and tom-tom note are at the same rhythmic position, and you add an accent, the accent is added to both instruments because they are both shown in the same down-stem voice by default.

You can see the accent applied to each note if you switch to the single-line instruments presentation type.

Tuplets

When working in the grid and five-line staff kit presentation types, tuplets are added to all instruments in the same voice.

You can switch to the single-line instruments presentation type to input cross-rhythms on each instrument separately. When you switch back to the grid or five-line staff kit presentation types, Dorico Elements attempts to resolve the rhythmic conflicts.

• Conflicting tuplets: One tuplet is moved into an extra voice for the duration of the conflict.

- Tuplet notes in one instrument and non-tuplet notes in another instrument starting at the same rhythmic position: The non-tuplet note is displayed as if it were part of the tuplet. This is because the note onset is at the same position as the start of the tuplet, so it sounds the same as the original notation.
- Tuplet notes in one instrument and non-tuplet notes in another instrument that do not start at the same rhythmic position, or other non-tuplet notes that start part-way through the tuplet: Non-tuplet notes are moved into an extra voice for the duration of the conflict.

NOTE

Deleting a tuplet from grid and five-line staff kit presentation types deletes the tuplet from all instruments whose notes contribute to the same shared voice.

Playing techniques

You can input playing techniques, such as **+** for closed and **o** for open hi-hat, during note input and add them later to existing music in the same ways as for other instruments.

Playing techniques are only added to the instrument to which the note you select belongs, even if there are other instruments in the same voice.

Percussion stickings

Dorico Elements does not yet have a dedicated feature for percussion stickings. However, you can use lyrics to represent percussion stickings in all kit presentation types:

- Grid/Five-line staff presentation types: Select a note in the instrument in which you want to show stickings.
- Single-line instruments presentation type: Input lyrics directly into instruments in which you want to show stickings.

RELATED LINKS

Inputting articulations on page 266

Inputting tuplets on page 249

Changing the pitch of individual notes on page 455

Input methods for playing techniques, pedal lines, string indicators, and harp pedal diagrams on page 358

Inputting lyrics on page 382

Dynamics in percussion kits

Unlike other items, dynamics are not shared between the grid/five-line staff presentation types and the single-line instruments presentation type. Any dynamics added to instruments in the single-line instruments presentation type do not appear when you switch to grid/five-line presentations.

This is due to the complexity of combining a large number of different dynamics at the same rhythmic position, as allowed in the single-line instruments presentation, into the single position required for both the grid and five-line staff presentations. Therefore, you can add dynamics in the grid and five-line staff presentation types independently of the single-line instruments presentation type.

RELATED LINKS

Input methods for dynamics on page 302

Percussion kit presentation types

You can show percussion kits in three different presentation types, which can be different in each layout in your project.

NOTE

Dynamics are not shared between the grid/five-line staff presentation types and the single-line instruments presentation type. Any dynamics added to instruments in the single-line instruments presentation type do not appear when you switch to grid/five-line presentations.

You can edit the appearance/structure of each presentation type independently in the **Edit Percussion Kit** dialog. For example, changing the order of instruments in the five-line staff presentation does not affect the order of instruments in the grid presentation of the same percussion kit.

5-line staff

Kit instruments are shown on a five-line staff. You can determine which instruments are shown on each line and in each space of the staff. A single staff label containing the name of the kit is shown.

The numbers down the left-hand side of the editing area in the **Edit Percussion Kit** dialog correspond to staff positions. For example, position 0 is the middle line of the five-line staff, position 1 is the space immediately above the middle staff line, position -2 is the line below the middle staff line, and so on.

Bold black lines show the five staff lines, while gray lines above and below the staff show nominal staff line positions. Each instrument is shown on its staff position.



Grid

Kit instruments are shown on a grid, with each instrument on its own line. You can customize the size of the gaps between each line. Staff labels are shown for each instrument in a smaller font than normal staff labels.

The numbers down the right-hand side of the editing area in the **Edit Percussion Kit** dialog correspond to the number of staff spaces between each instrument line. By default, all instruments in a grid are two spaces apart.

The order in which the instruments are listed matches the order in which they appear in the score.

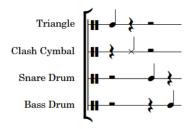
Each instrument in a grid shows its own staff label by default, aligned vertically with its own line, but you can group adjacent instruments together and show a single label for each group.



Single-line instruments

Kit instruments are shown as individual instruments with their own lines. Normal-sized staff labels are shown for each instrument.

The editing area in the **Edit Percussion Kit** dialog lists all of the instruments in the order in which they appear in the score.



RELATED LINKS

Percussion kits and drum sets on page 140
Edit Percussion Kit dialog on page 140
Staff labels for percussion kits on page 1297

Overriding the appearance of playing technique-specific noteheads on page 1403

Changing the percussion kit presentation type

You can change the presentation type of percussion kits in each layout independently and independently of each other. For example, you can use a five-line staff in the full score layout but a grid in the percussion part layout, and have two percussion kits with different presentation types in the same full score layout.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-L to open Layout Options.
- **2.** In the **Layouts** list, select the layouts in which you want to change the percussion kit presentation type.

By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, clicking and dragging across multiple layouts, **Shift** -clicking adjacent layouts, and **Ctrl/Cmd** -clicking individual layouts.

- **3.** In the category list, click **Players**.
- **4.** In the **Percussion** section, choose one of the following options for each percussion kit in your project:
 - 5-line Staff
 - Grid
 - Single-line Instruments
- 5. Click Apply, then Close.

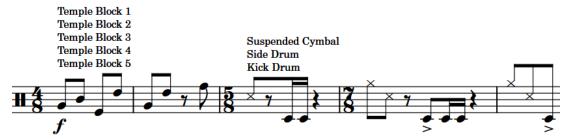
RESULT

The presentation type is changed for the selected percussion kits in the selected layouts.

Percussion legends

Percussion legends list the percussion instruments in use when using the five-line presentation type. Percussion legends can include all instruments that are represented on the staff, or only

show sounding instruments in a set range to remind players which instruments to play at certain points.



Two sounding instrument percussion legends

By default, percussion legends appear above the staff. You can change the staff-relative placement of percussion legends individually.

You can change various aspects of the paragraph style for percussion legends, such as the font size and style, in the **Paragraph Styles** dialog.

NOTE

- Percussion legends appear as signposts if there are no instruments sounding at their
 position, or when the layout uses the grid presentation type. Percussion legends do not
 appear at all in layouts using the single-line instrument presentation type.
- Percussion legends only appear in the layout in which they were added. If you want to show percussion legends in multiple layouts, you must add them in each layout.
- You can hide/show percussion legend signposts by choosing View > Signposts > Percussion Legends.

RELATED LINKS

Changing the staff-relative placement of items on page 423

Paragraph Styles dialog on page 739

Per-flow notation options for unpitched percussion on page 1404

Edit Percussion Kit dialog on page 140

Percussion kit presentation types on page 1406

Hiding/Showing instrument change labels at the start of flows on page 138

Staff labels for percussion kits on page 1297

Adding percussion legends to five-line staff kit presentations

You can add percussion legends at specific rhythmic positions to indicate the instruments in the kit. Percussion legends can show all instruments in the kit or only instruments sounding within the specified range.

NOTE

Percussion legends only appear when kits use the five-line staff percussion kit presentation type and in the layout in which they were added. If you want to show percussion legends in multiple layouts, you must add them in each layout.

PROCEDURE

- **1.** In Write mode, select one of the following:
 - An item on the staff at the rhythmic position where you want to add a percussion legend for all instruments.

- The range of notes/items for which you want to show a percussion legend for sounding instruments.
- **2.** Add a percussion legend in one of the following ways:
 - Choose Edit > Notations > Percussion > Legend for All Instruments.
 - Choose Edit > Notations > Percussion > Legend for Sounding Instruments.

TIP

You can also choose these options from the context menu.

RESULT

A percussion legend is added to the kit. It appears above the staff when the kit uses the five-line staff presentation. It lists instruments, either all instruments or just instruments with notes within the selected range, in the order in which they appear in the five-line staff, from highest down to lowest.

RELATED LINKS

Percussion kit presentation types on page 1406 Editing percussion legend text on page 1411

Changing the percussion legend type

You can change the type of percussion legends so they show all instruments or only sounding instruments in five-line staff presentations.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** 3 is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the percussion legends whose type you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Legend type** in the **Percussion Legends** group.

NOTE

The property is already activated for sounding instrument percussion legends.

- **3.** Choose one of the following options:
 - Legend
 - Sounding instruments

RESULT

The legend type of the selected legends is changed.

RELATED LINKS

Percussion legends on page 1407
Percussion kit presentation types on page 1406
Adding percussion legends to five-line staff kit presentations on page 1408

Engrave toolbox on page 490

Changing the sounding instrument percussion legend range

You can change the rhythmic range of sounding instrument percussion legends to include more/fewer instruments in the legend, as they only show the instruments playing at the rhythmic positions included in the range.

PROCEDURE

- **1.** In Write mode, select the sounding instrument percussion legend whose range you want to change.
- **2.** Change the range in any of the following ways, according to the current rhythmic grid resolution:
 - To move the whole range to the right, press Alt/Opt-Right Arrow.
 - To move the whole range to the left, press Alt/Opt-Left Arrow.
 - To lengthen the range, press Shift-Alt/Opt-Right Arrow.
 - To shorten the range, press Shift-Alt/Opt-Left Arrow.

NOTE

Key commands lengthen/shorten items by moving their end only.

• Click and drag the circular handle at the start/end to the right/left.

RESULT

The rhythmic range covered by the selected sounding instrument percussion legend is changed according to the current rhythmic grid resolution.

The instruments included in the percussion legend are automatically updated to reflect the instruments playing within the range.

RELATED LINKS

Rhythmic grid on page 212

Showing short instrument names in percussion legends

Percussion legends use full instrument names by default, but you can choose to use short names to save space.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- If you are in Engrave mode, Graphic Editing 3 is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the percussion legends whose instrument name lengths you want to change. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Use short names** in the **Percussion Legends** group.

RESULT

Short instrument names are shown in the selected percussion legends.

Deactivating **Use short names** returns the selected percussion legends to showing full instrument names.

RELATED LINKS

Staff labels for percussion kits on page 1297

Percussion legends on page 1407

Percussion kit presentation types on page 1406

Adding percussion legends to five-line staff kit presentations on page 1408

Engrave toolbox on page 490

Editing percussion legend text

By default, percussion legends show the instrument names of percussion instruments in five-line staff presentations, stacked vertically. You can change the text shown in percussion legends to show custom text.

PREREQUISITE

- The lower zone is shown.
- Properties is selected in the lower zone toolbar.
- If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the percussion legends you want to edit. You can do this in Write mode and Engrave mode.
- 2. In the Properties panel, activate **Custom text** in the **Percussion Legends** group.
- **3.** Enter the text you want into the value field.
- 4. Press Return.

RESULT

The text shown in the selected percussion legends is changed.

RELATED LINKS

Engrave toolbox on page 490 Hiding/Showing zones on page 43 Properties panel on page 646

Erasing the background of percussion legends

You can erase the background of individual percussion legends; for example, to ensure they remain legible when crossing barlines. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing !** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- 1. In Engrave mode, select the percussion legends whose backgrounds you want to erase.
- 2. In the Properties panel, activate **Erase background** in the **Percussion Legends** group.

RESULT

The backgrounds of the selected percussion legends are erased. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

Deactivating **Erase background** returns the selected percussion legends to the default nonerased background.

AFTER COMPLETING THIS TASK

You can change the padding between percussion legends and each edge of their erased areas.

RELATED LINKS

Engrave toolbox on page 490

Properties panel on page 646

Changing the property scope on page 648

Copying property settings to other layouts/frame chains on page 629

Changing the erasure padding of percussion legends

You can change the erasure padding of individual percussion legends, including changing the padding between percussion legends and each edge of their erased areas independently. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing 3** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- 1. In Engrave mode, select the percussion legends whose erasure padding you want to change.
- **2.** In the Properties panel, activate the **Erasure padding** properties, individually or together, in the **Percussion Legends** group.
 - L changes the padding between percussion legends and their left edge.
 - R changes the padding between percussion legends and their right edge.
 - **T** changes the padding between percussion legends and their top edge.
 - **B** changes the padding between percussion legends and their bottom edge.
- 3. Change the values in the value fields.

RESULT

Increasing the values increases the padding, decreasing the values decreases the padding. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

Voices in percussion kits

Dorico Elements automatically combines music into a smaller number of voices when multiple percussion instruments are presented in a five-line staff or as a grid, even if they contain different rhythms. By default, music is combined into one up-stem voice and one down-stem voice.

Alternatively, you can choose to notate all notes in a percussion kit in a single voice when the kit is defined as a drum set on the **Percussion** page in **Notation Options**. This convention is used less frequently for orchestral percussion.

You can also override this option for individual notes and whole instruments in individual percussion kits.

Notes in the same voice cannot be notated using different durations and are notated using ties by default instead. You can eliminate the use of ties by choosing to truncate longer notes so that only their onsets appear on the **Percussion** page in **Notation Options**.

If one of the instruments in a percussion kit has a tuplet rhythm, other instruments can share the voice if their notation is compatible, such as if the tuplet structure is the same, or if they have a single note that coincides with the start of the tuplet. In this case, the single non-tuplet note is notated as the same duration of the first note of the tuplet.

If the music of the different instruments in the same voice is incompatible, Dorico Elements dynamically creates another voice and notates the remaining music in that voice until the music is compatible again.

RELATED LINKS

Defining percussion kits as drum sets on page 145 Edit Percussion Kit dialog on page 140 Adding slash voices to percussion kits on page 1238

Specifying the stem direction/voice of instruments in percussion kits

You can specify the stem direction for each instrument in individual percussion kits. You can also set which voice they are in, allowing you to control which instruments share voices in percussion kits.

PROCEDURE

- **1.** In Setup mode, in the **Players** panel, expand the card of the player holding the kit whose instrument stem directions and voices you want to specify.
- 2. In the kit instrument label, click the instrument menu and choose **Edit Percussion Kit** to open the **Edit Percussion Kit** dialog.
- 3. In the dialog, select an instrument whose stem direction and voice you want to specify.
- **4.** Choose one of the following stem directions for **Stem direction and voice**:
 - Up-stem
 - Down-stem
- 5. Specify a voice by changing the value for **Stem direction and voice**.

NOTE

You do not have to change the voice number if you are switching between up- and downstem voices, as the number corresponds to the voice number for each stem direction.

6. Click Apply, then Close.

RESULT

The default stem direction and voice of the selected instrument is changed.

RELATED LINKS

Players panel on page 108

Edit Percussion Kit dialog on page 140

Changing the voice of individual notes in percussion kits

You can override the default voice for individual notes in percussion kits, including drum sets.

PREREOUISITE

If you are in Engrave mode, **Graphic Editing** I is selected in the Engrave toolbox.

PROCEDURE

- **1.** Select the notes whose voice you want to override. You can do this in Write mode and Engrave mode.
- 2. Choose Edit > Notations > Percussion > Change Voice > [Voice].
 For example, to change notes to the second down-stem voice, choose Edit > Notations > Percussion > Change Voice > Down-stem Voice 2. You can also choose this option from the context menu.

RESULT

The voice of the selected notes is changed, independently of the default voice for their instrument and independently of your setting for voices in drum sets.

TIP

You can reset the voice of individual notes by selecting them and choosing **Edit** > **Notations** > **Percussion** > **Change Voice** > **Reset Note Destination Voice**. You can also choose this option from the context menu.

RELATED LINKS

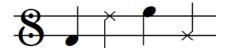
Engrave toolbox on page 490

Universal Indian Drum Notation

Dorico Elements supports the Universal Indian Drum Notation system developed by Keda Music Ltd.

Universal Indian Drum Notation has been designed primarily for tabla, but can also be applied to other Indian drums with two heads, such as nagara, dhol, dholak, mridangam, and pakhawaj.

Indian drum clefs are automatically shown on the staves of tabla instruments and tabla percussion kits, but you can also input Indian drum clefs manually.



RELATED LINKS
Adding players on page 122
Adding instruments to players on page 131
Inputting clefs with the panel on page 325
Percussion kits and drum sets on page 140
Percussion maps on page 763

Voices

For many instruments, such as flute or trombone, each staff usually contains a single musical line in a single voice that is read from left to right along the staff. When multiple, independent lines must be shown in a single staff, each line can be a separate voice.



An excerpt of piano music with two voices active on each staff

One common use for showing multiple voices in a single staff is in vocal music, when the soprano and alto lines share a single staff and the tenor and bass lines share another staff. Showing each vocal line in its own voice helps to separate the lines, making the music easier to read and making the shape of each melodic line clear.

In Dorico Elements, notes belong to voices. You can create as many voices as you like on each pitched instrument staff. Each voice has its own color, which you can see if you show voice colors. This can help you to keep track of which notes are in which voices if there are multiple overlapping musical lines in your project.

Voices in Dorico Elements are divided into up-stem voices and down-stem voices. Stems of notes in up-stem voices point upwards, while stems of notes in down-stem voices point downwards. However, in bars where only one voice contains notes, stem directions are automatically changed to the directions they would have if there were only one voice on the staff. By default, the first voice on the staff is up-stem.

Following most notation conventions, rests are shown in bars for all voices that have notes in the bar. If two or more voices have a rest of the same rhythmic duration at the same rhythmic position, that rest is consolidated by default: instead of showing two identical rests, only one is shown.

RELATED LINKS

Inputting notes into multiple voices on page 227
Changing the voice of existing notes on page 453
Swapping the contents of voices on page 454
Voices in percussion kits on page 1413
Slash voices on page 1236
Stem direction on page 1055
Voice column index on page 1419
Implicit rests in multiple-voice contexts on page 1251
Dynamics in playback on page 934

Per-flow notation options for voices

You can find options controlling how notes in multiple voices are positioned in each flow independently on the **Voices** page in **Notation Options**.

The options on this page allow you to change the position and order of notes in multiple-voice contexts, and choose when noteheads in different voices can overlap.

Musical examples demonstrate how each option affects the appearance of your music.

RELATED LINKS

Notation Options dialog on page 730 Per-flow notation options for rests on page 1252

Hiding/Showing voice colors

You can show notes in different colors according to their voice; for example, to check which notes are in which voice. When voice colors are hidden, all notes appear black by default.

Voice colors are considered annotations and are not printed by default.

NOTE

You cannot show colors for voices and notes out of range simultaneously.

PROCEDURE

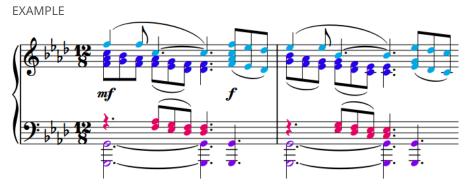
- Do one of the following:
 - To show voice colors, choose View > Note And Rest Colors > Voice Colors.
 - To hide voice colors, choose View > Note And Rest Colors > None.

RESULT

Voice colors are hidden/shown. The first eight voices on each staff use the colors set in **Preferences** > **Colors** > **Voice Colors**. Voice colors are automatically assigned to subsequent voices.

TIP

You can also identify voices by selecting individual notes and looking at the display in the status bar.



Voice colors shown

AFTER COMPLETING THIS TASK

If showing voice colors reveals some notes are not in the voice you want, you can change their voice.

RELATED LINKS

Changing music area colors on page 53
Changing the voice of existing notes on page 453
Stem direction on page 1055
View options for notes and rests on page 1044
Annotations on page 581
Status bar on page 37

Allowing/Disallowing noteheads in opposing voices to overlap

You can allow/disallow the noteheads of unison notes in opposing voices to overlap in different contexts in each flow independently. For example, if you want to allow notes with and without rhythm dots to overlap but disallow half notes to overlap with shorter notes.

PROCEDURE

- 1. Press Ctrl/Cmd-Shift-N to open Notation Options.
- 2. In the category list, click Voices.
- 3. In the Ordering Multiple Voices section, choose one of the following options for Unison half notes (minims) and shorter notes in opposing voices:
 - Allow noteheads to overlap
 - Do not allow noteheads to overlap
- **4.** Choose one of the following options for **Unison dotted and undotted notes in opposing voices**:
 - Allow noteheads to overlap
 - Do not allow noteheads to overlap
- 5. Click Apply, then Close.

RELATED LINKS

Voice column index on page 1419
Inputting notes into multiple voices on page 227
Note and rest grouping on page 841
Notation Options dialog on page 730

Note positions in multiple-voice contexts

Notes are usually placed directly above each other and at the same horizontal position, so that it is immediately clear which notes are played together. However, the horizontal alignment of notes can be different in multiple-voice contexts.

There are circumstances when some notes must be positioned slightly to one side in a different voice column to ensure the division of notes across the voices is clear. For example, when there are three or more voices in a single staff, or when notes in two voices are a second interval apart.



A phrase with multiple voice columns for some beats on the top staff

Interlocking notes in different voices can be positioned in two ways:

1. Notehead to notehead, which allows noteheads to overlap partially. This voice order often takes up less horizontal space than positioning notes stem to stem, as notes can overlap.



2. Stem to stem, which does not allow noteheads to overlap. This voice order keeps notes in different voices separate.



Dorico Elements positions notes by default with the noteheads partially overlapping, in order to minimize the horizontal space they occupy and to maintain the clarity of the rhythm. The order and position of notes in different voices is also automatically adjusted so that each rhythmic position uses as little horizontal space as possible, while remaining clear and legible.

- You can change the default order of notes in multiple voices in each flow independently in **Notation Options** > **Voices**.
- You can manually swap the order in which opposing voices are positioned horizontally and change the voice column of individual notes.
- You can move notes graphically in Engrave mode by changing the note spacing. You can
 move individual voice columns independently of all other items at that rhythmic position, or
 move everything at the same rhythmic position.

RELATED LINKS

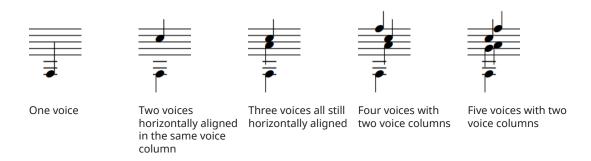
Stem direction on page 1055
Slashes in multiple-voice contexts on page 1246
Implicit rests in multiple-voice contexts on page 1251
Notation Options dialog on page 730
Note spacing on page 494

Voice column index

The voice column index is used to determine the positions of notes when multiple columns are needed; for example, when notes in two voices are a second interval apart and therefore cannot be placed directly above each other vertically, instead they must partially overlap.

Dorico Elements automatically changes the voice column of voices according to the number of active voices and the pitch of notes. Dorico Elements prefers showing voices with the widest

pitch range between them on the left of the rhythmic position and voices with narrower pitch ranges to the right, as this produces the most balanced result, especially when there are multiple accidentals.



You can adjust the horizontal spacing of voice columns independently of other voice columns at their rhythmic positions.

RELATED LINKS

Allowing/Disallowing noteheads in opposing voices to overlap on page 1418
Adjusting the spacing of individual notes/items independently of their rhythmic positions on page 498

Swapping the order of voices

Dorico Elements automatically positions notes with the noteheads partially overlapping, in order to minimize the horizontal space they occupy and maintain the clarity of the rhythm. You can manually swap the order in which opposing voices are positioned horizontally. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- If you are in Engrave mode, **Graphic Editing 3** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- 1. Select the notes whose order you want to change. You can do this in Write mode and Engrave mode.
- Choose Edit > Notations > Voices > Swap Voice Order. You can also choose this option from the context menu.

RESULT

The voice order of the selected notes is changed by changing their voice column index. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

NOTE

If you want to revert voices to their default voice order, we recommend that you reset their voice column by deactivating **Voice column index** in the **Notes and Rests** group of the Properties panel instead of swapping their voice order again.

EXAMPLE



Interlocking notes in opposing voices positioned notehead to notehead.



Interlocking notes in opposing voices positioned stem to stem.

RELATED LINKS

Changing the property scope on page 648

Engrave toolbox on page 490

Stem direction on page 1055

Implicit rests in multiple-voice contexts on page 1251

Swapping the contents of voices on page 454

Changing the voice of existing notes on page 453

Changing the voice column of notes

You can change the voice column, and therefore the horizontal order, of all notes in selected voices at individual rhythmic positions, independently of your per-flow settings. You can do this for the current layout and frame chain only, or for all layouts and frame chains.

PREREQUISITE

- The lower zone is shown.
- **Properties** is selected in the lower zone toolbar.
- **Graphic Editing !** is selected in the Engrave toolbox.
- You have chosen the appropriate property scope for local properties.

PROCEDURE

- **1.** In Engrave mode, select at least one note in each voice whose voice column you want to change.
- 2. In the Properties panel, activate Voice column index in the Notes and Rests group.
- 3. Change the value in the value field.

RESULT

The voice column of the selected voices is changed. If the property scope was set to **Locally**, this change only takes effect in the current layout and frame chain.

Deactivating the property returns the selected voice to their default order according to your per-flow settings.

TIP

The **Voice column index** property in the **Notes and Rests** group of the Properties panel is automatically activated when you swap the order of voices manually.

AFTER COMPLETING THIS TASK

You can adjust the horizontal spacing of voice columns independently of other voice columns at their rhythmic positions.

RELATED LINKS

Properties panel on page 646

Allowing/Disallowing noteheads in opposing voices to overlap on page 1418
Adjusting the spacing of individual notes/items independently of their rhythmic positions on page 498

Unused voices

An unused voice is one that contains no notes anywhere in the project. Any unused voices are automatically deleted when you close a project, but you cannot manually delete voices once they have been created. You can create as many voices as you want in each staff.

NOTE

Deleting all notes in a voice does not delete the voice immediately.

If you later want to input notes in a voice that was automatically deleted when you last closed the project, you can create a new voice at any rhythmic position.

Notes crossed to staves with existing notes in other voices

When you create cross-staff beams by crossing notes to staves that already contain notes, the stem direction of the existing notes may change. This is due to how multiple voices at the same rhythmic position are handled in Dorico Elements.

For example, if a piano part contains notes in up-stem voices on both staves, the stem direction of notes in both voices can change if notes from the upper staff are crossed to the lower staff. In this situation, the notes from the two staves are not combined, but are instead treated as two up-stem voices in a multiple-voice context.



Two piano staves, each with notes in a single upstem voice.



When the notes in the upper staff are crossed to the lower staff, the stem direction of the notes already in the lower staff changes so they point upwards.

You can change the stem direction of the notes originally in the lower staff in any of the following ways:

- Select the notes originally in the lower staff and change their voice to another voice, such as a down-stem voice.
- Select the notes originally in the lower staff and change their stem direction.

Alternatively, you can move the notes in the upper staff permanently to the lower staff.

RELATED LINKS

Creating cross-staff beams/tremolos on page 832 Moving notes/items to other staves on page 451 Inputting notes into multiple voices on page 227 Changing the voice of existing notes on page 453 Stem direction on page 1055

Glossary

Α

action (expression maps)

A control in expression maps that determines how individual switches are controlled in order to trigger the required playback technique or combination of playback techniques.

action (harps)

The mechanism that raises or lowers the pitch of harp strings, as controlled by the position of each pedal.

action (pianos)

The mechanism that allows piano hammers to strike the strings with different forces, depending on the strength with which the player depresses the corresponding key. It allows pianos to use a greater dynamic range, hence their full name "pianoforte".

alignment relative to noteheads

When calculating the horizontal alignment of items relative to noteheads, Dorico Elements uses the front notehead in the first voice column at the corresponding rhythmic position. The front notehead is the notehead on the correct side of the stem; that is, on the left of up-stems and on the right of down-stems. Items that can be aligned relative to noteheads include lyrics, chord symbols, and playing techniques.

anacrusis

See pick-up bar.

articulation (music notation)

A symbol that indicates how a note should be played, typically affecting its onset (attack), release, or duration. For example, staccato marks and accents.

articulation (sound libraries)

A term that refers to playing techniques generally.

attachment

The rhythmic position at which an item occurs, or to which an item applies, in the music. In Write mode and Engrave mode, an attachment line is shown between a single selected item and its rhythmic position.

В

bar

A span of music comprising a specific number of beats, as defined by the prevailing time signature, whose boundaries are indicated by bar lines. Also known as a "measure", but this documentation uses "bar".

C

cancellation natural

A natural accidental positioned on the staff immediately before a change in key signature or a single note. It indicates that the previous accidental no longer applies and can be followed immediately by a new accidental if applicable. Showing cancellation naturals before single accidentals that follow double accidentals is also known as "archaic cancellation". Cancellation naturals before a change in key signature are known as "traditional" when positioned after the barline and "Russian" when positioned before the barline.

caret

Shown during note input, the caret is the vertical line that extends above and below the staff and indicates the rhythmic position at which items are input. Also known as an "insertion point". In Dorico Elements, the caret, cursor, and mouse pointer are related but serve different purposes. See also rhythmic grid, note input, cursor, mouse pointer.

casting off

The act of fixing the layout of pages of music, such as defining a set number of systems per page or the number of bars per system.

cautionary accidental

A restatement of an earlier accidental to eliminate ambiguities, such as when a tied note with an accidental continues onto another page. Also known as a "courtesy accidental".

CC

Short for "continuous controller" or "control change", it is a MIDI message that combines a controller number and a value. The value for an individual controller can change over time, allowing incremental manipulation of the corresponding sound or effect, such as increasing/decreasing the string vibrato intensity. You can specify the sound or effect that each CC switches to and controls in each sound library using expression maps. In Dorico Elements, each instrument track has 127 available MIDI CCs, each with a value range from 0 to 127. Because MIDI CC does not use notes on a MIDI keyboard, it allows you to use the full range of MIDI keyboard notes for note input. However, it is therefore harder to trigger MIDI CC whilst recording notes. See also MIDI, PC.

channel

In MIDI, a channel determines which note, controller, or other data is played by which sound on which device. In Dorico Elements, notes on a single staff may be played by different channels, depending on which playing techniques are provided by the patch assigned to each channel. See also MIDI, patch.

chord

Two or more notes of the same duration that start at the same rhythmic position and share a stem.

chord input

A variation of note input where notes are stacked on top of each other to create chords, rather than being input after the previous note in sequence. Notes are input at the caret position, which does not advance automatically. See also caret, note input, Insert mode.

collision avoidance

Automatic adjustments made by Dorico Elements to ensure multiple items at the same position do not overlap and that all remain clearly legible. Includes changing the shape of items, such as slurs, and changing the vertical and/or horizontal position of items, such as accidentals in chords.

column

A vertical line representing the same horizontal position across all staves in the system. Used to determine the position of notes and chords for the purposes of spacing music accurately. Multiple columns can be used for the same rhythmic position to accommodate multiple voices, with notes or chords in some voices being offset horizontally from notes or chords in other voices.

concert pitch

All notes are written as they sound. Full scores are often notated in concert pitch, so that harmonies and themes are easier to identify. Also known as "sounding pitch". See also transposed pitch, instrument transposition.

condensing

The process of showing the music for multiple players on fewer staves than is normal, usually by allowing multiple instruments of the same type to share a staff, such as Flutes 1-2 or Horns 1-4. Most commonly used for large orchestral scores, as when there are fewer staves on a page it is possible to use a larger staff size, which is easier for conductors to read. See also divisi, pitch crossing, reducing.

constant point

A change in value in the Key Editor that sets a fixed value until the next point. See also point (Key Editor), linear point, value line.

context menu

A menu that you can access by right-clicking on a mouse or double-tapping on a touchpad. Its options vary by the location of the mouse pointer and what is selected when you access it, but it most commonly contains options also found on the **Edit** menu.

cursor

The vertical blinking line that appears when entering or editing text. See also caret, mouse pointer.

D

dead note

A note played on a fretted instrument whose sound is muted to produce a sound that is more percussive than pitched. Usually produced by gently resting one hand on the string. Also known as a "muted", "muffled", "ghost", or "silenced" note. In Dorico Elements, only notes belonging to fretted instruments, such as the guitar or banjo, can be dead notes.

disclosure arrow

A small arrow that is shown on all edges of the main window in Dorico Elements. It allows you to hide/show the toolbar and panels individually.

divisi

Italian for "divide" or "divided", divisi is when players split in order to play multiple lines of music. This commonly involves a section, such as Violin I, dividing and using two staves rather than one for a limited passage. Divisi passages can be notated all on the same staff, using multiple voices if required, or across multiple staves. See also tutti, condensing, exploding, reducing.

drum set

A particular type of percussion kit that is often used in pop and rock music. Drum sets often use a different arrangement of voices than percussion kits. In this documentation, references to "percussion kits" also apply to drum sets, as drum sets are a type of percussion kit.

E

EDO

An abbreviation for Equal Division of the Octave, it is a unit used to describe how an octave can be divided into equal parts, often for the purpose of defining a microtonal scale or tonality system. Traditional Western European music uses 12-EDO; that is, each octave is divided into 12 equal half-steps (semitones). Music that uses equal quarter tones uses 24-EDO. See also pitch delta.

endpoint

The unique combination of inputs and outputs that together allow the correct sounds to be played for each instrument.

Engrave mode

A mode in Dorico where you can manipulate and modify every item in your project, but without deleting them, moving them rhythmically, or changing the pitch of notes. You can also determine how the pages in each layout of your project are formatted for printing or exporting. See also modes.

enharmonic equivalent

An alternative spelling of a note that uses a different scale degree and accidental but produces the same sounding pitch, such as G^{\sharp} and A^{\flat} .

ensemble

A predefined collection of players, each holding instruments that are often used together, such as string quartet, wind quintet, brass quintet, string ensemble, and double woodwinds.

envelope

A change in sound over time that comprises multiple stages, such as attack, sustain, and decay. In the Dynamics editor, envelopes are represented by highlighted regions and multiple separate points, each controlling a different parameter of the overall envelope. See also point (Key Editor), constant point, linear point, value line.

explicit rest

A rest that was deliberately input during rest input or imported from a MusicXML file. Explicit rests cannot be suppressed between notes in a particular voice. See also rest, implicit rest.

exploding

The process of assigning music to more instruments than it was written for originally. Exploding music is often a key step in arranging and orchestrating music, such as when a piano piece is arranged for string quartet. See also reducing, divisi.

F

family

Instruments of a similar kind that are typically bracketed together in a score, such as woodwind, brass, percussion, and strings.

fermata

A notation that indicates all notes at that position are held for longer than their notated length. It is most commonly shown as a curved line with a dot under the curve, but it can also be shown with a pointed arch or square shape. Also known as a "pause" or a "birds' eye".

flow

A self-contained span of music of any scope, such as a movement in a symphony, a song in an album, a number in a musical, or a short exercise in a music theory worksheet. A flow can contain the same players as other flows in the project or separate players just for that flow. See also player.

formatting

The act of determining the number of bars in a system, the number of systems on a page, and the distances between staves and systems.

fps

A unit of measurement, short for "frames per second", that refers to the number of video frames occurring each second.

fragment

Part of a notation item. For example, fragments of a note include its notehead, rhythm dots, accidentals, the tip of its stem, and beam. In Write mode, selecting any part of an item also selects all of its fragments, so any changes you make affect the whole item. In Engrave mode, you can select each fragment individually to tweak its position or appearance. See also item, segment.

frame

A rectangular container for music, text, or graphics on a page.

fretted instrument

A type of instrument that in most cases has multiple strings, a neck with marked frets, and is played by stopping the strings at fret positions on the neck with one hand, usually the left, and plucking the corresponding strings with the other hand, usually the right. Common fretted instruments include the guitar, ukulele, and banjo.

full score

A score comprising all of the music for all of the players and their instruments, typically laid out in a specific order. The order used varies according to the ensemble for which the music

is written. In full scores for orchestra, the players are typically ordered from the highest wind instrument at the top of the page, such as piccolo, to the lowest string instrument at the bottom of the page, such as contrabass, with brass, keyboards, voices, and percussion in between.

G

galley view

A viewing option that shows music laid out as a single, infinitely wide system.

grace note

A small note, often used to show an ornament or embellishment, that is not counted towards the number of beats in the bar; instead, it steals from the duration of either the preceding or the following rhythmic notes. Also known as an "arhythmic" or "crushed" note. In common practice, a grace note with a slashed stem is an "acciaccatura", which is to be played as quickly as possible, either immediately before or at the rhythmic position of the note or chord that follows it. A grace note with an unslashed stem is an "appoggiatura", which is played as half of the written duration of the note or chord that follows it.

grand staff instrument

An instrument that normally uses two or more staves joined by a brace to display their notes. Common grand staff instruments include the piano, organ, and harp. Upper staves usually indicate higher notes and use the treble clef, while lower staves usually indicate lower notes and use the bass clef.

Н

hairpin

A notation for dynamics that uses a pair of angled lines, diverging from or converging on a single point, to show a gradual increase or reduction in the dynamic level; that is, a crescendo or diminuendo.

half-bar

The rhythmic position that divides bars into two equal sections when the prevailing time signatures can be divided into four equal beats. In Dorico Elements, specific beam grouping and note grouping settings apply to bars with a half-bar. Time signatures that have a half-bar include 4/4 and 12/8.

handle

A selectable item that marks the ends of lines, the corners of frames, and other moveable positions, such as pedal line retakes and slur control points. In Write mode, handles are circular and mark rhythmic positions. In Engrave mode, handles are square and mark graphical positions.

harmonic series

A naturally-occurring set of frequencies that are all related to a single pitch, known as the "fundamental". When a fundamental pitch is played, the note produced contains many different notes within the harmonic series. These additional notes are known as "partials" or "overtones". It is also possible to bring out the sound of individual partials by playing them as harmonics. There is a consistent pattern of intervals between partials within the harmonic series, and these intervals become progressively smaller the further up the harmonic series they occur. For example, the interval between the first and second partials is an octave whereas the interval between the seventh and eighth partials is only approximately a major second. At the top end of the harmonic series, most partials are microtones. See also partial.

hook

A short line that extends from other lines, most commonly at a right angle, that helps to clarify the end position of lines. In Dorico Elements, hooks can be used at the end of pedal lines, octave lines, repeat endings, and tuplet brackets.

horizontal justification

The alignment of musical content to the left and right edges of the frame. To ensure that all staves in a system occupy the same width, any remaining space that is left over after the music

is spaced is distributed evenly between all of the columns in the system. Sometimes the final system of a flow is not fully justified and is allowed to end partway across the width of the frame. See also frame, justification.

Ι

implicit rest

A rest that is automatically shown around the notes you input. Its notated duration automatically adjusts according to the time signature and its position in the bar. Implicit rests can be suppressed between notes in a particular voice, which hides them. See also rest, explicit rest, padding rest, multi-bar rest.

Insert mode

A way of changing how notes are input. When Insert mode is activated, new notes push all subsequent notes in the same voice along by the input duration instead of overwriting existing notes. Similarly, reducing the duration of notes with Insert mode activated pulls them closer together without leaving rests between the notes. This also affects edits you make outside of note input, such as deleting notes, changing the duration of notes, or inputting time signatures. See also note input, chord input.

instrument

Anything that requires at least one staff to represent the sounds or music it produces. Common instruments include the violin, flute, tuba, and bass drum. However, human voices, computer triggering samples, and tape recordings can also be instruments.

instrument transposition

The interval difference between the pitch the instrument plays and the resulting sounding pitch, often included as part of the instrument name. For example, when a Clarinet in Bb plays a C, the pitch produced is a concert Bb. Instrument transposition is also known as "instrument pitch". See also concert pitch, transposed pitch.

item

Generic term for any note, rest, chord, notation, or other selectable object that appears in the score in Dorico Elements. See also fragment, segment.

ı

justification

The alignment of musical content to the edges of the frame, both horizontally and vertically. See also frame, horizontal justification, vertical justification.

K

key command

A set of keys that perform a defined task when pressed together. Also known as a "keyboard shortcut" or "hotkey".

L

layer

See voice.

layout

A page-based presentation of the music for one or more players in one or more flows; for example, a full score that contains all players or an instrumental part that contains only a single player. See also flow, player.

layout options

Options that affect the setup of an individual layout, such as page and staff size. These options can be set in each layout independently in the **Layout Options** dialog. See also layout.

linear point

A change in value in the Key Editor that acts as a point on a curve, setting a value for its position only and allowing for a smooth change in value from that position until the next point. See also point (Key Editor), constant point, value line.

lock duration

Functionality that allows you to change the pitches of existing music while retaining existing rhythms.

lyric

Any text that is intended to be sung or spoken by an individual singer or group of singers. A lyric can be a whole word or an individual syllable in a multi-syllabic word. Lyrics are shown at each rhythmic position where a new word or syllable begins. Typically, lyrics are found below the staff, but are sometimes placed above the staff; for example, in the case of a short score.

M

measure

See bar.

MIDI

An abbreviation for Musical Instrument Digital Interface, a standard for how electronic musical instruments, computers, and virtual instruments can connect to and communicate with each other. In Dorico Elements, MIDI data can be sent to one of 16 channels, which allow either a specific instrument, or a specific patch on a specific instrument, to receive and respond to the data. See also channel, patch, CC, PC.

minor key

A key signature based on a minor scale, which has a different pattern of intervals to a major scale. See also minor scale.

minor scale

A sequence of notes containing the pitches of a minor key. There are three types of minor scales: natural, harmonic, and melodic. Natural minor scales follow the interval pattern of the Aeolian mode, which on a keyboard is all the white notes from A-A. Harmonic minor scales also follow the Aeolian mode interval pattern but the seventh degree of the scale is sharpened; for example, G‡ in A harmonic minor. Melodic minor scales follow different interval patterns when they are rising/falling: when rising, melodic minor scales have sharpened sixth and seventh degrees, but when falling, the sixth and seventh degrees are both natural. See also minor key.

modes

Selectable workspaces in the project window that represent different phases in the workflow of preparing a score. See also Setup mode, Write mode, Engrave mode, Play mode, Print mode.

mouse pointer

The icon on the screen that allows you to interact with items and the user interface, usually by clicking. Its position is typically controlled by an external mouse or touchpad. Its appearance varies depending on the context, such as appearing as a hand when it hovers over a hyperlink, but it most commonly appears as an arrow pointing towards the top left corner of the screen. Also known as a "mouse arrow", "cursor", or simply a "pointer" or "mouse" In this documentation, we use the term "mouse pointer" to differentiate from the cursor and caret. See also cursor, caret, touchpad.

multi-bar rest

A consolidation of multiple adjacent empty bars into a smaller unit, typically shown as a single bar with the total number of bars' rest written above the staff. A multi-bar rest normally shows an H-bar symbol, which is a thick horizontal line with vertical lines at each end. In some older

published scores, a multi-bar rest of up to nine bars in length is shown using a combination of double whole and whole rests. Also known as a "multirest".

music area

The main part of the window in Setup, Write, and Engrave modes where you input and edit your music.

MusicXML

A file format designed to allow the interchange and archiving of music notation data in an open and non-proprietary way. It is useful for exchanging scores between different music applications.

N

node

A position along the length of a string that marks an equal division of the string, such as a quarter of the way along a string. Touching, but not fully stopping, a string at a node produces a harmonic partial. See also partial, harmonic series.

notation options

Options that affect the way the music is notated, particularly concerning how notes and rests are grouped according to meter, rules for the extent of accidentals, and options for transposition. These options can be set independently for each flow in the **Notation Options** dialog.

note input

The standard method of adding notes to staves in sequence that is possible when the caret is active. The caret automatically advances to the next rhythmic position after each note is input. During note input, it is also possible to input other items at the caret position. Also known as "step input" because notes are input step-by-step. See also caret, chord input, Insert mode.

0

octave division

A single step within an octave whose interval depends on the total number of divisions in the octave. For example, in 12-EDO, there are twelve octave divisions, each a half-step (semitone) apart. See also EDO, pitch delta.

overtone

See partial. See also harmonic series, node.

P

padding

The minimum distance/gap between two items, such as text and its enclosure. Padding values can be independent of other set values, such as minimum height or width.

padding rest

A rest that fills the extra rhythmic space before or after cues that start or end partway through bars. This shows clearly how the rhythm of the cue fits within the time signature and how it relates to the player's existing material. See also implicit rest.

page break

The forced termination of a page of music at a particular rhythmic position, typically at a barline. Often used to ensure a convenient page turn in a part. In Dorico Elements, page breaks can be achieved using frame breaks, which are indicated using signposts. See also system break.

page view

A viewing option that shows music laid out on a page with a fixed width and height, as it appears when printed. See also galley view.

panel

Wide palettes of tools on the left, right, and bottom edges of the program window that are available in all modes, but their content varies in each mode.

part

The music belonging to the instruments played by one or more players, shown on its own rather than in a full score. Performers who do not need to see the music belonging to the whole ensemble play from parts so they only have to read the music they play themselves. See also full score, layout.

partial

A single pitch or frequency in the harmonic series, which varies in pitch according to the pitch of the fundamental but is always a consistent interval above the fundamental according to its number in the harmonic series. For example, the second partial is an octave above the fundamental, the third partial is an octave and a fifth above the fundamental, and the fourth partial is two octaves above the fundamental. Also known as simply a "harmonic" or "overtone", although when described as an overtone it has a different number, as the first overtone is the same as the second partial. See also harmonic series.

patch

An older term for a discrete sound on a MIDI device or virtual instrument. See also channel, MIDI, PC.

pause (holds)

A notation that shows where the established rhythmic flow of the music is interrupted, either with a moment of repose or a short silence, before continuing. Also known as a "hold", "fermata", "breath mark", and "caesura". See also fermata.

pause (rest)

A marking with a rhythmic value that indicates no note is played for that duration. In this documentation, we refer to this as a "rest". See also rest.

PC

Short for "program change" or "patch change", it is a MIDI message that allows you to access different sounds by switching to the corresponding programs. Because programs can also include effects presets, they allow you to change to specific sounds quickly, which is particularly useful in live performances. You can specify the programs that each PC switches to in each sound library using expression maps. See also MIDI, CC, patch.

pedal level change

A change to how far a piano sustain pedal is depressed, between 1 (fully depressed) and 0 (not depressed). It is notated as a change to the height of a pedal line. Also known as a "pedal lift".

pick-up bar

A note or notes played before the first full bar of a piece. Also known as an "upbeat" or "anacrusis". Pick-up bars often only comprise one or two beats whose main purpose is to lead in to the start of the piece.

pitch crossing

A possible situation on staves containing multiple voices or parts, such as condensed staves, where notes in down-stem voices have higher pitches than notes in up-stem voices. See also condensing.

pitch delta

The number of octave divisions by which accidentals raise or lower the pitch of notes. For example, in 12-EDO, a pitch delta of 1 raises notes by a half-step (semitone) and is commonly notated using the sharp accidental (#). See also EDO.

player

A musician who plays one or more instruments. Players are defined as either single players or section players and are assigned to flows and layouts. See also single player, section player, flow, layout.

player group

A collection of players that comprises either a subset of the main ensemble, such as a choir within an orchestra, or a separate group, such as an off-stage brass group or second orchestra. Each group of players is labeled separately in the full score and is grouped and numbered together in the instrument order. See also player.

playhead

A vertical line that moves alongside music during playback and when recording, showing the current rhythmic position. Also known as a "playback line".

Play mode

A mode in Dorico where you can change how your music sounds in playback, including by changing the playback template and assigning VST instruments, inputting automation, adjusting the mix, and changing the sounding duration of notes in playback without affecting their notated duration. See also modes.

playthrough

A single time playing from the beginning of the piece to the end. Music that contains multiple possible endings, such as music with repeat endings or codas, requires multiple playthroughs.

plug-in

A software program that can operate within another software program. Dorico Elements supports VST instruments and effects and script plug-ins written in Lua.

point (Key Editor)

A change in value in the Key Editor. Points appear as squares that you can select and edit, such as by dragging them. Points can be constant or linear. See also constant point, linear point, value line

point (size)

A unit of measurement in typography that describes the size of fonts.

pointer

See mouse pointer.

polymeter

Music containing multiple simultaneous meters; for example, one instrument in the ensemble plays in 6/8 and another plays in 7/4.

popovei

A temporary value field that is evoked using a key command and allows you to input items using text entries. You can open popovers in Write mode during note input or when items are selected in the music area. There are dedicated popovers for different types of items.

preamble

The notations typically drawn before the first note or rest on each system of music. The preamble usually includes clefs, key signatures, and time signatures. In Dorico Elements, the preamble is drawn automatically, so you cannot select any items included in it.

Print mode

A mode in Dorico that allows you to print and export the layouts in your project. See also modes.

print preview area

The main part of the window in Print mode where you can see a preview of what is going to be printed or exported as a graphic. See also Print mode.

project

A Dorico Elements file that can contain multiple flows and layouts. See also flow and layout.

properties

The characteristics of individual items and fragments of items in your project that can be edited via the Properties panel. There are two types of properties: local and global. Local properties are layout- and frame chain-specific, meaning that by default, changing local properties for an item in one layout does not affect the same item in other layouts or other frame chains.

Q

quantization

In music, the act of adjusting the positions and durations of notes so they align with the nearest defined beat. This process eliminates small variations in rhythm and duration produced naturally by live performers, and can be useful when importing/exporting MIDI data as quantized music produces neater notation.

R

rastral size

The size of a full five-line staff, measured from the bottom line to the top line. The term comes from the rastra engravers historically used to draw five-line staves on blank paper. Because the rastrum is a fixed object, people became used to their set sizes and Dorico Elements continues this tradition by offering users a selection of rastral staff sizes.

reducing

The process of taking music for more than one instrument and assigning it to fewer instruments, such as a keyboard reduction of a choral piece. A piece of music that has been reduced is known as a "reduction". See also exploding, condensing, divisi.

rest

A marking with a rhythmic value that indicates no note is played for that duration. Also known as a "silence" or "pause", but in this documentation, we refer to them as "rests". See also implicit rest, explicit rest, padding rest, multi-bar rest, pause (holds).

rhythmic grid

A unit of rhythmic duration whose value affects certain aspects of inputting and editing, such as the amount by which items move. Its current value is shown by the note value in the status bar, and by ruler markings indicating beat divisions and subdivisions above the staff on which the caret is active. See also caret.

rhythm section

A collection of instruments typically found in jazz and commercial music. Customarily, the rhythm section includes keyboards, percussion kits, guitars, and bass guitars or double basses. In Dorico Elements, instruments defined as being in the rhythm section can show chord symbols differently to other instruments.

S

score

See full score, part, layout, project.

section player

Multiple musicians who all play the same instrument and read from the same part layout; for example, Violin I. Section players may not play multiple different instruments, but can divide. See also player, single player.

segment

Part of a notation item that functions autonomously in Engrave mode. Segments can exist regardless of their position, such as individual ending brackets within a repeat ending, or only when a single item is split across a system or frame break, such as glissando lines. See also item, fragment.

Setup mode

A mode in Dorico where you can set up the fundamental elements of the project: instruments and the players that hold them, flows, layouts, and videos. You can also determine how they interact with each other; for example, by changing the players assigned to layouts. See also modes.

single player

An individual musician who can play one or more instruments; for example, a flute doubling piccolo. See also player, section player.

SMuFL

Short for "Standard Music Font Layout", it is a font specification that maps all the different symbols required for music notation onto a standard layout. Dorico Elements requires SMuFL-compliant fonts for certain areas of the program, such as clefs and dynamic glyphs, to ensure it can locate the correct symbol. SMuFL-compliant fonts include Bravura, Petaluma, and November 2.0.

space

A unit of measurement in music engraving based on the distance between the center of two adjacent staff lines. Practically all notation items are scaled in proportion to the size of a space; for example, a notehead is normally one space tall.

spacing

The act of determining the horizontal distance between successive columns in order to format the music. Horizontal spacing in Dorico Elements considers the graphical shape and size of notes and other items, such as rhythm dots and accidentals, and the note spacing values set. Full systems are automatically horizontally justified.

spelling

The way in which a note of a given pitch is specified by a letter name plus an accidental. For example, assuming the conventional 12-EDO pitch system, MIDI note 61 can be spelled as C#, Db, and B*. The same pitch is normally spelled a certain way in a given key; for example, MIDI note 61 is normally spelled as C# in D major, but is spelled as Db in Ab major. See also EDO, MIDI.

split stem

A way of presenting altered unisons that keeps each accidental directly beside the notehead to which it applies. Also known as a "cherry stalk" or "tree".

staff-relative placement

The vertical position of items relative to musical staves; that is, either above or below.

staff spacing handle

The square handle on the bottom left corner of each staff when **Staff Spacing** sis activated in Engrave mode. Staff spacing handles only change the vertical position of a single staff. See also system spacing handle.

string shift indicator

An angled line that indicates the direction of movement when string players have to shift position on the fingerboard to play a higher/lower note with the same finger as the previous note.

stroke

The short line that bisects editorial slurs and ties. Also known as a "notch".

SVG

SVG stands for Scalable Vector Graphics, which is an XML-based way of displaying and modifying graphics. Due to the way it is coded, it allows you to modify graphics very flexibly compared to other formats.

system

A horizontal span of music that is played together. Most printed music displays systems spanning the full width of pages. A system can contain any number of staves. For example, in orchestral full scores, systems typically contain staves for all instruments in the orchestra, meaning a single system often occupies the full height of the page. In part layouts, each system only contains the staves required for that player, which is often a single staff and means multiple systems can fit on each page. See also system break, page break, casting off.

system break

The forced termination of a system of music at a particular rhythmic position, typically at a barline. Indicated in Dorico Elements with signposts. See also page break.

system formatting

The distribution of bars into systems and systems into frames. When copying part formatting between layouts, Dorico Elements considers the positions of system breaks, frame breaks, and note spacing changes to be aspects of system formatting.

system object

An item that applies to all staves in the system, but is not necessary to show on every staff, such as tempo marks and rehearsal marks. In Dorico Elements, you can show system objects at multiple positions in each system by showing them above multiple instrument families.

system spacing handle

The square handle on the top left corner of each system when **Staff Spacing** is activated in Engrave mode. System spacing handles change the vertical position of the top staff in systems, which also moves all staves in the system accordingly. See also staff spacing handle.

Т

tempo track

The timing-related information included in MIDI data that affects tempo, SMPTE offsets, time signatures, timecodes, and markers, which can be imported independently of the rest of the data in MIDI files.

token

A code used in a text string that is automatically replaced by a piece of information from elsewhere in the project, such as the title of the current flow, the name of the player, or the page number. Also known as a "wildcard" or "text code".

touchpad

Any flat device with a tactile sensor that functions as an alternative to the traditional computer mouse. Commonly built into laptop computers but can also be separate appliances connected wirelessly or via a cable.

transport

Encompasses all options related to playback and recording.

transposed pitch

In transposed pitch, the pitches notated are the pitches that the instrument plays, rather than the desired sounding pitch. Instrumental parts are always in transposed pitch so that players can simply play the written notes, which is especially important for transposing instruments. See also concert pitch, instrument transposition.

tuplet

A rhythm that is performed at a fraction of its normal written duration. For example, a triplet is three notes of a given note value played in the time it would normally take to play two notes of that note value. Also known as an "irrational rhythm" or a "countermetric rhythm".

tutti

Italian for "everyone", tutti indicates that a passage of music is to be played by all players reading from that part or staff. It is most commonly used to indicate the end of a divisi passage, or for clarification when a staff can indicate both solos and tutti passages at different times. See also divisi.

U

upbeat

See pick-up bar.

V

value line

A visual representation of value over time. In Dorico Elements, you typically find value lines in the Key Editor. Fully horizontal value lines indicate a constant value, while angled value lines indicate a smooth change in value within a given duration, usually between two points. See also point (Key Editor), constant point, linear point.

vertical justification

The spreading out of staves and systems across the full height of frames with as even a distribution of space as possible. If the music in the frame requires less vertical space than is available, the remaining space is distributed evenly between the systems, and between the staves of the systems. See also frame, justification.

vibrato bar

A device on electric fretted instruments, typically guitars, that allows the performer to add vibrato to notes and to adjust the pitch of notes, similar to a guitar bend. Also known as a "whammy bar", "tremolo bar", "tremolo arm", or "vibrato arm".

voice

In Dorico Elements, a series of notes, chords, rests, and other notations that make up a single musical line and are normally played by the same instrument. Assigning notes and items to different voices allows multiple lines of music to be presented on the same staff as clearly as possible, such as in vocal music where the soprano line uses an up-stem voice and the alto line uses a down-stem voice. Dorico Elements allows as many voices as are needed to be input onto a single staff, and lays them out and spaces them automatically. See also instrument.

VST instrument

Short for "Virtual Studio Technology instrument", it is a digital plug-in that converts MIDI data into audio output. It can emulate an existing piece of studio hardware or can be an entirely new creation.

W

Write mode

A mode in Dorico where you can input and edit your music, including changing the rhythmic positions of items, changing the pitch of notes, and deleting notes and items. See also modes.

Index

A	accidentals (continued)
A paper sizes E70 E04	lines 1185
A paper sizes 578, 584	microtonal 783
abbreviated	MIDI input 240
dates 642 dynamics 903, 915, 924	moving 780
	none 274, 776, 1002, 1065 octave divisions 1009
instrument names 176, 179, 180, 437, 1291	
staff labels 140, 1288, 1290, 1291 tempo text 1316	ornaments 1071, 1084 panel 196, 275
absolute channel change actions 758	parier 190, 273 parentheses 776, 784, 1065
absolute font size 737, 739	part names 178
absolute tempo changes 1314	piano roll editor 661, 664
parentheses 1318	pitch before duration 209
Academico font 736, 737, 739	quarter tones 783, 1009
accelerando. See gradual tempo changes. See also	respelling 460–463
tempo marks	restating 783, 784
accents. See articulations	showing 775, 776, 784, 1065, 1079
acciaccaturas. See grace notes	signposts 438
accidental duration rules 783	size 777, 858
changing 784	spacing 494, 495, 778–780
common practice 783	stacking order 778, 780
Modernist 783	Stein-Zimmermann 1009
Second Viennese School 783	text 378, 381, 639
accidental spelling 240	ties across breaks 776, 1347
changing 460–462	titles 639
resetting 463	tokens 639
accidentals 775	transposing 457, 1006, 1007
altered unisons. See altered unisons	trills 1078–1080, 1083, 1084
appearance 776, 784	accolades. See braces
arrows 1009	accompaniment
brackets 776, 784, 1065	chords 247, 852, 859, 875, 877
cancellation 783, 785	inputting 219, 222, 225, 227, 247
cautionary. See cautionary accidentals	playback 936, 937
changing 239, 276	actions 750, 758
chord symbols 155, 159, 162, 312, 853, 858,	activating 62, 217, 438
864–866	caret 217
chords 778	channel effects 705, 711
clusters 495, 778–782	chord input 192, 247
collision avoidance 778, 780	dotted notes 192
color 53, 778	EQ 705
deleting 775	force duration 192
duration rules. See accidental duration rules	frames 490
enharmonic equivalents 460–463	grace note input 192
figured bass 389	graphic editing 490
glissando lines 1096	graphic slices 490
Gould arrows 1009	independent voice playback 530
guitar pre-bends 1111	Insert mode 192, 232
harmonics 1065	inserts 711
harp pedaling. See harp pedaling	instrument filters 436
hiding 775, 776, 784, 785, 1065, 1079	lock duration 192
horn branch indicators 960	MIDI thru 212
inputting 209, 239, 276	mouse editing 208
intervals 333, 474, 1080	mouse input 192, 208
kerning 779	note input 217, 219, 222
key signatures 775, 1000, 1001, 1006	note spacing 490, 496 pitch before duration 192
layout names 178	pitch before duration 192

a stirration or (so ortions of)	alianamant (anntinuad)
activating (continued)	alignment (continued)
playback 29, 525, 527, 543, 549	ornaments 1072
player sorting 123	page numbers 1130
plug-ins 513	pedal lines 1142, 1143, 1146, 1147, 1149, 1150
rest input 192	playing techniques 1164, 1168, 1172
scissors 192	repeat counts 1222, 1223
signposts 438	repeat endings 1213
staff spacing 490, 608	repeat markers 1217
system track 416	rests 1249, 1252, 1253
	rhythm dots 1043, 1420
tuplet input 192	
VST instruments 511, 513, 527	staff labels 180, 1289, 1296
adagio. See tempo marks	staves 588, 597, 605, 1289, 1305
add intervals popover. See note tools popover	systems 588, 597, 605, 1289, 1305
Add Marker dialog 391	tempo marks 1314
add-on switches 749, 757	text 379, 739, 742, 1333
added notes	time signatures 1372
chord symbols 314	trills 1073
adding. See inputting	voices 1418–1421. See also voice column index
additional	allegretto. <i>See</i> tempo marks
endings 399, 401, 1210	allocating. See assigning
voices 227, 1256, 1416	allowing. See activating. See also enabling
additive time signatures. <i>See</i> time signatures	alpha channel 571, 580
advanced options	alterations
hiding 41	chord symbols 314, 853
showing 41	jazz ornaments 337
advancing	altered bass notes 315, 853, 867
caret 218	arrangement 867
chord symbols popover 317	inputting 310, 315
figured bass popover 389	separator 853, 858, 867
hairpins 419	altered unisons 781
lyrics popover 384	appearance 782
slurs 419	
.5 7 7 7	formatting 782
aeolian	split stems 781
chord symbols 316, 866	alternating time signatures. See time signatures
scales 471, 478	alto abbreviation
aggregate time signatures 277, 1360	horn fingerings 960
combining 1372	alto clef. See clefs
dashed barlines 277, 1360	ambience 515
inputting 277, 280–282	amp modeling 705, 711
aikin noteheads 1037, 1038	AmpSimulator 705, 711
air sounds. See playing techniques. See also diamond	anacrusis. See pick-up bars
noteheads	analysis
aliases	chords 319
jump bar 66, 67	fugues 54, 936, 937, 1174
alignment	harmony 938, 1174
arpeggio signs 1092	angles
bar numbers 814	beams 828, 840
barlines 805	borders 739, 1336
bars 597, 805, 1305	fanned beams 840
chord symbols 853, 859, 861, 862	fingering slides 967
counts 1222, 1223	glissando lines 501, 1096, 1099
crosshairs 503	hairpins 501, 919
dynamics 905, 906, 930-932	jazz articulations 1127
fermatas 994–996	lines 375, 501, 1174, 1182, 1195
fingerings 954	pedal lines 1142, 1143, 1146, 1147
gradual dynamics 907	slurs 1265, 1280
instrument names 180	string shift indicators 971
items 503	ties 1352
lines 1177, 1185	tremolos 1378
lyrics 1016, 1018	tuplet brackets 501, 1391
measures 597, 1305	annotations 214, 481, 581, 1176
notes 1418–1421. See also voice column index	comments 481
octave line numerals 898, 899	highlights 560, 863, 864, 1224, 1226, 1239, 1243

annotations (continued)	arpeggio signs (continued)
lines 1176	popover 335, 339
note/rest colors 53, 54, 534, 1044, 1253, 1417	position 1092
ornaments. See ornaments	spacing 1092
signposts 438	swash 1089
voice colors 53, 1417	ties 243
aperture	types 335, 1090
hairpins 918, 919, 925, 926	voices 339, 340
messa di voce 919, 925, 926	arrangements
apostrophes 641	accidentals in key signatures 1001
appearance	chord symbols 853, 867
default settings 728, 730	flows 167
items 646	movements 167
resetting 424	pages 40, 49
appending	arranger 74
crescendo 924	adding 74
diminuendo 924	bold 74, 739
flows 77	exporting 101
possibile 915	fonts 739
subito 915, 916	italics 74, 739
Apply Space Template dialog 721	tokens 640
Apply Stage Template dialog 713	arranging 443, 445
applying. See assigning. See also activating	changing instruments 132
appoggiaturas. See grace notes	chord symbols 319
Arabic numerals	condensing. See condensing
page numbers 1131	copying 445–447
archaic accidental cancellation 785	1,3,3
	filters 417, 418, 433
arco. See playing techniques	MIDI import 84
areas	pasting 447
editing 36, 140, 1406	reducing 626. See also condensing
graphs 696	tools 443, 463
music 33	transforming notes. See transformations
print preview 35	transposing. See transposing
project start 33	voices 451, 453, 454
selecting 410, 414, 416, 417, 659, 698	arrows 1174
tools 36, 646	accidentals 1009
arhythmic notes. See grace notes	arpeggio signs 1089
arms	caps 1171, 1186
vibrato. See vibrato bar	design 1170
arpeggio signs 1089, 1092, 1174	disclosure 41
alignment 1092	lines 1176
appearance 1089–1091	noteheads 1035, 1038
beat-relative playback 1093	panels 37, 43, 107
brackets 1089	zones 37, 43, 107
changing 421	articulations 787, 1160
cross-staff 339, 340	changing 266
crosshairs 503	collision avoidance 791
curved 335	copying 788
deleting 443	deleting 788
direction 1089	duration 787, 792
duration 1093, 1094	dynamics 935
ends 1091	inputting 202, 209, 266, 267
filter 417	inverting 791
fingerings 966	jazz. See jazz articulations
formatting 1090, 1091	key commands 267
grace notes 1092	kits 1404
handles 1092	MIDI import 87
inputting 332, 335, 339, 340	moving 501, 790, 791
length 339, 340, 501, 1092	notes 789
moving 448, 451, 501	order 789
muting in playback 533	overlapping 791
panel 337, 340	panel 196
playback 1093, 1094	percussion 769, 1398, 1399, 1404

articulations <i>(continued)</i> pitch before duration 209 placement 789, 791 playback 530, 531, 732, 745, 769–771, 792, 935	audio buffer size 263, 264 device setup 57 dialog 99
playing technique-specific noteheads 769	exporting 98, 99
position 501, 788–790	mixer 700, 701
slurs 789, 791, 1264	outputs in mixer 552
spacing 501	panning 709, 713, 718
stems 789	playback 543, 549
ties 790, 792, 1341	repeats 534
tremolos 769	reverb 720, 725, 727
tuplets 266	videos 189
types 787	volume 189, 700, 701, 708
artificial harmonics 1062	warning 37
accidentals 1065	auditioning
changing 1069	chords 211, 408, 527
hiding 1063	MIDI devices 212, 258, 408
partials 1064	notes 211, 212, 258, 408, 527
pitch 1064	scrub playback 527
playback 1062–1064	augmented 473
showing 1063	accidentals 783
styles 1066, 1069	chord symbols 314, 853
assigning 62	intervals 333, 457, 473, 474, 783, 1080, 1081 scales 471, 478
expression maps to endpoints 507, 555 flows to layouts 119, 173	trills 333, 1080, 1081
instruments to endpoints 554	author name 481, 482
key commands 62	changing 486
MIDI commands 62	hiding 485
notehead designs 1038	lyricist 980
notes to strings 1040	showing 485
page templates 586	sorting by 486
percussion kit voices 1238, 1413, 1414	auto-save 101–103
percussion maps to endpoints 507, 555	date and time 102
players to flows 119, 169	deleting projects 102
players to layouts 119, 172	disabling 104
voices 227, 229, 453, 530, 1238, 1413, 1414	interval 103
voices to endpoints 554	recovering projects 103
atonal key signatures 1002	automation lanes. See MIDI CC editor. See also Key
note spelling 457	Editor
attacca 530, 801	AutoPan 705, 711
attachment lines 23, 448, 501	auxiliary notes 1083
caesuras 332	notehead design 1038
crosshairs 503	position 1084
dynamics 925	showing 1083
hiding 425, 426	-
playing techniques 1164, 1167, 1168, 1171	В
showing 426	D
text 1329	B paper sizes 578, 584
attachment points	backgrounds 51
chord symbol components 856	chord symbols 868
items 448, 501	colors 52, 739, 742
lines 375, 377, 1174, 1177	dynamics 911
attack	erasing 868, 911, 966, 974, 1162, 1193, 1338, 1411
articulations 787, 1342	fingerings 966
delay 752	gradients 52
dynamics 309, 903	lines 1193
playback 744	pages 52
tremolos 396, 403, 405, 1379	percussion legends 1411
VST instruments 515	playing techniques 1162
attribute playback techniques 770, 771	text 379, 739, 742, 1162, 1193, 1338
inputting 362, 771	

backups 104	bar numbers (continued)
auto-save. See auto-save	showing 808, 811, 819
location 104	signposts 438
number 104	size 811, 812
backwards 427	staff-relative placement 813, 1235
moving bars 617, 620	statistics 105
navigation 317, 384, 389, 428	subordinate 818, 819
pitches 465, 477	subsequent repeats 820
playback. See scrubbing	system-relative placement 815
rhythms 465, 477	time signatures 816
balalaika. See fretted instruments	total. See counts
balance	
	bar repeats 1224, 1377
mix. See mixer	bar numbers 810
ballroom	brackets 1226, 1228
panning. See stage templates	casting off 613
reverb. See space templates	changing 421, 1225
bands 76	changing number 1227
adding 70, 112	colors 54
EQ 705	consolidating 1258
player order 108, 123	counts 1226-1229
project templates 70, 76	deleting 443
staff grouping 847	dynamics 1225
stage templates 713	erased backgrounds 1224
banjo. See fretted instruments	filter 417
bar counts	font style 1226, 1229
multi-bar rests 810	frame breaks 621
bar graphs 696	frequency 1227
bar numbers 808	grouping 1229, 1230
alignment 814	handles 419
alternative 820	highlights 1224, 1226
appearance 808, 811	inputting 397, 398, 407
barlines 814	length 419
brackets 820	moving 448, 451
changing 817, 819	moving counts 501
clefs 814	multi-bar rests 1258
collision avoidance 814	panel 398
colors 54	parentheses 1226, 1228
comments 481, 482, 484–486	phrase length 421, 1225
counts 1232	playback 421, 1225
default settings 808	popover 397
deleting 818	regions 1224
	•
enclosures 809	symbols 1229
erased backgrounds 809	system breaks 617
font 811, 812	types 397
frequency 808	viewing options 1226
galley view 39	bar rests 1256
gaps 814	counts 1258
guide 811	cues 730, 902, 1252
hiding 808, 811, 816, 819	deleting 1251, 1254
layout options 808	hiding 590, 1251, 1252, 1254, 1256
moving 501, 814	inputting 242, 295
multi-bar rests 808, 810	moving 1253
multiple positions 813	multi-bar rests 1258
paragraph styles 812	showing 590, 1252, 1256
parentheses 820	
	slashes 1251
part layouts 811	statistics 105
pick-up bars 1364	voices 1251, 1252, 1256
position 813, 814, 1235	barbershop quartet. See project templates
ranges 810, 1231. See also numbered bar regions	barline joins 805, 806
rehearsal marks 1198	default 806, 846, 847
repeat sections 820	hiding 802, 803, 806
returning to primary sequence 819	barline-attached lines. See lines
sequence changes 817	

algrament 805 bar numbers 814 caesuras 332 changing 299, 301, 799-801 chord symbols 861, 868 coda 802 copying 168 counts. See repeat counts custom joins. See barline joins dashed 799-801, 1360, 1372 default 800, 801 default settings 798 deleting 443, 806 double 799-801 end barlines 801 fermatas 996 final. See final barlines frame breaks 616 gaps 868, 911, 1162, 1193, 1338, 1411 grace notes 986 gradual tempo changes 1315 grand staff instruments 805, 806 hiding 277, 801, 802, 868, 911, 1162, 1193, 1338, 1306 length 805-807 moving 443, 804 multi-bar rests 299 none 277, 801, 1360 notation options 798 open meter 1360 panel 296, 301 popover 294, 296, 299 rehearsal marks 1196 repeat. See repeat barlines scale size 799, 800 short 799-801 staff grouping 805-807, 847 system breaks 616, 801 systemic 802, 803 thickness 799-801 stiff grouping 805-807, 847 system breaks 616, 801 systemic 802, 803 thickness 799-801 tick 799-801 time signatures 807, 1372 triple 296 tuplets 1389 types 296, 799 vocal staves 805, 806 Baroque appooglaturas 983, 990 figured bass. See figured bass ornaments 337, 1071 trills 1085, 1088 tuning 530 adding 885 chord ading 885 hiding 1163 inputting 358, 302, 364 bars 14, 793 alaginament 597, 805, 1253, 1305 bar rests. See bar rests beam grouping 23, 841, 842, 844, 4chord symbols 863 countin 295, 440, 793-795 deleting 295, 440, 441 fixing number 613, 618, 621 frame breaks 616, 620 frames 105 gaps 120, 120, 120, 120, 120, 120, 120, 120,	barlines 798	barré 1160
bar numbers 814 caseuras 332 changing 299, 301, 799-801 chord symbols 861, 868 coda 802 copying 168 counts. See repeat counts custom joins. See barline joins dashed 799-801, 1360, 1372 default 800, 801 default settings 798 deletting 443, 806 double 799-801 dynamics 906, 907, 911 end barlines 801 fermatas 996 final. See final barlines frame breaks 616 gaps 868, 911, 1162, 1193, 1338, 1411 grace notes 986 gradual tempo changes 1315 grand staff instruments 805, 806 hiding 277, 801, 802, 868, 911, 1162, 1193, 1338, 1411 initial. See systemic barlines inputting 294, 296, 299, 301, 796 joins. See barline joins key signatures 801, 1003 length 805-807 moving 443, 809 none 277, 801, 1360, 1103 length 805-807 moving 443, 809 none 277, 801, 1360, 1039 length 805-807 moving 443, 806 nitiation options 798 open meter 1360 panel 296, 3296, 299 one 277, 801, 1360, 1398 open meter 1360 panel 296, 3296, 299 single 799-801 staff grouping 805-807, 847 system breaks 616, 801 signposts 299, 301 time signatures 807, 1372 triple 296 tuplets 1389 types 296, 799 kool staves 805, 806 Baroque appoggiaturas 983, 990 figured bass. See figured bass ornaments 337, 1071 trills 1085, 1088 tuning 530	across staves 805–807	adding 885
caesuras 332	alignment 805	chord diagrams 876, 885
changing 299, 301, 799-801 chord symbols 861, 868 coda 802 copying 168 counts. See repeat counts custom joins. See barline joins dashed 799-801, 1360, 1372 default 800, 801 default settings 798 deletting 443, 806 double 799-801 dynamics 906, 907, 911 end barlines 801 fermatas 996 final. See final barlines frame breaks 616 gaps 868, 911, 1162, 1193, 1338, 1411 grace notes 986 gradual tempo changes 1315 grand staff instruments 805, 806 hiding 277, 801, 802, 868, 911, 1162, 1193, 1338, 1360, 1411 initial. See systemic barlines inputting 294, 296, 299, 301, 796 joins. See barline joins key signatures 801, 1003 length 805-807 moving 443, 804 multi-bar rests 299 none 277, 801, 1360, 1360 notation options 798 open meter 1360 panel 296, 301 popover 294, 295, 299 rehearsal marks 1196 repeat. See repeat barlines scale size 799, 800 shor 799-801 staff grouping 805-807, 847 system breaks 616, 680 systemic 802, 803 thickness 799-801 stick 799-801 stiff grouping 805-807, 847 system breaks 616, 681 systemic 802, 803 thickness 799-801 tick 799-801 time signatures 807, 1372 triple 296 tuplets 1389 types 296, 799 coal staves 805, 806 Baroque appoggiatura 983, 990 figured bass. See figured bass ornaments 337, 1071 trills 1085, 1088 tuning 530	bar numbers 814	hiding 1163
chord symbols 861, 868 coda 802 copying 168 counts. See repeat counts custom joins. See barline joins dashed 799-801, 1360, 1372 default 801, 801 default settings 798 deleting 443, 806 double 799-801 end barlines 801 fermatas 996 final. See final barlines frame breaks 616 gaps 868, 911, 1162, 1193, 1338, 1411 grace notes 986 gradual tempo changes 1315 grand staff instruments 805, 806 hiding 277, 801, 802, 868, 911, 1162, 1193, 1338, 1300, 1411 initial. See systemic barlines inputting 294, 296, 299, 301, 796 joins. See barline joins key signatures 801, 1003 length 805-807 moving 443, 804 multi-bar rests 299 none 277, 801, 1360 notation options 798 open meter 1360 panel 296, 301 popover 294, 296, 299 rehearsal marks 1196 repeat. See repeat barlines scale size 799, 800 short 799-801 staff grouping 805-807, 847 system breaks 616, 801 systemic 802, 803 thickness 799-801 staff grouping 805-807, 847 system breaks 616, 801 systemic 802, 803 thickness 799-801 time signatures 807, 1372 triple 296 tuplets 1389 types 296, 799 vocal staves 805, 806 Baroque appoggiaturas 983, 990 figured bass. See figured bass ornaments 337, 1071 trills 1085, 1088 tuning 530		inputting 358, 362, 364
coda 802 copying 168 counts. See repeat counts custom joins. See barline joins dashed 799-801, 1360, 1372 default 801, 801 default settings 798 deletting 443, 806 double 799-801 dynamics 906, 907, 911 end barlines 801 fermatas 996 final. See final barlines frame breaks 616 gaps 868, 911, 1162, 1193, 1338, 1411 grace notes 986 gradual tempo changes 1315 grand staff instruments 805, 806 hiding 277, 801, 802, 868, 911, 1162, 1193, 1338, 1360, 1411 initial. See systemic barlines inputting 294, 296, 299, 301, 796 joins. See barline joins key signatures 801, 1003 length 805-807 moving 443, 804 multi-bar rests 299 none 277, 801, 1360 notation options 798 open meter 1360 panel 296, 301 popover 294, 296, 299 rehearsal marks 1196 repeat. See repeat barlines scale size 799, 800 short 799-801 staff grouping 805-807, 847 system breaks 616, 801 systemic 802, 803 thickness 799-801 tick 799-801 signingter 807, 797, 796, 1254, 1305 spacing 494-496, 796, 1179, 1254 splitting 616, 617, 620, 621, 796 system breaks 616, 617 timecodes 1208 tuplets 1389 types 296, 799 vocal staves 805, 806 sar and Barlines panel 296, 298, 301 sard 647 time for the form of the for		
coupting 168		
counts. See repeat counts custom joins. See barline joins dashed 799-801, 1360, 1372 default 800, 801 default settings 798 deleting 443, 806 double 799-801 dynamics 906, 907, 911 end barlines 801 fermatas 996 final. See final barlines frame breaks 616 gaps 868, 911, 1162, 1193, 1338, 1411 grace notes 986 gradual tempo changes 1315 grand staff instruments 805, 806 hiding 277, 801, 3160, 802, 868, 911, 1162, 1193, 1338, 1360, 1360, 1360, 1360, 200, 200, 200, 200, 200, 200, 200, 2		
custom joins. See barline joins dashed 799-801, 1360, 1372 default 800, 801 default settings 798 deleting 443, 806 double 799-801 signposts 299, 301, 438, 443, 798 single 799-801 tick 799-801 ti		
dashed 799-801, 1360, 1372 default 800, 801 default 800, 801 default settings 798 deleting 443, 806 double 799-801 dynamics 906, 907, 911 end barlines 801 fermatas 996 final. See final barlines frame breaks 616 gaps 868, 911, 1162, 1193, 1338, 1411 grace notes 986 gradual tempo changes 1315 grand staff instruments 805, 806 hiding 277, 801, 802, 868, 911, 1162, 1193, 1338, 1360, 1411 initial. See systemic barlines inputting 294, 296, 299, 301, 796 joins. See barline joins key signatures 801, 1003 length 805-807 moving 443, 804 multi-bar rests 299 none 277, 801, 1360 notation options 798 open meter 1360 panel 296, 301 popover 294, 296, 299 rehearsal marks 1196 repeat. See repeat barlines scale size 799, 800 short 799-801 staff grouping 805-807, 847 system breaks 616, 801 systemic 802, 803 thickness 799-801 tick 893-804-805 Baroque appoggiaturas 983, 990 figured bass. See figured bass ornaments 337, 1071 trills 1085, 1088 tuning 530 count-in 263 deleting 205, 440, 793-795 deleting 205, 440, 793-795 deleting 205, 440, 793 display 540, 543 divisions 796 duration 793 divisions 796 duration 793 expanding 297, 299, 440, 441 fixing number 613, 618, 620 frames 105 gaps 1221, 1305 gaps 1221, 1305 gips 10430 graphs 696 grouping, 5ee bar repeats. See also multi-bar rests half-bar 730, 841, 844 height 587, 588, 605 inputting 294, 296, 299, 301, 796 iputed 43, 804 multi-bar rests 1257, 1258 navigation 430 note grouping 23, 841, 842, 844, 1240 numbers 808 panel 296, 298 pick-up bars 1364 playback 525, 540 popover 294, 295, 297 red 441, 442 repeat 1201, 1216, 1224 rest alignment 1253 rests. See bar repeats. See also multi-bar rests 1364 playback 525, 540 popover 294, 295, 297 red 441, 442 repeat 1201, 1216, 1224 rest alignment 1253 rests. See bar repeats. See also multi-bar rests 1257, 1258 navigation 430 note grouping 23, 841, 842, 844, 1240 numbers 808 panel 296, 298 pick-up bars 440, 793 pick-up		-
default 800, 801 default settings 798 deleting 443, 806 double 799-801 double 799-801 end barlines 801 fermatas 996 final. See final barlines frame breaks 616 gaps 868, 911, 1162, 1193, 1338, 1411 grace notes 986 gradual tempo changes 1315 grand staff instruments 805, 806 hiding 277, 801, 802, 868, 911, 1162, 1193, 1338, 1360, 1411 initial. See systemic barlines inputting 294, 296, 299, 301, 796 joins. See barline joins key signatures 801, 1003 length 805-807 moving 443, 804 multi-bar rests 299 none 277, 801, 1360 notation options 798 open meter 1360 panel 296, 301 popover 294, 296, 299 rehearsal marks 1196 repeat. See repeat barlines signpotts 299, 301, 438, 443, 798 single 799-801 staff grouping 805-807, 847 system breaks 616, 801 systemic 802, 803 thickness 799-801 tick 7		5
default settings 798 deleting 443, 806 double 799-801 dynamics 906, 907, 911 end barlines 801 fermatas 996 final. See final barlines frame breaks 616 gaps 868, 911, 1162, 1193, 1338, 1411 grace notes 986 gradual tempo changes 1315 grand staff instruments 805, 806 hiding 277, 801, 802, 868, 911, 1162, 1193, 1338, 1360, 1441 initial. See systemic barlines inputring 294, 296, 299, 301, 936 length 805-807 moving 443, 804 multi-bar rests 299 none 277, 801, 1360 notation options 798 open meter 1360 panel 296, 301 popover 294, 296, 299 rehearsal marks 1196 repeat. See repeat barlines single 799-801 signposts 299, 301, 438, 443, 798 single 799-801 signposts 299, 301, 438, 443, 798 single 799-801 tick 799-706 tick 799-7		
deleting 443, 806 double 799-801 dynamics 906, 907, 911 end barlines 801 fermatas 996 final See final barlines frame breaks 616 gaps 868, 911, 1162, 1193, 1338, 1411 grace notes 986 gradual tempo changes 1315 grand staff instruments 805, 806 hiding 277, 801, 802, 868, 911, 1162, 1193, 1338, 1360, 1411 initial. See systemic barlines inputting 294, 296, 299, 301, 796 joins. See barline joins key signatures 801, 1003 length 805-807 moving 443, 804 multi-bar rests 299 none 277, 801, 1360 notation options 798 open meter 1360 panel 296, 201 popover 294, 296, 299 rehearsal marks 1196 repeat. See repeat barlines signposts 299, 301, 438, 443, 798 single 799-801 tick 799-706 tick 799-706 tick 799-706 tick 799-706 tick 799-706 figured bass. See figured bass ornaments 337, 1071 trills 1085, 1088 tuning 530		
double 799-801 dynamics 906, 907, 911 end barlines 801 fermatas 996 final. See final barlines frame breaks 616 gaps 868, 911, 1162, 1193, 1338, 1411 grace notes 986 gradual tempo changes 1315 grand staff instruments 805, 806 hiding 277, 801, 802, 868, 911, 1162, 1193, 1338, 1360, 1411 initial. See systemic barlines inputting 294, 296, 299, 301, 796 joins. See barline joins key signatures 801, 1003 length 805-807 moving 443, 804 multi-bar rests 299 none 277, 801, 1360 notation options 798 open meter 1360 panel 296, 301 popover 294, 296, 299 rehearsal marks 1196 repeat. See repeat barlines scale size 799, 800 short 799-801 staff grouping 805-807, 847 system breaks 616, 801 systemic BO2, 803 thickness 799-801 stick 799-801 tick 799-801 tic		
dynamics 906, 907, 911 end barlines 801 fermatas 996 final. See final barlines frame breaks 616 gaps 868, 911, 1162, 1193, 1338, 1411 grace notes 986 gradual tempo changes 1315 grand staff instruments 805, 806 hiding 277, 801, 802, 868, 911, 1162, 1193, 1338, 1360, 1411 initial. See systemic barlines inputting 294, 296, 299, 301, 796 joins. See barline joins key signatures 801, 1003 length 805-807 moving 443, 804 multi-bar rests 299 none 277, 801, 1802, 804 multi-bar rests 299 none 277, 801, 1360 notation options 798 open meter 1360 panel 296, 301 popover 294, 296, 299 rehearsal marks 1196 repeat. See repeat barlines single 799-801 staff grouping 805-807, 847 system breaks 616, 801 systemic 802, 803 thickness 799-801 staff grouping 805-807, 847 system breaks 616, 801 systemic 802, 803 thickness 799-801 tick 799-801 time signatures 807, 1372 triple 296 tuplets 1389 types 296, 799 vocal staves 805, 806 Baroque appoggiaturas 983, 990 figured bass. See figured bass ornaments 337, 1071 trills 1085, 1088 tuning 530 duration 793 expanding 297, 299, 440, 441 fixing number 613, 618, 621 frame breaks 616, 620 frame breaks 616, 620 frames 105 gaps 1221, 1305 glissando lines 1096 going to 430 graphs 696 grouping. See bar repeats. See also multi-bar rests half-bar 730, 841, 844 height 587, 588, 605 inputting 294-299, 439 linsert mode 439 length 440, 793 moving 614, 616-618, 620, 621 multi-bar rests 1257, 1258 navigation 430 note grouping 23, 841, 842, 844, 1240 numbers 808 panel 296, 298 panel 296, 299 poore 294, 296, 299		·
end barlines 801 fermatas 996 final. See final barlines frame breaks 616 gaps 868, 911, 1162, 1193, 1338, 1411 grace notes 986 gradulat lempo changes 1315 grand staff instruments 805, 806 hiding 277, 801, 802, 868, 911, 1162, 1193, 1338, 1360, 1411 initial. See systemic barlines inputting 294, 296, 299, 301, 796 joins. See barline joins key signatures 801, 1003 length 805-807 moving 443, 804 multi-bar rests 299 none 277, 801, 1360 notation options 798 open meter 1360 panel 296, 301 popover 294, 296, 299 rehearsal marks 1196 repeat. See repeat barlines signaptors 299, 301, 438, 443, 798 single 799-801 staff grouping 805-807, 847 system breaks 616, 801 systemic 802, 803 thickness 799-801 tick 799-801 time signatures 807, 1372 triple 296 tuplets 1389 types 296, 799 vocal staves 805, 806 Baroque appoggiaturas 983, 990 figured bass. See figured bass ornaments 337, 1071 trills 1085, 1088 tuning 530 expanding 297, 299, 440, 441 fixing number 613, 618, 621 frames 105 gaps 182, 11,1162, 1193, 1338, 1411 fixina 105, 1088 tuning 530 expanding 299, 122, 1305 glissando lines 1096 going to 430 graphs 696 grouping, 5ee bar repeats. See also multi-bar rests half-bar 730, 841, 844 height 587, 588, 605 inputting 296, 298 playla 542, 525, 886, 605 inputting 294, 295, 299 nove part mode 439 length 440, 793 noving 14, 616-618, 620, 621 multi-bar rests 1257, 1258 navigation 430 note grouping 23, 841, 842, 844, 1240 numbers 808 panel 296, 298 pick-up bars 1364 papayak 525, 540 papel 296, 299 pick-up bars 1364 papayak 525, 540 papel 296, 299 papel 296, 298 pick-up bars 1364 papayak 525, 540 papel 296, 298 pick-up bars 1364 papayak 525, 540 papel 296, 298 pick-up		
fermatas 996 final. See final barlines frame breaks 616 gaps 868, 911, 1162, 1193, 1338, 1411 grace notes 986 gradual tempo changes 1315 grand staff instruments 805, 806 hiding 277, 801, 802, 868, 911, 1162, 1193, 1338, 1360, 1411 initial. See systemic barlines inputting 294, 296, 299, 301, 796 joins. See barline joins key signatures 801, 1003 length 805-807 moving 443, 804 multi-bar rests 299 none 277, 801, 1360 notation options 798 open meter 1360 panel 296, 301 popover 294, 296, 299 rehearsal marks 1196 repeat. See repeat barlines single 799-801 signposts 299, 301, 438, 443, 798 single 799-801 staff grouping 805-807, 847 system breaks 616, 620 frame breaks 616, 620 frames 105 gaps 1221, 1305 graphs 696 grouping. See bar repeats. See also multi-bar rests half-bar 730, 841, 844 height 587, 588, 605 inputting 294-299, 439 linsert mode 439 length 440, 793 moving 614, 616-618, 605, 602, 621 multi-bar rests 1257, 1258 navigation 430 note grouping 23, 841, 842, 844, 1240 numbers 808 panel 296, 298 pick-up bars 1364 playback 525, 540 propover 294, 295, 297 red 441, 442 rest alignment 1253 rests. See bar rests rhythm slashes 1239, 1240 selecting 410-412, 416 size 439, 440, 494, 587, 597, 605, 793, 1305 spacing 1430 graphs 696 gradual tempo to 430 graphs 696 grouping. See bar repeats. See also multi-bar rests half-bar 730, 841, 844 height 587, 588, 605 inputting 294-299, 439 linsert mode 439 length 440, 793 moving 614, 616-618, 605 inputting 294-299, 439 linsert mode 439 length 440, 793 moving 614, 616-618, 605 inputting 294-299, 439 length 440, 793 moving 614, 616-618, 605 inputting 294-299, 439 length 440, 793 moving 614, 616-618, 605 inputting 294-299, 439 length 440, 793 moving 614, 616-618, 605 inputting 294-299, 439 length 440, 793 moving 614, 616-618, 605 inputting 294-299, 499 length 440, 793 m		
final. See final barlines frame breaks 616 gaps 868, 911, 1162, 1193, 1338, 1411 grace notes 986 gradual tempo changes 1315 grand staff instruments 805, 806 hiding 277, 801, 802, 868, 911, 1162, 1193, 1338, 1360, 1411 initial. See systemic barlines inputting 294, 296, 299, 301, 796 joins. See barline joins key signatures 801, 1003 length 805–807 moving 443, 804 multi-bar rests 299 none 277, 801, 1360 notation options 798 open meter 1360 panel 296, 301 popover 294, 296, 299 rehearsal marks 1196 repeat. See repeat barlines signposts 299, 301, 438, 443, 798 single 799–801 slignposts 299, 301, 438, 443, 798 single 799–801 staff grouping 805–807, 847 system breaks 616, 801 systemic 802, 803 thickness 799–801 tick 799–801 tick 799–801 tick 799–801 tick 799–801 time signatures 807, 1372 triple 296 tuplets 1389 types 296, 799 vocal staves 805, 806 Baroque appoggiaturas 983, 990 figured bass. See figured bass ornaments 337, 1071 trills 1085, 1088 tuning 530 frame breaks 616, 620 frames 105 gaps 1221, 1305 glissando lines 1096 gaps 1221, 1305 glissando lines 1096 gaps 1221, 1305 glissando lines 1096 gisins to 430 graphs 696 grouping. See bar repeats. See also multi-bar rests half-bar 730, 841, 844 height 587, 588, 605 injutting 294, 299, 439 linsett mode 439 length 440, 793 moving 614, 616–618, 620, 621 multi-bar rests 1257, 1258 navigation, 430 note grouping 23, 841, 842, 844, 1240 numbers 808 panel 296, 298 pick-up bars 1364 pappoyer 294, 295, 297 red 441, 442 rest alignment 1253 rests. See bar rests rhythm slashes 1239, 1240 selecting 410–412, 416 size 439, 440, 494, 587, 597, 605, 793, 1305 spacing 494–496, 597, 796, 1759, 605, 793, 1305 spacing 494–496, 597, 796, 1759, 617, 796 system breaks 616, 617 timecodes 1208 tuplets 1389 upbeats. See pick-up bars vibrato. See vibrato bar. See also guitar width 494–496, 597, 796, 1254, 1305 Bartók pizzicato. See pidying techniques base switches 749, 757 baseline attachment points 866 chord symbols 853 dynamics 920		
frame breaks 616 gaps 868, 911, 1162, 1193, 1338, 1411 grace notes 986 gradual tempo changes 1315 grand staff instruments 805, 806 hiding 277, 801, 802, 868, 911, 1162, 1193, 1338, 1360, 1411 initial. See systemic barlines inputting 294, 296, 299, 301, 796 joins. See barline joins key signatures 801, 1003 length 805-807 moving 443, 804 multi-bar rests 299 none 277, 801, 1360 notation options 798 open meter 1360 panel 296, 301 popover 294, 296, 299 rehearsal marks 1196 repeat. See repeat barlines single 799-801 staff grouping 805-807, 847 systemic 802, 803 thickness 799-801 tick 799-801 time signatures 807, 1372 triple 296 tuplets 1389 types 296, 799 vocal staves 805, 806 Baroque appoggiaturas 983, 990 figured bass. See figured bass ornaments 337, 1071 trills 1085, 1088 tuning 530 figured bass. See figured bass ornaments 337, 1071 trills 1085, 1088 tuning 530 figured bass. See figured bass ornaments 337, 1071 trills 1085, 1088 tuning 530		
gaps 868, 911, 1162, 1193, 1338, 1411 grace notes 986 gradual tempo changes 1315 grand staff instruments 805, 806 hiding 277, 801, 802, 868, 911, 1162, 1193, 1338, 1360, 1411 initial. See systemic barlines inputting 294, 296, 299, 301, 796 joins. See barline joins key signatures 801, 1003 length 805-807 moving 443, 804 multi-bar rests 299 none 277, 801, 1360 notation options 798 open meter 1360 panel 296, 301 popover 294, 296, 299 rehearsal marks 1196 repeat. See repeat barlines signaposts 299, 301, 438, 443, 798 single 799-801 staff grouping 805-807, 847 system breaks 616, 801 systemic 802, 803 thickness 799-801 tick 799-801 time signatures 807, 1372 triple 296 tuplets 1389 types 296, 799 vocal staves 805, 806 Baroque appoggiaturas 983, 990 figured bass. See figured bass ornaments 337, 1071 trills 1085, 1088 tuning 530 gaps 1221, 1305 gissando lines 1096 going to 430 graphs 696 grouping, See bar repeats. See also multi-bar rests half-bar 730, 841, 844 height 587, 588, 605 inputting 294-299, 439 Insert mode 439 length 440, 793 moving 614, 616-618, 620, 621 multi-bar rests 1257, 1258 narigutures 439 length 440, 793 moving 614, 616-618, 620, 621 multi-bar rests 1257, 1258 narigutures 439 length 440, 793 moving 614, 616-618, 620, 621 multi-bar rests 1257, 1258 narigutures 439 length 440, 793 moving 614, 616-618, 620, 621 multi-bar rests 1257, 1258 narigutures 439 length 440, 793 moving 614, 616-618, 620, 621 multi-bar rests 1257, 1258 narigutures 439 length 440, 793 moving 614, 616-618, 620, 621 multi-bar rests 1257, 1258 narigutures 439 length 440, 793 moving 614, 616-618, 620, 621 multi-bar rests 1257, 1258 narigutures 439 length 440, 442 rest alignment 1253 rest. See bar rests rhythm slashes 1239, 1240 selecting 410-412, 416 size 439, 440, 494, 587, 597, 605, 793, 1305 spacing to 430 note grouping 23, 841, 842, 844, 12		•
grace notes 986 gradual tempo changes 1315 grand staff instruments 805, 806 hiding 277, 801, 802, 868, 911, 1162, 1193, 1338, 1360, 1411 initial. See systemic barlines inputting 294, 296, 299, 301, 796 joins. See barline joins key signatures 801, 1003 length 805-807 moving 443, 804 multi-bar rests 299 none 277, 801, 1360 notation options 798 open meter 1360 panel 296, 301 popover 294, 296, 299 rehearsal marks 1196 repeat. See repeat barlines scale size 799, 800 short 799-801 staff grouping 805-807, 847 systemic 802, 803 thickness 799-801 tick 799-801 tick 799-801 tick 799-801 time signatures 807, 1372 triple 296 tuplets 1389 types 296, 799 vocal staves 805, 806 Baroque appoggiaturas 983, 990 figured bass. See figured bass ornaments 337, 1071 trills 1085, 1088 tuning 530 ginste 430 graphs 696 grouping. See bar repeats. See also multi-bar rests half-bar 730, 841, 844 height 587, 588, 605 inputting 294-299, 439 Insert mode 439 length 400, 793 moving 614, 616-618, 620, 621 moving 6140, 793 moving 6140, 793 moving 6140, 793 moving 614, 616-618, 620, 621 moving 6140, 793 moving 6140, 793 moving 6140, 793 moving 614, 616-618, 620, 621 movi		
gradual tempo changes 1315 grand staff instruments 805, 806 hiding 277, 801, 802, 868, 911, 1162, 1193, 1338, 1360, 1411 initial. See systemic barlines inputting 294, 296, 299, 301, 796 joins. See barline joins key signatures 801, 1003 length 805-807 moving 443, 804 multi-bar rests 299 none 277, 801, 1360 notation options 798 open meter 1360 panel 296, 301 popover 294, 296, 299 rehearsal marks 1196 repeat. See repeat barlines scale size 799, 800 short 799-801 staff grouping 805-807, 847 system breaks 616, 801 systemic 802, 803 thickness 799-801 tick 799-801 tick 799-801 tick 799-801 tick 799-801 systemic 802, 803 thickness 799-801 tick 799-801 tick 799-801 systemic 802, 803 thickness 799-801 tick 799-801 systemic 802, 803 thickness 799-801 tick 799-801 systemic 802, 803 thickness 799-801 systemic 802, 803 thickness 799-801 systemic 802, 803 thickness 799-801 tick 799-801 systemic 802, 803 thickness 799, 800 systemic 99-801 tick 799-801 systemic 99-801 tick 799-801 systemic 99-801 systemic 99-80 systemic 99-80 systemic 99-80 sy	• .	
grand staff instruments 805, 806 hiding 277, 801, 802, 868, 911, 1162, 1193, 1338, 1360, 1411 initial. See systemic barlines inputting 294, 296, 299, 301, 796 joins. See barline joins key signatures 801, 1003 length 805-807 moving 443, 804 multi-bar rests 299 none 277, 801, 1360 notation options 798 open meter 1360 panel 296, 301 popover 294, 296, 299 rehearsal marks 1196 repeat. See repeat barlines single 799-801 sign posts 299, 301, 438, 443, 798 single 799-801 staff grouping 805-807, 847 system breaks 616, 801 systemic 802, 803 thickness 799-801 tick 799-801 tick 799-801 tick 799-801 time signatures 807, 1372 triple 296 tuplets 1389 types 296, 799 vocal staves 805, 806 Baroque appoggiaturas 983, 990 figured bass. See figured bass ornaments 337, 1071 trills 1085, 1088 tuning 530 graphs 696 grouping. See bar repeats. See also multi-bar rests half-bar 730, 841, 844 height 587, 588, 605 inputting 294-299, 439 Insert mode 439 length 440, 793 Insert mode 439 length 440, 793 length 440, 793 inputting 294-299, 39 Insert mode 439 length 440, 793 length 440, 7		
hiding 277, 801, 802, 868, 911, 1162, 1193, 1338, 1360, 1411 initial. See systemic barlines inputting 294, 296, 299, 301, 796 joins. See barline joins key signatures 801, 1003 length 805-807 moving 443, 804 multi-bar rests 299 none 277, 801, 1360 notation options 798 open meter 1360 panel 296, 301 popover 294, 296, 299 rehearsal marks 1196 repeat. See repeat barlines scale size 799, 800 short 799-801 staff grouping 805-807, 847 system breaks 616, 801 systemic 802, 803 thickness 799-801 tick 799-801 tick 799-801 tick 799-801 time signatures 807, 1372 triple 296 Baroque appoggiaturas 983, 990 figured bass. See figured bass ornaments 337, 1071 trills 1085, 1088 tuning 530		
1360, 1411 initial. See systemic barlines inputting 294, 296, 299, 301, 796 joins. See barline joins key signatures 801, 1003 length 805-807 moving 443, 804 multi-bar rests 299 none 277, 801, 1360 notation options 798 open meter 1360 panel 296, 301 popover 294, 296, 299 rehearsal marks 1196 repeat. See repeat barlines scale size 799, 800 short 799-801 stignposts 299, 301, 438, 443, 798 single 799-801 staff grouping 805-807, 847 system breaks 616, 801 systemic 802, 803 thickness 799-801 time signatures 807, 1372 triple 296 tuplets 1389 types 296, 799 vocal staves 805, 806 Baroque appoggiaturas 983, 990 figured bass. See figured bass ornaments 337, 1071 trills 1085, 1088 tuning 530 Insert mode 439 length 440, 793 Insert mode 439 length 460, 793 Insert mode 439 length 460, 793 Insert mode 439 length 440, 796 length 441, 416 see bar rests rhythm slashes 1239, 1240 selecting 410-412, 416 selecting 412,		
initial. See systemic barlines inputting 294, 296, 299, 301, 796 ipins. See barline joins key signatures 801, 1003 length 805–807 moving 443, 804 multi-bar rests 299 none 277, 801, 1360 notation options 798 open meter 1360 panel 296, 301 popover 294, 296, 299 rehearsal marks 1196 repeat. See repeat barlines scale size 799, 800 short 799–801 signposts 299, 301, 438, 443, 798 single 799–801 systemic 802, 803 thickness 799–801 tick 799–801 systemic 802, 803 thickness 799–801 tick 799–801 systemic 802, 803 thickness 799–801 tick 799–801 systemic 802, 803 thickness 799–801 tick 799–801 system breaks 616, 801 systemic 802, 803 thickness 799–801 tick 799–801 systemic 802, 803 thickness 799–801 splantage approach 526, 546 system breaks 616, 617 time signatures 807, 1372 triple 296 tuplets 1389 types 296, 799 vocal staves 805, 806 Baroque appoggiaturas 983, 990 figured bass. See figured bass ornaments 337, 1071 trills 1085, 1088 tuning 530 height 587, 588, 605 inputting 294–299, 439 insputting 614, 616–618, 629 moving 614, 616–618, 620 moving 614, 616–618, 621 multi-bar rests 1257, 1258 navigation 430 note grouping 23, 841, 842, 844, 1240 note grouping 24, 295, 297 red 441, 442 scale stee grouping 24, 295, 297 red 441, 442 scale stee grouping 24, 295, 297 red 441, 442 scale stee grouping 24, 295, 297 red 441, 442 scale stee grouping 24, 287, 597,		
inputting 294, 296, 299, 301, 796 joins. See barline joins key signatures 801, 1003 length 805-807 moving 443, 804 multi-bar rests 299 none 277, 801, 1360 notation options 798 open meter 1360 panel 296, 301 popover 294, 296, 299 rehearsal marks 1196 repeat. See repeat barlines scale size 799, 800 short 799-801 signposts 299, 301, 438, 443, 798 single 799-801 staff grouping 805-807, 847 system breaks 616, 801 systemic 802, 803 thickness 799-801 tick 799-801 time signatures 807, 1372 triple 296 tuplets 1389 types 296, 799 vocal staves 805, 806 Baroque appogglaturas 983, 990 figured bass. See figured bass ornaments 337, 1071 trills 1085, 1088 tuning 530 inputting 294-299, 439 insert mode 439 Insert multibarests 259 Invite pay 44, 44, 44, 44 Invite pay 49 Invite pay 49 Invite	·	
joins. See barline joins key signatures 801, 1003 length 805–807 moving 443, 804 multi-bar rests 299 none 277, 801, 1360 notation options 798 open meter 1360 panel 296, 301 popover 294, 296, 299 rehearsal marks 1196 repeat. See repeat barlines scale size 799, 800 short 799–801 staff grouping 805–807, 847 system breaks 616, 801 systemic 802, 803 thickness 799–801 tick 799–801 systemic 802, 803 thickness 799–801 tick 799–801 time signatures 807, 1372 triple 296 tuplets 1389 types 296, 799 vocal staves 805, 806 Baroque appoggiaturas 983, 990 figured bass. See figured bass ornaments 337, 1071 trills 1085, 1088 tuning 530 Insert mode 439 length 440, 793 length 440, 793 moving 614, 616–618, 620, 621 multi-bar rests 1257, 1258 navigation 430 note grouping 23, 841, 842, 844, 1240 notation 430 note grouping 23, 841, 84		
key signatures 801, 1003 length 805–807 moving 443, 804 multi-bar rests 299 none 277, 801, 1360 notation options 798 open meter 1360 panel 296, 301 popover 294, 296, 299 rehearsal marks 1196 repeat. See repeat barlines scale size 799, 800 signposts 299, 301, 438, 443, 798 single 799–801 staff grouping 805–807, 847 system breaks 616, 801 system breaks 616, 801 systemic 802, 803 thickness 799–801 tick 799–801 signatures 807, 1372 triple 296 tuplets 1389 types 296, 799 vocal staves 805, 806 Baroque appogglaturas 983, 990 figured bass. See figured bass ornaments 337, 1071 trills 1085, 1088 tuning 530 length 440, 793 moving 614, 616, 616, 620, 621 molitich afel-6-618, 620, 621 molitich 491–496, 796, 1254, 1305 systemic 490, 298 panel 296, 298 panel 296, 298 pick-up bars 1364 papevage 494–496, 796, 1799, 1254 styling 616, 617, 620, 621, 796 system breaks 616, 617 time codes 1208 tuplets 1389 upbeats. See pick-up bars vibrato. See vibrato bar. See also guitar width 494–496, 597, 796, 1254, 1305 Bars and Barlines panel 296, 298, 301 Bartók pizzicato. See playing techniques base switches 749, 757 baseline attachment points 856 chord symbols 853 dynamics 920		
length 805-807 moving 443, 804 multi-bar rests 299 none 277, 801, 1360 notation options 798 open meter 1360 panel 296, 301 popover 294, 296, 299 rehearsal marks 1196 repeat. See repeat barlines scale size 799, 800 signposts 299, 301, 438, 443, 798 single 799-801 staff grouping 805-807, 847 system breaks 616, 801 systemic 802, 803 thickness 799-801 staff grouping 805-807, 847 systemic 802, 803 thickness 799-801 time signatures 807, 1372 triple 296 tuplets 1389 types 296, 799 vocal staves 805, 806 Baroque appoggiaturas 983, 990 figured bass. See figured bass ornaments 337, 1071 trills 1085, 1088 tuning 530 moving 614, 616-618, 620, 621 multi-bar rests 1257, 1258 nulti-bar rests 1257, 1258 nulti-bar rests 1257, 1258 nulti-bar rests 1294, 844, 1240 note grouping 23, 841, 842, 844, 1240 numbers 808 panel 296, 298 panel 296, 298 panel 296, 299 pick-up bars 1364 playback 525, 540 popover 294, 295, 297 red 441, 442 repeat 1210, 1216, 1224 rest alignment 1253 rests. See bar rests rhythm slashes 1239, 1240 selecting 410-412, 416 size 439, 440, 494, 587, 597, 605, 793, 1305 systemic 802, 803 spacing 494-496, 796, 1179, 1254 splitting 616, 617, 620, 621, 796 system breaks 616, 617 time signatures 807, 1372 triple 296 tuplets 1389 upbeats. See pick-up bars vibrato. See vibrato bar. See also guitar width 494-496, 597, 796, 1254, 1305 Bars and Barlines panel 296, 298, 301 Bartók pizzicato. See pick-up bars vibrato. See vibrato bar. See also guitar width 494-496, 597, 796, 1254, 1305 Bars and Barlines panel 296, 298, 301 Bartók pizzicato. See pick-up bars vibrato. See vibrato bar. See also guitar width 494-496, 597, 796, 1254, 1305 Bars and Barlines panel 296, 298, 301 Bartók pizzicato. See pick-up bars vibrato. See vibrato bar. See also guitar width 494-496, 597, 796, 1254, 1305 Bars and Barlines panel 296, 298, 301 Bartók pizzicato. See pick-up bars vibratos. See p		
moving 443, 804 multi-bar rests 299 none 277, 801, 1360 notation options 798 open meter 1360 panel 296, 301 popover 294, 296, 299 rehearsal marks 1196 repeat. See repeat barlines scale size 799, 800 short 799-801 staff grouping 805-807, 847 system breaks 616, 801 systemic 802, 803 thickness 799-801 tick 799-801 time signatures 807, 1372 triple 296 tuplets 1389 types 296, 799 vocal staves 805, 806 Baroque appoggiaturas 983, 990 figured bass. See figured bass ornaments 337, 1071 trills 1085, 1088 tuning 530 multi-bar rests 1257, 1258 navigation 430 note grouping 23, 841, 842, 844, 1240 note appoggiator 430 note grouping 23, 841, 842, 844, 1240 note appoggiator 430 note grouping 23, 841, 842, 844, 1240 note appoggiator 430 note grouping 23, 841, 842, 844, 1240 note appoggiator 430 note grouping 23, 841, 842, 844, 1240 note appoggiator 430 note grouping 23, 841, 842, 844, 1240 note appoggiator 430 note grouping 23, 841, 842, 844, 1240 numbers 808 panel 296, 298 pick-up bars iloft-up brack 525, 540 popover 294, 295, 297 red 441, 442 rest alignment 1253 rests. See bar rests rhythm slashes 12239, 1240 selecting 410-412, 416 size 439, 440, 494, 587, 597, 605, 793, 1305 spacing 494-496, 796, 1179, 1254 splitting 616, 617, 620, 621, 796 size 439, 440, 494, 587, 597, 605, 793, 1305 spacing 494-496, 796, 1179, 1254 splitting 616, 617, 620, 621, 796 size 439, 440, 494, 587, 597, 605, 793, 1305 spacing 494-496, 796, 1179, 1254 splitting 616, 617, 620, 621, 796 size 439, 440, 494, 587, 597, 605, 793, 1305 spacing 494-496, 796, 1179, 1254 splitting 616, 617, 620, 621, 796 size 439, 440, 494, 587, 597, 605, 793, 1305 spacing 494-496, 796,		
multi-Ďar rests 299 none 277, 801, 1360 note grouping 23, 841, 842, 844, 1240 notation options 798 open meter 1360 panel 296, 301 popover 294, 296, 299 rehearsal marks 1196 repeat. See repeat barlines scale size 799, 800 short 799-801 signposts 299, 301, 438, 443, 798 single 799-801 staff grouping 805-807, 847 system breaks 616, 801 systemic 802, 803 thickness 799-801 tick 799-801 tick 799-801 time signatures 807, 1372 triple 296 tuplets 1389 types 296, 799 vocal staves 805, 806 Baroque appoggiaturas 983, 990 figured bass. See figured bass ornaments 337, 1071 trills 1085, 1088 tuning 530 navigation 430 note grouping 23, 841, 842, 844, 1240 notation onto grouping 23, 841, 842, 844, 1240 note grouping 25, 298 panel 296, 298 panel 296, 298 panel 296, 298 panel 296, 298 reta 441, 442 rest alignment 1253 rests. See bar rests rhythm slashes 1239, 1240 selecting 410-412, 416 size 439, 440, 494, 587, 597, 605, 793, 1305 spacing 494-496, 796, 1179, 1254 splitting 616, 617, 620, 621, 796 system breaks 616, 617 time signatures 807, 1372 timecodes 1208 tuplets 1389 upbeats. See pick-up bars vibrato. See vibrato bar. See also guitar width 494-496, 597, 796, 1254, 1305 Bars and Barlines panel 296, 298, 301 Bartók pizzicato. See playing techniques base switches 749, 757 baseline attachment points 856 chord symbols 853 dynamics 920		
none 277, 801, 1360 notation options 798 open meter 1360 panel 296, 301 popover 294, 296, 299 rehearsal marks 1196 repeat. See repeat barlines scale size 799, 800 signposts 299, 301, 438, 443, 798 single 799-801 signposts 299, 301, 438, 443, 798 single 799-801 staff grouping 805-807, 847 system breaks 616, 801 system breaks 616, 801 system breaks 616, 801 system signatures 807, 1372 triple 296 tuplets 1389 types 296, 799 vocal staves 805, 806 Baroque appoggiaturas 983, 990 figured bass. See figured bass ornaments 337, 1071 trills 1085, 1088 tuning 530 note grouping 23, 841, 842, 844, 1240 numbers 808 numbers 808 numbers 808 numbers 808 numbers 808 panel 296, 298 pick-up bars 1364 playback 525, 540 popover 294, 295, 297 red 441, 442 reset alignment 1253 rests. See bar rests rhythm slashes 1239, 1240 selecting 410-412, 416 size 439, 440, 494, 587, 597, 605, 793, 1305 system breaks 616, 617 time signatures 807, 1372 triple 296 tuplets 1389 upbeats. See pick-up bars vibrato. See vibrato bar. See also guitar width 494-496, 597, 796, 1254, 1305 Bars and Barlines panel 296, 299, 301 Bartók pizzicato. See playing techniques base switches 749, 757 baseline attachment points 856 chord symbols 853 dynamics 920	-	
notation options 798 open meter 1360 panel 296, 298 panel 296, 301 pick-up bars 1364 popover 294, 296, 299 palyback \$525, 540 popover 294, 296, 299 popover 294, 295, 297 rehearsal marks 1196 popover 294, 295, 297 red 441, 442 rest alignment 1253 repeat 5ze repeat barlines repeat 1210, 1216, 1224 rest alignment 1253 rests. See bar rests single 799-801 rests See bar rests rhythm slashes 1239, 1240 selecting 410-412, 416 size 439, 440, 494, 587, 597, 605, 793, 1305 systemic 802, 803 spacing 494-496, 796, 1179, 1254 thickness 799-801 splitting 616, 617, 620, 621, 796 tick 799-801 signatures 807, 1372 time signatures 807, 1372 time signatures 807, 1372 time codes 1208 tuplets 1389 upbeats. See pick-up bars vibrato. See vibrato bar. See also guitar vocal staves 805, 806 Baroque Bars and Barlines panel 296, 298, 301 appoggiaturas 983, 990 Bartók pizzicato. See playing techniques base switches 749, 757 baseline attachment points 856 chord symbols 853 dynamics 920		
open meter 1360 panel 296, 301 porover 294, 296, 299 prehearsal marks 1196 repeat. See repeat barlines scale size 799, 800 signposts 299, 301, 438, 443, 798 single 799–801 staff grouping 805–807, 847 system breaks 616, 801 systemic 802, 803 thickness 799–801 signatures 807, 1372 triple 296 tuplets 1389 types 296, 799 vocal staves 805, 806 Baroque appoggiaturas 983, 990 figured bass. See figured bass or genet 126, 298 pick-up bars 1364 playback 525, 540 papover 294, 295, 297 red 441, 442 rest alignment 1253 rests. See bar rests rhythm slashes 1239, 1240 selecting 410–412, 416 selecting 410–412, 416 system of 404, 494, 597, 597, 605, 793, 1305 spacing 494–496, 796, 1179, 1254 splitting 616, 617, 620, 621, 796 system breaks 616, 617 time codes 1208 tuplets 1389 upbeats. See pick-up bars vibrato. See vibrato bar. See also guitar width 494–496, 597, 796, 1254, 1305 Bars and Barlines panel 296, 298, 301 appoggiaturas 983, 990 figured bass. See figured bass ornaments 337, 1071 trills 1085, 1088 tuning 530		
popover 294, 296, 299 rehearsal marks 1196 repeat. See repeat barlines scale size 799, 800 short 799-801 signposts 299, 301, 438, 443, 798 single 799-801 staff grouping 805-807, 847 system breaks 616, 801 systemic 802, 803 thickness 799-801 tick 799-801 stignatures 807, 1372 triple 296 tuplets 1389 types 296, 799 vocal staves 805, 806 Baroque appoggiaturas 983, 990 figured bass. See figured bass or red 441, 442 repeat 1210, 1216, 1224 repeat 1210, 1216, 1224 rest alignment 1253 rests. See bar rests rhythm slashes 1239, 1240 selecting 410-412, 416 size 439, 440, 494, 587, 597, 605, 793, 1305 spacing 494-496, 796, 1179, 1254 splitting 616, 617, 620, 621, 796 system breaks 616, 617 time signatures 807, 1372 timecodes 1208 tuplets 1389 upbeats. See pick-up bars vibrato. See vibrato bar. See also guitar width 494-496, 597, 796, 1254, 1305 Bars and Barlines panel 296, 298, 301 Bartók pizzicato. See playing techniques base switches 749, 757 ornaments 337, 1071 trills 1085, 1088 tuning 530 playback 525, 540 popover 294, 295, 297 red 441, 442 rest alignment 1253 rests. See bar rests rhythm slashes 1239, 1240 selecting 410-412, 416 size 439, 440, 494, 587, 597, 605, 793, 1305 spacing 494-496, 796, 1179, 1254 splitting 616, 617, 620, 621, 796 system breaks 616, 617 timecodes 1208 tuplets 1389 upbeats. See pick-up bars vibrato. See vibrato bar. See also guitar width 494-496, 597, 796, 1254, 1305 Bars and Barlines panel 296, 298, 301 Bartók pizzicato. See playing techniques base switches 749, 757 ornaments 337, 1071 baseline attachment points 856 chord symbols 853 dynamics 920	open meter 1360	panel 296, 298
rehearsal marks 1196 repeat. See repeat barlines scale size 799, 800 short 799-801 signposts 299, 301, 438, 443, 798 single 799-801 staff grouping 805-807, 847 system breaks 616, 801 systemic 802, 803 thickness 799-801 time signatures 807, 1372 triple 296 tuplets 1389 types 296, 799 vocal staves 805, 806 Baroque appoggiaturas 983, 990 figured bass. See figured bass or red 441, 442 rest alignment 1253 repeat 1210, 1216, 1224 rest alignment 1253 rests. See bar rests rhythm slashes 1239, 1240 selecting 410-412, 416 size 439, 440, 494, 587, 597, 605, 793, 1305 spacing 494-496, 796, 1179, 1254 splitting 616, 617, 620, 621, 796 system breaks 616, 617 time signatures 807, 1372 timecodes 1208 tuplets 1389 upbeats. See pick-up bars vibrato. See vibrato bar. See also guitar width 494-496, 597, 796, 1254, 1305 Bars and Barlines panel 296, 298, 301 Bartók pizzicato. See playing techniques base switches 749, 757 ornaments 337, 1071 trills 1085, 1088 tuning 530 chord symbols 853 dynamics 920	panel 296, 301	pick-up bars 1364
repeat. See repeat barlines scale size 799, 800 short 799–801 signposts 299, 301, 438, 443, 798 single 799–801 staff grouping 805–807, 847 system breaks 616, 801 systemic 802, 803 thickness 799–801 tick 799–801 time signatures 807, 1372 triple 296 tuplets 1389 types 296, 799 vocal staves 805, 806 Baroque appoggiaturas 983, 990 figured bass. See figured bass or ed 441, 442 repeat 1210, 1216, 1224 rest alignment 1253 rests. See bar rests rhythm slashes 1239, 1240 selecting 410–412, 416 size 439, 440, 494, 587, 597, 605, 793, 1305 systemic 802, 803 spacing 494–496, 796, 1179, 1254 splitting 616, 617, 620, 621, 796 system breaks 616, 617 time codes 1208 tuplets 1389 upbeats. See pick-up bars vibrato. See vibrato bar. See also guitar width 494–496, 597, 796, 1254, 1305 Bars and Barlines panel 296, 298, 301 Bartók pizzicato. See playing techniques base switches 749, 757 ornaments 337, 1071 trills 1085, 1088 tuning 530 red 441, 442 repeat 1210, 1216, 1224 rest alignment 1253 rests. See bar rests rhythm slashes 1239, 1240 selecting 410–412, 416 size 439, 440, 494, 587, 597, 605, 793, 1305 system breaks 616, 617, 620, 621, 796 system breaks 616, 617 time codes 1208 tuplets 1389 upbeats. See pick-up bars vibrato. See vibrato bar. See also guitar width 494–496, 597, 796, 1254, 1305 Bars and Barlines panel 296, 298, 301 Bartók pizzicato. See playing techniques base switches 749, 757 baseline attachment points 856 chord symbols 853 dynamics 920	popover 294, 296, 299	playback 525, 540
scale size 799, 800 short 799–801 signposts 299, 301, 438, 443, 798 single 799–801 staff grouping 805–807, 847 system breaks 616, 801 systemic 802, 803 thickness 799–801 tick 799–801 time signatures 807, 1372 triple 296 tuplets 1389 types 296, 799 vocal staves 805, 806 Baroque appoggiaturas 983, 990 figured bass. See figured bass ornaments 337, 1071 trills 1085, 1088 tuning 530 repeat 1210, 1216, 1224 rest alignment 1253 rests. See bar rests rhythm slashes 1239, 1240 selecting 410–412, 416 size 439, 440, 494, 587, 597, 605, 793, 1305 spacing 494–496, 796, 1179, 1254 splitting 616, 617, 620, 621, 796 system breaks 616, 617 timecodes 1208 tuplets 1389 upbeats. See pick-up bars vibrato. See vibrato bar. See also guitar width 494–496, 597, 796, 1254, 1305 Bars and Barlines panel 296, 298, 301 Bartók pizzicato. See playing techniques base switches 749, 757 baseline attachment points 856 chord symbols 853 dynamics 920	rehearsal marks 1196	popover 294, 295, 297
short 799–801 signposts 299, 301, 438, 443, 798 single 799–801 staff grouping 805–807, 847 system breaks 616, 801 systemic 802, 803 thickness 799–801 tick 799–801 time signatures 807, 1372 triple 296 tuplets 1389 types 296, 799 vocal staves 805, 806 Baroque appoggiaturas 983, 990 figured bass. See figured bass ornaments 337, 1071 trills 1085, 1088 tuning 530 rest alignment 1253 rests. See bar rests rhythm slashes 1239, 1240 selecting 410–412, 416 selecting 410–412, 410 selecting 410–412, 410 selecti	repeat. See repeat barlines	
signposts 299, 301, 438, 443, 798 single 799–801 staff grouping 805–807, 847 system breaks 616, 801 systemic 802, 803 thickness 799–801 tick 799–801 time signatures 807, 1372 triple 296 tuplets 1389 types 296, 799 vocal staves 805, 806 Baroque appoggiaturas 983, 990 figured bass. See figured bass ornaments 337, 1071 trills 1085, 1088 tuning 530 rests. See bar rests rhythm slashes 1239, 1240 selecting 410–412, 416 size 439, 440, 494, 587, 597, 605, 793, 1305 spacing 494–496, 796, 1179, 1254 splitting 616, 617, 620, 621, 796 system breaks 616, 617 timecodes 1208 tuplets 1389 upbeats. See pick-up bars vibrato. See vibrato bar. See also guitar width 494–496, 597, 796, 1254, 1305 Bars and Barlines panel 296, 298, 301 Bartók pizzicato. See playing techniques base switches 749, 757 baseline attachment points 856 chord symbols 853 dynamics 920	·	
single 799–801 staff grouping 805–807, 847 system breaks 616, 801 systemic 802, 803 systemic 802, 803 thickness 799–801 tick 799–801 time signatures 807, 1372 triple 296 tuplets 1389 tuplets 1389 tvpes 296, 799 vocal staves 805, 806 Baroque appoggiaturas 983, 990 figured bass. See figured bass ornaments 337, 1071 trills 1085, 1088 tuning 530 rhythm slashes 1239, 1240 selecting 410–412, 416 size 439, 440, 494, 587, 597, 605, 793, 1305 spacing 494–496, 796, 1179, 1254 splitting 616, 617, 620, 621, 796 system breaks 616, 617 timecodes 1208 tuplets 1389 upbeats. See pick-up bars vibrato. See vibrato bar. See also guitar width 494–496, 597, 796, 1254, 1305 Bars and Barlines panel 296, 298, 301 Bartók pizzicato. See playing techniques base switches 749, 757 baseline attachment points 856 chord symbols 853 dynamics 920		
staff grouping 805–807, 847 system breaks 616, 801 systemic 802, 803 systemic 802, 803 systemic 802, 803 spacing 494–496, 796, 1179, 1254 splitting 616, 617, 620, 621, 796 system breaks 616, 617 time signatures 807, 1372 triple 296 tuplets 1389 tuplets 1389 types 296, 799 vocal staves 805, 806 Baroque appoggiaturas 983, 990 figured bass. See figured bass ornaments 337, 1071 trills 1085, 1088 tuning 530 specting 410–412, 416 size 439, 440, 494, 587, 597, 605, 793, 1305 spacing 494–496, 796, 1179, 1254 splitting 616, 617, 620, 621, 796 system breaks 616, 617 time codes 1208 tuplets 1389 upbeats. See pick-up bars vibrato. See vibrato bar. See also guitar width 494–496, 597, 796, 1254, 1305 Bars and Barlines panel 296, 298, 301 Bartók pizzicato. See playing techniques base switches 749, 757 baseline attachment points 856 chord symbols 853 dynamics 920		
system breaks 616, 801 systemic 802, 803 systemic 802, 803 spacing 494–496, 796, 1179, 1254 splitting 616, 617, 620, 621, 796 system breaks 616, 617 time signatures 807, 1372 timecodes 1208 triple 296 tuplets 1389 tuplets 1389 types 296, 799 vocal staves 805, 806 Baroque appoggiaturas 983, 990 figured bass. See figured bass ornaments 337, 1071 trills 1085, 1088 tuning 530 size 439, 440, 494, 587, 597, 605, 793, 1305 spacing 494–496, 796, 1179, 1254 splitting 616, 617, 620, 621, 796 system breaks 616, 617 timecodes 1208 tuplets 1389 upbeats. See pick-up bars vibrato. See vibrato bar. See also guitar width 494–496, 597, 796, 1254, 1305 Bars and Barlines panel 296, 298, 301 Bartók pizzicato. See playing techniques base switches 749, 757 baseline attachment points 856 chord symbols 853 dynamics 920		
systemic 802, 803		
thickness 799–801 tick 799–801 tick 799–801 time signatures 807, 1372 triple 296 tuplets 1389 types 296, 799 vocal staves 805, 806 Baroque appoggiaturas 983, 990 figured bass. See figured bass ornaments 337, 1071 trills 1085, 1088 tuning 530 splitting 616, 617, 620, 621, 796 system breaks 616, 617 timecodes 1208 tuplets 1389 upbeats. See pick-up bars vibrato. See vibrato bar. See also guitar width 494–496, 597, 796, 1254, 1305 Bars and Barlines panel 296, 298, 301 Bartók pizzicato. See playing techniques base switches 749, 757 baseline attachment points 856 chord symbols 853 dynamics 920		
tick 799–801 time signatures 807, 1372 triple 296 tuplets 1389 types 296, 799 vocal staves 805, 806 Baroque appoggiaturas 983, 990 figured bass. See figured bass ornaments 337, 1071 trills 1085, 1088 tuning 530 system breaks 616, 617 timecodes 1208 tuplets 1389 upbeats. See pick-up bars vibrato. See vibrato bar. See also guitar width 494–496, 597, 796, 1254, 1305 Bars and Barlines panel 296, 298, 301 Bartók pizzicato. See playing techniques base switches 749, 757 baseline attachment points 856 chord symbols 853 dynamics 920		
time signatures 807, 1372 triple 296 tuplets 1389 tuplets 1389 types 296, 799 vocal staves 805, 806 Baroque appoggiaturas 983, 990 figured bass. See figured bass ornaments 337, 1071 trills 1085, 1088 tuning 530 timecodes 1208 tuplets 1389 upbeats. See pick-up bars vibrato. See vibrato bar. See also guitar width 494–496, 597, 796, 1254, 1305 Bars and Barlines panel 296, 298, 301 Bartók pizzicato. See playing techniques base switches 749, 757 baseline attachment points 856 chord symbols 853 dynamics 920		
triple 296 tuplets 1389 tuplets 1389 types 296, 799 vocal staves 805, 806 Baroque appoggiaturas 983, 990 figured bass. See figured bass ornaments 337, 1071 trills 1085, 1088 tuning 530 tuplets 1389 upbeats. See pick-up bars vibrato. See vibrato bar. See also guitar width 494–496, 597, 796, 1254, 1305 Bars and Barlines panel 296, 298, 301 Bartók pizzicato. See playing techniques base switches 749, 757 baseline attachment points 856 chord symbols 853 dynamics 920		
tuplets 1389 types 296, 799 vocal staves 805, 806 Baroque appoggiaturas 983, 990 figured bass. See figured bass ornaments 337, 1071 trills 1085, 1088 tuning 530 upbeats. See pick-up bars vibrato. See vibrato bar. See also guitar width 494–496, 597, 796, 1254, 1305 Bars and Barlines panel 296, 298, 301 Bartók pizzicato. See playing techniques base switches 749, 757 baseline attachment points 856 chord symbols 853 dynamics 920	-	
types 296, 799 vocal staves 805, 806 Baroque appoggiaturas 983, 990 figured bass. See figured bass ornaments 337, 1071 trills 1085, 1088 tuning 530 vibrato. See vibrato bar. See also guitar width 494–496, 597, 796, 1254, 1305 Bars and Barlines panel 296, 298, 301 Bartók pizzicato. See playing techniques base switches 749, 757 baseline attachment points 856 chord symbols 853 dynamics 920		
vocal staves 805, 806 Baroque appoggiaturas 983, 990 figured bass. See figured bass ornaments 337, 1071 trills 1085, 1088 tuning 530 width 494–496, 597, 796, 1254, 1305 Bars and Barlines panel 296, 298, 301 Bartók pizzicato. See playing techniques base switches 749, 757 baseline attachment points 856 chord symbols 853 dynamics 920		
Baroque Bars and Barlines panel 296, 298, 301 appoggiaturas 983, 990 Bartók pizzicato. See playing techniques figured bass. See figured bass base switches 749, 757 ornaments 337, 1071 baseline trills 1085, 1088 attachment points 856 tuning 530 chord symbols 853 dynamics 920		
appoggiaturas 983, 990 figured bass. See figured bass ornaments 337, 1071 trills 1085, 1088 tuning 530 Bartók pizzicato. See playing techniques base switches 749, 757 baseline attachment points 856 chord symbols 853 dynamics 920		
figured bass. See figured bass base switches 749, 757 ornaments 337, 1071 baseline trills 1085, 1088 attachment points 856 tuning 530 chord symbols 853 dynamics 920		
ornaments 337, 1071 baseline trills 1085, 1088 attachment points 856 tuning 530 chord symbols 853 dynamics 920		
trills 1085, 1088 attachment points 856 tuning 530 chord symbols 853 dynamics 920		
tuning 530 chord symbols 853 dynamics 920		
dynamics 920		
·	Carming 550	
		· ·

baseline (continued)	beaming (continued)
lyrics 1020, 1025	slants 828, 989
staff labels 180	slashes 1241
text 379, 742	spacing 833
bass clef. See clefs	splitting 730, 821, 824, 841, 844
bass drum. See unpitched percussion	staff-relative placement 826, 827
bass guitar. See fretted instruments	stem direction 826, 830, 832, 834, 1059
bass notes	stemlets. See stemlets
altered 310, 315	tablature 1309
counterpoint 936, 937	thickness 826
figured bass. See figured bass	ties 243
bassoon. See instruments	time signatures 822, 842
beam corners 835	tuplets 821, 824, 825, 838, 841, 1390
beam groups 22, 821, 822, 841	unbeaming 824
creating 822	vocal staves 824
cut common time 844	beat groups 22, 821, 841
default settings 730, 821	cut common time 844
defining 821, 842	defining 277, 842
half-bar 821	numerators 1367
notation options 821	rhythm slashes 1240
pick-up bars 1364	ties 1341
resetting 825	time signatures 1367, 1368
selecting 411, 412	beat units 1319
stem directions 1057	deleting beats 295
time signatures 822	inputting beats 295
beam lines	metronome marks 421, 1319
direction 836	setting 292
gaps 838	tempo marks 289
number 837	tuplets 252
thickness 826	beats
beam slants 828	deleting 295, 440, 793–795
changing 828	display 540, 543
grace notes 989	inputting 295, 297, 299, 439, 440
beaming 821, 822, 840	Insert mode 439, 440
accidentals 783	per minute 1319
angles 828, 840	pick-up. See pick-up bars
centered beams 829, 830	popover 295
corners 835	recording latency 263, 264
cross-staff. See cross-staff beams	relative position 425
default settings 821	selecting 417
direction 826–828, 836	beep. <i>See</i> click
fanned 840	bend intervals 1109
gaps 838	handles 1112, 1114–1116
grace notes 989	microtonal 1109
grouping 821, 822, 841, 844. See also beat groups	bends
half-bar 821, 842	guitar. See guitar bends. See also dives
handles 828	jazz. See jazz articulations. See also jazz ornaments
hiding 1060	vibrato. See vibrato bar
inverting 826, 827	big band. See bands. See also jazz
large pitch ranges 989	bindings. See ties. See also laissez vibrer ties
lyrics 824	birds eyes. <i>See</i> fermatas
meter 842	bit depths 98, 99
multiple staves. See cross-staff beams	black and white 580
notation options 821	black noteheads 1033, 1034
notes 822	blank areas. See erased backgrounds
optical cross-staff spacing 833	blank pages
partial 836	deleting 633
placement 826, 832, 835, 1059	staff spacing changes 608
primary beams 836	blank staves
resetting 825, 827, 831, 835	adding 122, 126, 131
restating accidentals 783	after flows 592
rests 821, 822, 839	hiding 590, 592
secondary beams 836, 837	showing 590, 592

blog 68	bracketed noteheads (continued)
blue selections 931, 1275	curve 1052
Blues guitar post-bends 1107	formatting 1052
body	gaps 1083
changing 1186	ghost notes 1048
lines 1174, 1176, 1186	guitar bends 1103, 1105
playing technique continuation lines 1168, 1170	handles 1054
bold text 379, 736, 737, 739, 742, 1329	hiding 1048
chord symbols 858	inputting 1048
composer 74, 739	length 501, 1054
dedication 74, 739	moving 501, 1052, 1054
figured bass 949	percussion 1048
fingerings 960	playback 1048
instrument change labels 139	shape 1052, 1054
lyricist 74, 739	showing 1048
lyrics 1022, 1023	slurs 1054
Markdown 74	splitting 1051
project information 74, 739	tablature 1047, 1048, 1103, 1108
rehearsal marks 1199	tie chains 1050
repeat endings 1213	ties 1054
subtitles 74, 739	ties on tablature 1050, 1341
tasto solo 949	trills 1083
tempo marks 1317	vibrato bar dives and returns 1108
titles 74, 739	width 1052
bomb	brackets 845
dive. See dives	accidentals 776, 784, 1065
bongos. See unpitched percussion. See also percussion	arpeggio signs 1089
kits	bar numbers 820
booklets 576	bar repeats 1226, 1228, 1232, 1234
duplex printing 577	barlines 805, 806
printing 575, 576	capo chord symbols 155, 853
borders 581, 1335	chord symbols. See parenthesized chord symbols
bar numbers 809	counts 1228, 1234, 1245
chord symbols 869	divisi 846, 847, 849, 850, 1174, 1307
exporting 570	dynamics 910
fingerings 958	ensemble types 76, 847
harp pedaling 1137, 1138	figured bass 387, 941, 944
instrument change labels 139, 739	fingerings 269, 270, 961, 962, 964
layout names 982 lines 1192	grouping 163, 846, 847, 1295 guitar bends 1103, 1105
padding 739, 869, 1138, 1337	harmonics 1066
part names 739	hiding 802, 846, 849
printing 566	hold lines 944
shape 739, 809, 1336	horizontal. See lines
style 739, 1336	instrument transpositions 1293
tacets 623, 739	layouts 846
text 739, 1192, 1335, 1336	metronome marks 1318, 1321
thickness 1137, 1192, 1337	moving 874, 1054
Boston chord symbols 853	noteheads. <i>See</i> bracketed noteheads
bottom zone. See lower zone	numbered bar regions 1232, 1234
bowing. See playing techniques. See also slurs	pedal lines 1155, 1156
boxes. See borders. See also frames	player groups 163, 806, 1295
bpm 1319	playing techniques 1168
changing 692, 1319	project templates 76
braces 845	repeat endings 1210, 1212, 1214
hiding 802, 846, 848, 849	secondary 849, 850
secondary brackets 849, 850	showing 802, 846, 849
showing 802, 846, 848, 849	signposts 438
signposts 438	size 873
staff spacing 587, 588, 605	slash regions 1245
bracketed noteheads 1047, 1048, 1122	staff labels 1293
changing type 1048	staff spacing 587, 605
chords 1047, 1048, 1051	staves 846, 847, 1295

brackets (continued)	C
sub-brackets 849, 850	
sub-sub-brackets 851	C clef. See clefs
tablature 1066, 1103, 1105, 1108	cadenzas 277, 297, 299, 440, 441, 793, 1360
templates 76	system dividers 1302
tempo marks 1318, 1321	caesuras 991, 993
thickness 872	appearance 421
time signatures 277, 1365, 1367, 1370	breath marks 994
tuplets 1391	colors 54
vibrato bar dives and returns 1108	Curlew marks 994
Brandt-Roemer chord symbols 853	deleting 443
brass band. <i>See</i> bands. <i>See also</i> project templates	fermatas 994
brass instruments 128	gaps 994
	gradual tempo changes 997
adding 110, 112, 122, 126, 131	
brackets 847, 1295	inputting 328, 330–332
chord symbols 859	linking 994
fingerings 952, 960, 970	moving 448, 501
glissando lines 1100, 1101	multiple at same position 994
groups 163	placement 994
horn branch indicators 960, 971	playback 997, 999
panning. <i>See</i> stage templates	position 332, 994
player order 108, 123	types 421, 993
playing techniques 361	calando. See gradual tempo changes. See also tempo
project templates 76	marks
reverb. See space templates	calculating
system objects 1304	chord symbols 319
transposition 110, 130	harp pedaling 371
Bravura music font 736	stacking 504, 778
breaking	statistics 105
multi-bar rests 1257, 1259	tempo marks 393
notes 256	values 649
tie chains 256, 1351	cancellation
breaks	accidentals 783, 785
frame 620	double accidentals 785
page 620	key signatures 1004
playback 530, 997	naturals 1004
system 617	candidate menus
breath marks 991–993	playing techniques popover 358
appearance 421	tempo popover 288
caesuras 994	cantabile. See dynamic modifiers
colors 54	Capo Chord Symbol Definition dialog 159
Curlew marks 994	Capo Definition dialog 157
deleting 443	capos 154
fermatas 994	adding 156, 157
inputting 328, 330, 331	alignment 861, 862
moving 448, 451, 501	chord symbols 154, 155, 158-161, 163, 853, 861,
multiple at same position 994	862
placement 994	defining 156–159, 162
playback 997	deleting 157, 159
position 994	gaps 155, 853
types 421, 993	hiding 160, 161, 163
breves. See double whole notes	italics 155, 853
Brickwall Limiter 705, 711	notation staves 158
Britten Curlew. See fermatas. See also breath marks	parentheses 155, 853
Broadcast WAVE format 99	partial 156, 157
broken beams 836	position 160, 862
buffer	tablature 154, 156, 157
audio 263, 264	caps 1166, 1176
building ensembles 112, 127	arrows 1171, 1186
bypassing 705, 711. See also muting	changing 1171, 1186
	continuation 1176
	lines 1176
	playing technique continuation lines 1168, 1171

capsule	cautionary key signatures 1005
borders 739, 1336	hiding 1006
cards	showing 1006
disclosure arrows 41	cautionary time signatures 1362
flows 118	hiding 1362
layouts 115	showing 1362
players 108	CC64
timecodes 118	pedal lines 90, 263, 265
caret 214	cello. See instruments
activating 192, 217	center selection 49
advancing 218	centered beams 829
chords 214, 247	creating 830
color 53	removing 831
deactivating 192, 217	centered text
extending 218, 231	bar numbers 814
grace notes 214, 244	hairpins 916
inputting vs. editing 206	centimeters
Insert mode 214, 232	staff spacing 608
lock duration 214	unit of measurement 50
moving 212, 218, 1387	chains
multiple staves 218, 231	frames 645
percussion kits 233	ties 1341
rhythmic grid 212, 213	chamber
slash voices 214	ensembles 76, 112, 114, 126, 713
slashes 229	panning. See space templates
tablature 214	reverb. <i>See</i> space templates
types 214	change labels
voice indicator 214, 227, 913	instruments. See instrument change labels
casting off 612	Change Paragraph Style dialog 1333
bars per system 613, 618	channel change actions 507, 552, 555, 758
copying to other layouts 626, 627	channels 700, 703, 704
flows 487, 593	adding 710
locking 613, 615	bypassing inserts 711
moving bars 614 note spacing 494, 495	changing 554 controls 703, 705
resetting 616	effects. See FX channels
staff spacing 587, 604, 605	endpoints 552
systems per frame 613, 621	expression maps 507, 552, 555, 758. See also
categories	channel change actions
ensembles 112, 114, 127	FX. See FX channels
lines 375, 1174	height 707
noteheads 1034, 1037	hiding 707
project templates 76	importing 90
templates 70, 847	inserts 705, 711, 712
cautionary 1005	instruments 554, 703, 704
accidentals. See cautionary accidentals	meter 703
key signatures. See cautionary key signatures	MIDI 90, 703, 704
time signatures. See cautionary time signatures	mixer 700, 701, 703–705, 710
cautionary accidentals 783, 784	muting 532
color 53, 778	names 710
common practice 784	panning 709, 713
hiding 776, 784, 1065	percussion maps 507, 552, 555
Modernist 783	playback 552
parentheses 783, 784	plug-ins 552
showing 776, 784, 1065	renaming 710
tie chains 776, 1065, 1347	reverb 712, 720
trills 1078	scrolling 707
cautionary clefs 889	setup 552
cautionary fingering 961	showing 707
hiding 962	soloing 532
parentheses 962	strips 700, 701, 705
showing 962	video 704
	volume 708

character styles 736, 742	chord symbol regions 863
creating 743	handles 419, 863
deleting 742	hiding 859, 860
dialog 742	highlights 864
missing fonts 72	inputting 317, 318
saving as default 742	length 419
Character Styles dialog 742	moving 448, 451
cherry stalks. See split stems	popover 317
choir templates 70, 76, 713	showing 859, 860
staff grouping 847	chord symbols 247, 852
Choose Chord Diagram dialog 884	accidentals 155, 159, 162, 312, 853, 858, 864, 865
choral lyrics 1010	added notes 314
playing techniques 361	alignment 853, 859, 861, 862, 867 alterations 853
verse numbers 1030	altered bass notes 310, 858, 867
chord brackets. See bracketed noteheads. See also	appearance 853, 854, 856
parenthesized chord symbols	arrangement 867
chord diagrams 852, 875	backgrounds 868
barré 876, 885	barlines 861, 868
changing 883, 884	brackets. See parenthesized chord symbols
colors 884, 885	capos 154, 155, 159–161, 163, 853
components 876	changing 421, 853
copying shapes 883	colors 54, 856
custom 885	components. See chord symbol components
dots 885	copying 414, 859, 860, 862
editing 885	crosshairs 503
fingerings 876, 882, 883, 885	custom 854, 856
font styles 887	default settings 853
formatting 885	deleting 443, 859
fret numbers 882, 883, 885, 887	diagrams. See chord diagrams
gaps 880	dialog 854, 856
grid 879–882	engraving options 853
hiding 877, 878, 880, 881	enharmonic spelling 154, 155, 159–163, 853, 865,
inputting 877, 878	866
nut 876	erased backgrounds 853, 868, 869
omitted strings 876, 885	figured bass 385, 387
open strings 876, 885	filter 417
resetting 883, 885	fonts 858
rows 879–883	gaps 155, 853
shapes 883–885	generating 319 global 852
showing 877, 878, 880, 881 size 880	height 862, 867
symbols. See chord symbols	hiding 318, 859, 860, 863, 867, 878
thumb 882, 883, 885	highlights 864
tuning 151, 153, 880, 883	inputting 310, 312, 317–319, 859
chord input 249	instruments 310, 859, 860
activating 192, 247	intervals 314
arpeggio signs 339	inversions 310
caret 214	italics 155, 853, 858
exploding 231	layouts 860
multiple staves 231	local 852
register selection 222	main 155
tablature 237, 247	MIDI input 310
chord symbol components 853	MIDI navigation 62
appearance 853	modal 316, 866
attachment points 856	moving 448, 501, 861, 862
custom 856	MusicXML import 874
handles 854, 856	navigation during input 317
inputting 312	no chord 316
popover 312	note spacing 861
types 853	omissions 314
	padding 853, 869, 874
	parentheses. See parenthesized chord symbols

chord symbols (continued)	chords (continued)
pitch 173	tablature 222, 237, 1048, 1050
placement 862	ties 243, 1346
playback 507, 520, 521	track. See chords track
players 310, 859, 860	transformations 463
polychords 310, 315, 867	velocity 676. See also Velocity editor
popover 312	vibrato bar dives and returns 1108
position 853, 859, 861, 862, 867	voices 227, 1416
quality 310, 853, 867	chords track 520
regions. See chord symbol regions	hiding 521
roots 310, 313, 853, 867	showing 521
selecting 411, 414, 416, 417	Chorus 705, 711
separators 858, 867	chorus lyrics 1010
showing 310, 318, 859, 860, 863, 867, 878	changing lines to 1029
signposts 438, 852, 863	changing lyrics to 1011
size 422, 858, 867, 873	paragraph styles 1022
slash regions 859, 863, 1239	popover 383
spacing 861, 862	chromatic glissando 1096
spelling 154, 155, 159–163, 853, 865, 866	playback 1100, 1101
staff-relative placement 862	church
staves 310, 859, 860	panning. <i>See</i> stage templates
suspensions 314	reverb. See space templates
•	circa
systems 860, 862 track. <i>See</i> chords track	tempo marks 1321
	circle
transposing 155, 158–163, 173, 456, 457, 852, 864	
transposing instruments 155, 173, 865, 866	bar number enclosures 809
types 312, 853	chord symbols 853
viewing options 864	fingerings 958
voicing 310, 521	hairpins. See niente
Chord Symbols Options dialog 853	harmonics 1066, 1068
chords 247, 852	noteheads 1034, 1038, 1399, 1402
accidentals 778, 780	pitches 467, 477
arpeggio signs 1092	playing techniques 361, 1160
auditioning 211	rhythms 467, 477
bracketed noteheads 1047, 1048, 1051	string indicators 974
brackets 870	tapping 1119
building 253, 475	clarinet. See instruments. See also transposing
caret 214, 218, 247	instruments
collision avoidance 778, 780 dense 779	clash cymbals. <i>See</i> unpitched percussion Classical
exploding 231 figured bass 385, 387, 938, 949	ornaments 337
	trills 1085, 1088
fingerings 966	classical guitar. <i>See</i> fretted instruments clefs 889
grace notes 244, 245, 247	
guitar bends 1103, 1107	bar numbers 814
identifying 37, 319	cautionary 889
inputting 192, 231, 247, 253, 475	changing 110, 324, 325
inverting 464	colors 54
lines 231, 339–342, 375, 377	deleting 443
moving 465, 467	filter 417
parentheses 870	gaps 889, 891
pitch mappings 469	grace notes 890
playback 520, 525, 530, 533, 1238	guitar 130, 895
post-bends 1107	hiding 324, 325, 892, 893
register selection 222	Indian drum 325, 1414
reversing 465. See also retrograde	inputting 321, 322, 324, 325
rolled. See arpeggio signs	instrument changes 136
rotating 467	instruments 110
scale mapping 471	key signatures 1003
selecting 411, 412	layouts 892
stem directions 1056. See also voices	moving 136, 448, 451, 890, 891
symbols. See chord symbols. See also chord	multi-bar rests 1258, 1259
diagrams	octave indicators 323, 894, 895

clefs (continued)	collision avoidance (continued)
overrides 110, 324, 325	playing techniques 1165
panel 325	slurs 1265, 1273
popover 322, 324	staves 587, 588, 605, 607, 608
position 209, 890	text 1334
restorative 324, 325	ties 1341, 1354
showing 892, 893	titles 598
signposts 438, 892	colon
spacing 891	dynamics 304, 909
ties 1348	tuplets 1394
tokens 639	colored regions 516, 560, 864, 1226, 1239, 1243
transposing instruments 110	Dynamics editor 677
transposition 323, 892, 894, 895	exporting 581
types 322	hiding 425
Clefs panel 324, 325	MIDI CC editor 684
click 262, 540	MIDI Pitch Bend editor 683
count-in 259, 263	percussion editor 663
disabling 525	piano roll editor 661
enabling 525	Playing Techniques editor 673
MIDI recording 259	printing 581
mixer 700, 701	Tempo editor 689, 691
playback 262, 517, 518, 525	tempo track 517
reverb 722, 723	Transform tool 696
settings 262	colors 51
sound 262, 517, 518	accidentals 53, 778
volume 708	background 52, 54
clipping 708	bar numbers 54
closing. See opening	bar repeats 54, 1226
clusters	breath marks 54
accidentals 495, 778–782	caesuras 54
jazz articulations 1127	caret 53
spacing 495	cautionary accidentals 53, 778
CMYK processing 580	chord diagrams 884, 885
coda 1216	chord symbols 54, 856, 864
barlines 802	clefs 54
brackets 802	comments 54
font 1217	dark theme 51
gap 500, 1220, 1221, 1305	dynamics 54
hiding 1220	exporting 571
indent 500, 1220, 1221, 1305	fermatas 54
inputting 402, 403	graphics 571, 580
mid-system gap 1216, 1220, 1221	holds 54
multiple 1217	instrument change labels 139
sections 1216	instrument names 180, 1296
showing 1220	instruments 516, 661, 663, 715, 716, 718
size 1217	inverting 54
codec 185	light theme 51
codes 638	lines 54
time 1206	lyrics 54, 1022
col legno. See playing techniques	markers 54
collision avoidance	MIDI trigger regions 560
accidentals 495, 778–780	mixer 704
articulations 791	monochrome 580
bar numbers 814	muted 534
barlines 868, 911	note ranges 53, 1044
chord symbols 868	noteheads 54, 1037
clefs 814	notes 53, 54, 534, 1417
dynamics 904, 906, 911	ornaments 54
flow headings 598	pages 52, 54
galley view 607	pedal lines 54
lines 1179	piano roll editor 661, 663
margins 598	Play mode 516
notehead brackets 1054	playhead 53

colors (continued)	common practice
playing techniques 54	accidental duration rule 783
rehearsal marks 54, 1199	common practice accidental duration rule 784
resetting 52–54	common time. See time signatures
rests 54, 1253	components
rhythmic grid 53	articulations 788
slash regions 1239, 1243	chord diagrams 876
slurs 54	chord symbols 312, 853, 856
staff labels 180, 1296	lines 1176
stage templates 715, 716, 718	playing technique continuation lines 1168
tablature 53, 54, 1044, 1308, 1310	tempo marks 1317
tempo marks 54	composer 68, 74, 979
text 54, 379, 739, 742	adding 979
time signatures 54	bold 74, 739
tracks 516, 661, 663	exporting 101
trills 54	first pages 631, 978
tuplets 54	flow headings 634–636
voices 53, 516, 661, 663, 1416, 1417	fonts 739, 979
windows 51	italics 74, 739
columns	tokens 640
accidentals 495, 778, 780	compound figured bass intervals 385, 387, 949
figured bass 938	compound time signatures 1360
lines 1178, 1179	beam grouping 821, 1240
markers 392	inputting 277, 280–282
missing fonts 72	note grouping 841, 1240
videos 392	rhythm slashes 1240
voices 1418, 1419	compressed MusicXML 82, 83
combinations	Compressor 705, 711, 727
part layouts 172	con sordino. See playing techniques
playback techniques 756, 760, 769	concert band. See bands. See also project templates
tremolos 769	concert hall
combined dynamics. See dynamics	panning. See stage templates
combining. See consolidation	reverb. <i>See</i> space templates
comma	concert pitch 174
breath marks. See breath marks	clefs 323, 892, 894
commands	exporting 570
jump bar 64, 66	input pitch 210
key commands 58, 62	instrument transpositions 1292
MIDI 58, 62	layouts 170, 173, 566, 570, 639, 981
Comment dialog 483	printing 566
comments 438, 481, 1047	staff labels 1287, 1292
adding 484	status bar 37
authors 481, 486	tokens 639, 981
bar numbers 482, 484, 485	viewing 173
changing 485	concertina dragging 610
colors 54	concertos
date 482, 485	cadenzas 440, 441, 1360
deleting 443, 482	movements. See flows
dialog 483	soloists 125
display 482, 485	condensing 587, 588, 590, 626, 1307
exporting 486, 570, 581	divisi 1298
flows 482, 485	extra staves 1300
hiding 487	fonts 739, 1296, 1298
initials 481, 486	ossia staves 1301
instruments 482, 485	paragraph styles 1296, 1298
list 482, 485	percussion. See percussion kits
order 486	signposts 438
panel 482, 485	staff labels 1296, 1298
printing 486, 566, 581	conditions
replying 484	expression maps 751, 760
showing 487	conductor score. See condensing. See also layouts
sorting 486	

configurations	continuous
accidentals 780, 783, 1001	bar counts 1227, 1233
endpoints 552, 556–558	beams across staves 832
Key Editor 658, 698, 699	controller 758
key signatures 1001	hairpins 921
playback 57, 543	rehearsal marks 1197
connecting. See linking	view 39, 49, 650, 661, 663
consecutive	contrabass. See instruments
dynamics 302, 307, 921, 925, 930, 935	contracting. See expanding
guitar bends 1103, 1108	contrapuntal. See counterpoint
MIDI CC 696-698	control change actions 750, 758
notes 219, 459, 463, 696–698	control points
rests 1257	handles 1266, 1284, 1357
velocity 696–698	slurs 1278
consolidation 626	ties 1352, 1356
aggregate time signatures 1372	controllers
bar repeats 1258	expression maps 744
bars 443	MIDI. See MIDI controllers
breath marks 994	conventions
caesuras 994	accidentals 775, 783, 1001, 1009
fermatas 994–996	arpeggio signs 1092
flows 77	breath marks 994
notes 249, 453, 1418	caesuras 994
part layouts 172	cues 902
players 164, 172, 626	dynamics 904
rests 730, 1250–1253, 1256–1258	ensembles 76
rhythm dots 1043	fermatas 994
staff labels 147, 148, 1297, 1298	fingerings 952
staves. See condensing	grace notes 983
stems 140, 1413, 1414, 1416	harp pedaling 1139
time signatures 1372	key signatures 1001, 1003
voices 140, 453, 626, 1413, 1414, 1416, 1418–1421	lyrics 1016
constant points 680, 687, 689	middle C 50
inputting 679, 686, 691	ornaments 1072
contents	pauses 993
bars 795	pedal lines 1147
front matter 978	playing techniques 1164
lines 1168, 1176	rehearsal marks 1196
playing techniques 1168	rests 1249
table 978	tempo marks 1314
tempo marks 1316, 1318, 1322	tremolos 1378
continuation caps 1176	trills 1072
continuation lines 1166, 1174	voices 1418
angles 1143	converting
caps 1171	grace notes into normal notes 985
duration 1167	layouts to graphics files 570
dynamics 304, 903, 907, 918, 920, 921	notes into grace notes 985
figured bass 942	notes into tuplets 1388
hiding 1324	PDF 570
inputting 358, 362, 364	tuplets into normal notes 1388
pedal lines 1141, 1143, 1151, 1153–1155, 1157,	copies
1158	printing multiple 566
playing techniques 1166, 1169–1172	Copy Staff Spacing dialog 612
slurs across breaks 1265	copying 443, 445–447
tempo marks 1315, 1323–1325	articulations 788
thickness 1155, 1326	barlines 168
continuation signs 1156	beams 835
lines 1176	chord diagram shapes 883
parentheses 1155	Chord mode 249
playing technique continuation lines 1168	chord symbols 414, 859, 860, 862
text 1157	dynamics 445, 447, 448, 660, 682, 931
	flows 77, 168
	frames 630, 631

copying (continued)	courtesy. See cautionary
	cowbell. See unpitched percussion. See also playing
Insert mode 439	
instruments 123	technique-specific noteheads
lyrics 1013	crash cymbals. See unpitched percussion
MIDI 448, 660, 688	creating. See inputting
notes 445–447, 670, 788, 835	crescendo. See gradual dynamics
page formatting 628	crop marks 581
page templates 630, 631	exporting 570
part formatting 627	printing 566
pitches 468, 478	cross noteheads 1035, 1038
players 123	dead notes 1122
1 2	
playing techniques 1169	percussion 1399, 1402
points 660	resetting 1039
properties 629	cross stick. See unpitched percussion. See also playing
slurs 447, 788	technique-specific noteheads
staff spacing 611	cross-staff
system objects 414, 1304	arpeggio signs 339, 340
tempo marks 445, 660	beams 832–835, 1059
text 57, 445	lines 375, 377
tremolos 835	overlapping notes 1418
copyright 74, 980	resetting 835
adding 980	slurs 267, 419, 448, 451, 1265, 1272
bold 74, 739	spacing 833
exporting 101	stems 832, 835, 1059
first pages 631	ties 243, 1348
fonts 739, 980	tremolos 832, 835
italics 74, 739	cross-voice
tokens 640	arpeggio signs 339, 340
cor anglais. See instruments. See also transposing	lines 375, 377
instruments	slurs 267, 419, 448, 451, 1272
corners	ties 243, 1348
beaming 835	crosshairs 503
crop marks 581	crotchets. See quarter notes
count-in	crushed notes. See grace notes
duration 259, 263	CSV files 101
metronome click 259, 263	Cubase
counterpart layout 42	expression maps 744, 762
counterpoint 242	instrument names 1288
bar rests 242, 1256	staff labels 1288
MIDI import 87	cue labels
MIDI recording 258, 259	moving 501
playback 936, 937	staff-relative placement 423
voices 227, 1416	cues 902
counts 1226	bar rests 730, 1252
bar numbers 810, 820, 1364	deleting 443
bar repeats 1226–1228	instrument changes 136
barlines 1222	moving 451
bars 408, 1226, 1231, 1232, 1234, 1243	rests 730
frames 1206	signposts 438
hiding 1223, 1228, 1234, 1245	spacing 494, 495
lyrics 1024	staves 602
moving 501, 1223, 1235, 1245	cup mute. See playing techniques
multi-bar rests 1258	Curlew mark. See fermatas
numbered bar regions 408, 1232–1234	curly quotes 638, 641
page numbers 642	cursor
pick-up bars 1364	caret 214
placement 1235, 1245	chord symbols 317
ranges 810, 1232, 1234	figured bass 389
repeats 536, 820, 1210, 1222, 1223	fingerings 269
rhythm slashes 1243–1245	lyrics 384, 1024
staff-relative placement 1235, 1245	text 638
statistics 105	
timecodes 1206	

curvature direction grace notes 1263 guitar bends 423	cutting <i>(continued)</i> slash regions 1240 tie chains 256, 1351
guitar pre-bends 1110	tic thairis 250, 1551
notehead brackets 1052, 1054 slurs 1263, 1270, 1271, 1284	D
ties 1345, 1346, 1354	da capo
curve	al coda 1216
dynamics 934	al fine 1216
curved arpeggio signs 1089	al segno 1216
duration 1093, 1094	font 1217
inputting 335	hiding 1220
playback 1093, 1094	inputting 402, 403
popover 335	showing 1220
custom harling igins 906	size 1217
barline joins 806	word wrapping 1219
chord diagrams 885	dal segno 1216
chord symbols 853, 854, 856 endpoint configurations 556, 557	hiding 1220
ensembles 112, 127	showing 1220
key commands 58, 62, 66	damping. See playing techniques
layouts 119	dangling ties. See laissez vibrer ties
markers 391, 1203	dark theme 51, 54
page size 578	dashed
paper size 578	barlines 277, 800, 801, 1360, 1372. See also
percussion techniques 1399, 1401, 1402	aggregate time signatures
playback templates 543, 546, 549	figured bass 942
player order 124	frames 634, 879
repeat endings 1213	guitar bend hold lines 1110 hairpins 920
repeat markers 1218	jazz articulations 1128
score layouts. See layouts	lines. See dashed lines
size 422, 587, 601	lyrics 382, 384, 1026, 1027
staff order 124	octave lines 897
staff size 604	pedal continuation lines 1154
tempo text 1316	pedal lines 1153
trill speeds 1087	slurs 1267–1269
tuning 151, 153, 154, 877, 880	staff labels 1293
zoom levels 432	string indicator lines 974, 1167
Custom Centered Beam dialog 830	tempo marks 1323–1326
custom notehead sets	ties 1343–1345
percussion 1399, 1401, 1402	vibrato bar lines 354, 355, 1118
custom playing techniques	dashed lines 501
percussion 1399, 1401, 1402 playback 770	attachment 426, 448, 501
custom score layouts. See layouts	between staves 433
Custom Staff Size dialog 604	crosshairs 503
custom text 1328	Engrave mode 496
dynamics 914	lines 375, 1174
instrument changes 138	lyrics 382, 1026, 1027
markers 391, 1203	octave lines 897
percussion legends 1411	tempo marks 1323, 1325 data
repeat endings 1213	expression maps 745
repeat markers 1218	library 728
repeats 1222	date and time 642
cut common time 1360	annotations 581
appearance 1371	auto-saved projects 102
beat grouping 844	comments 481, 482, 485, 486
cutting	exporting 570
bars 793–795	language 56
beats 440, 793	printing 566
notes 256	tokens 56, 642
selections 445, 487, 793–795	•

deactivation	default cettings (continued)
deactivating	default settings (continued)
caret 217	selection tools 39
chord input 247	slurs 447
double-click mode switching 42, 191	space templates 721, 727
highlights 425	staff grouping 847
Insert mode 232	staff labels 56, 179, 180, 182
mouse editing 208	staff spacing 587, 605
mouse input 208	stage templates 713
muted tracks 532, 700–702	tablature strings 219, 222
note input 219, 222	text 737, 739, 743, 1334
playback 527	voice order 730
player sorting 123	volume 708
playhead following 524	delay
signposts 425, 438	
	expression maps 752
soloed tracks 532, 700–702	glissando line playback 1101
dead notes 1122	inserts 705, 711
decimal places	instrument changes 136
metronome marks 287, 291, 1319	deleting 443, 489
decorations. See ornaments	accidentals 775
decrescendo. See gradual dynamics	articulations 788
dedications 74, 978	auto-saved projects 102
exporting 101	bar number changes 818
tokens 640	barlines 802, 806
default flow headings 630, 634	bars 295, 440, 793–795
default page templates 630, 631	beams 824
composer 978	beats 295, 440, 793, 795
lyricist 978	borders 739, 982, 1335
title 978	braces 802
tokens 978	brackets 776, 784, 802, 871, 910, 941, 944, 1048
default settings 18, 26, 57, 646, 728, 730, 732	capos 157, 159
accidentals 209	centered beams 831
articulations 209	chord diagrams 877, 878, 881
barlines 800, 801	chord symbols 859
beam grouping 730, 825	clefs 443, 892, 893
chord symbols 853, 858	comments 482
dialogs 26	counts 1223
dynamics 447, 448	dynamics 661
file names 572	editors 658
flow headings 634	effects 712
flows 730	effects channels 710
font styles 743	empty pages 25
hand tool 39	endpoints 556, 558
instrument names 56, 179, 180, 182	fermatas 995
key commands 25, 58, 62	files 68
layouts 176, 616, 728	fingering slides 969
library 728	fingerings 959
marquee tool 39	flow headings 595
MIDI 448	flow numbers 635, 636
mouse input 207	flows 170, 173
	· · · · · · · · · · · · · · · · · · ·
notations input 209, 310	frame breaks 616, 623
note grouping 730	frames 595
note input options 209	FX channels 710
note spacing 494, 495	gaps between notes 255
noteheads 1039	grace notes 985
overlapping notes 730	groups from percussion kits 149
panning 718	guitar post-bends 1112
playback 543, 549, 708, 718, 725, 727, 732	guitar pre-bends 1112
playback templates 544	guitar techniques 1124
playing techniques 1166	indents 1305
project templates 76	Insert mode 439
resetting 728, 730, 732	inserts 712
reverb 725, 727	instrument filters 437
rhythm dots 209	instrument names 1288, 1290

deleting (continued)	depth
instrument transpositions 180, 1292	audio 709
instruments 125, 134, 144	nested slurs 1273
jazz articulations 1129	nested tuplets 1386
jump bar aliases 67	deselecting. See selecting
key commands 63, 64	design
Key Editor configurations 699	arrows 1170, 1171, 1174, 1186
layouts 176	fingerings 958
markers 392	grace note slashes 987
MIDI points 661	lines 1170, 1171, 1174, 1186
niente markings 928	noteheads 1034, 1037–1039
note spacing changes 499	slurs 1267, 1268, 1270
notehead brackets 1048	time signatures 1375, 1376
notes 440, 671, 793, 1041, 1045	designation
overlapping notes 255	strings. See string indicators
page numbers 1130	destination
page template overrides 633	exporting files 572
pages 633	instruments 902
parentheses 776, 784, 871, 910, 941, 944, 1048	notes 469, 471, 478, 967
pedal level changes 1147	détaché. See playing techniques. See also articulations
pedal lines 1147	detecting
pick-up bars 440	grace notes 91
pitch mappings 469	inversions 319
playback overrides 673	strings 374
playback techniques 761, 771	tuplets 91
players 125, 166, 167, 169, 172	detuned fretted instruments 154, 158
projects 68	devices
rests 255, 793, 1254, 1256	audio 57, 263, 264, 530
retakes 1147	diagonal
rhythm dots 1041, 1043, 1045	accidental stacking 778
rhythmic feel change 540	chord symbols 853, 867
scoops 1124	lines 375, 840, 1096, 1125
staff labels 1288, 1290	diagrams
staff spacing changes 610	chords. See chord diagrams
staves 590	harp pedaling. See harp pedaling. See also harp
stem direction changes 1059	pedal diagrams
stop positions 442	dialogs 26
string indicators 975	diamond noteheads 1035, 1036, 1038, 1160
strings 151	accidentals 1065
system breaks 616, 619	harmonics 1063, 1066, 1068, 1069
system indents 1305	percussion 1399, 1402
tapping 1124	resetting 1039
templates 699	diddle 219, 254, 1377, 1386
tempo marks 661	playback 1383
ties 453, 841, 842, 844, 1350, 1351, 1413	dimensions
time 439, 440, 793–795	frames 37
time signatures 443	page size 578
titles 595	paper size 578
tre corde 1158	diminished. See augmented. See also intervals
tremolos 1381	diminuendo. See gradual dynamics
trill intervals 1082	dips 1118
tuplets 1388	inputting 353
velocity changes 677	intervals 1123
videos 189	moving 501
voices 1422	popover 335
delta 694, 695, 697	direction
demo projects 68	
denominators	arpeggio signs 1089, 1090
	audio. See panning
styles 1367, 1369	beams 826, 827, 836
time signatures 1359	fanned beams 840
dense chords	glissando lines 1040
accidental stacking 779	grace notes 985
depressed keys 202	gradual dynamics 918, 925–927, 935

direction (continued)	distribution
guitar bends 423	bars per system 613
guitar pre-bends 1110	beats in bars 842
hairpins 918, 925–927	dynamics 920
lines 1187	staves per frame 588
panning 709	systems per frame 613
paper orientation 578	values 693
partial beams 836	velocity 693
playback techniques 770, 771	dives 1103, 1108, 1118
rhythm slashes 1246	handles 1114, 1116
slur curvature 1270, 1271	inputting 346, 348–350
stems 1055, 1057–1059	moving 501
string shift indicators 972, 1040	popover 335
tie curvature 1345, 1346	pre-dives. See guitar pre-bends
transposing 456, 457	vibrato bar. See vibrato bar. See also guitar bends
disabling. See enabling. See also deactivating	dividers. See system dividers
disclosure arrows 41	
	dividing. See splitting
Expression Maps dialog 745	divisi 626, 1307
Properties panel 37	brackets 846, 847, 849, 850, 1174, 1307
disconnecting. See unlinking	condensing 626, 1298, 1307
display options 28, 39	fonts 1296
date 642	hiding empty staves 590, 591
frames 583, 645	hiding staff labels 1288
image resolution 580	lengthening 448, 451
Key Editor 650	moving 448, 451
language 55	paragraph styles 1296
layouts 32	playback 530, 531, 554
music area 33, 40, 49	shortening 448, 451
pages 583	signposts 438
panels 36, 43	staff labels 1288, 1298
percussion editor 663	staff size 602
piano roll 650, 661	staff spacing 588
playback 543	staves 590, 591
print preview 35	DJ-EQ 705, 711
project window 32	djembe. See unpitched percussion
tabs 44	documentation 15, 68
time 31, 543, 642	doits. See jazz articulations
transport 31	dolce. See dynamic modifiers
zones 36	dorian
distance bar numbers 814	chord symbols 316, 478, 866 scales 471
beams 839	DoricoBeep 262, 507, 517 sound 518
braces 849	
brackets 849, 851 breath marks 994	dots
	barlines. See repeat barlines
chord diagrams 880 fermatas 994	chord diagrams 875, 876, 885
flow headings 599	guitar tapping 1119 Keyboard panel 202
hyphens 1026, 1027	rhythm. See rhythm dots. See also dotted notes
instrument change labels 136 instruments 713, 715, 716, 718, 720, 722, 723, 725	dotted
	beat units 292
lyrics 1016, 1020, 1026, 1027, 1334	dynamics 903 hairpins 920
margins 585, 598–600	•
noteheads 833	lines. See dotted lines
page edges 585, 600	noteheads 1037
panning 713, 715, 716, 718, 720, 722, 723, 725	notes. See dotted notes
reverb 713, 715, 716, 718, 720, 722, 723, 725	octave lines 897
staff labels 1289	rests 192, 730
staves. See staff spacing	slurs 1267–1269
stems 833	tempo marks 1323, 1325
system indents 1289, 1305	ties 1343–1345 tramples 403, 405
text borders 739, 1337	tremolos 403, 405
Distortion 705, 711	

dotted lines 501	drum kits. See percussion kits. See also drum sets
attachment 426, 448, 501	Drum Pads panel 205
crosshairs 503	key commands 43
lines 1174	drum rolls. See tremolos
octave lines 897	drum sets 140, 1397
stop positions 442	adding 131
tempo marks 288, 1323–1325	caret 233
dotted notes 225, 841	defining kits as 145
consolidation 1043, 1418	exporting 149
double 225	filtering instruments 140
forcing 257, 841	hits 1236, 1239, 1241
inputting 192, 225	importing 150
moving dots 1044	inputting notes 93, 233, 236, 665
note grouping 22, 841, 844, 1240	laissez vibrer ties 1349
rhythm slashes 1240	naming 140
swing playback 537	noteheads 1403
tempo equations 1327	patterns 93
tremolos 403, 405	rhythm slashes 1236, 1239, 1241
triple 225	setting up 140, 236
voices 1418	stem direction 145
double 649	voices 145, 1413
accidentals 239, 276, 457, 460–463, 785	dry
barlines 296, 299, 301, 799–801	reverb 712
bass. See instruments. See also transposing	DualFilter 705, 711
instruments	duplets. See tuplets
cadence. See ornaments	duplex printing 566, 577
dotted notes 22, 225, 841	booklets 576
note durations 255	duplicating
octaves 473	character styles 743
slashes 1302, 1377	copying. See copying
stems 781, 1416. <i>See also</i> voices values 649	dynamics 445, 682
whole notes 14, 196, 219, 222, 227, 231–233, 237,	expression maps 759 flows 168
247, 254–256	items 445–447
doubling instruments 121	key signatures 1005
adding 131	MIDI 660, 688
inputting notes 219, 222	notes 445–447, 670
instrument changes. <i>See</i> instrument changes	paragraph styles 741
moving 133	percussion maps 767
showing staves 49	pitches 468, 478
down arpeggio signs. <i>See</i> arpeggio signs	playback templates 549
down bow. <i>See</i> playing techniques	players 123
down-stem voices. See voices	playing techniques 1169
downloads 68	points 660, 682, 688
dpi 580	rehearsal marks 1304
draft staves. See sketch staves	repeat endings 1304
dragging 39, 208, 430, 455, 527, 659. See also drawing	switches 760
drags. See grace notes	tempo marks 445, 660, 1304
drawing 39, 208, 430, 455, 527, 652, 659	time signatures 1362
crosshairs 503	duration 14, 419, 1167, 1249
dynamics 679	accidentals 783, 784
highlights 253, 445, 448, 451, 455	arpeggio signs 1093, 1094
marquee selections 659, 698	articulations 787, 792
MIDI 686	audio 98, 99
mouse editing 208	bars 23, 440, 793
notes 664. See also note input	changing 254, 255, 257, 419, 841
rhythmic grid 212, 253, 445, 448, 451, 455	count-in for MIDI recording 263
scrubbing 527	display 31, 540, 638, 641
tempo 517, 689	dynamics 310, 419, 918, 925, 930, 931
velocity 676	exporting 105, 106, 638, 641
drop frame timecodes 1206	fermatas 421
drops. See jazz articulations	figured bass 419, 942, 943, 947
drum editor. See percussion editor	flows 530, 641, 793-795

duration (continued)	dynamics (continued)
forcing 257, 841	changing 421, 681, 908
glissando lines 1101	colors 54
grace notes 990	combined 903
horizontal lines 1183	continuation lines 903, 918
input settings 209, 310	continuous hairpins 921
jazz articulations 1127	conventions 904
lines. See duration lines	copying 445, 447, 448, 660, 682, 931
locking 459	crescendo. See gradual dynamics
notated 671	crosshairs 503
notes 23, 196, 254–256, 664, 665, 667, 671	deleting 443
pedal lines 1158	diminuendo. See gradual dynamics
percussion 665	duration 310
played 671	dynamic curve 934
playing techniques 358, 362, 364, 419, 1167, 1172	editing 908
pre-roll 529	editor. See Dynamics editor. See also Velocity
project 638	editor
repeat endings 1212	endpoint positions 907
rests 241, 254, 257, 841, 1249	erased backgrounds 911, 912
slurs 1285	exporting 101
statistics 105	expression maps 752
terminology 14	expressive text. See dynamic modifiers
tokens 638, 641	filters 417
tremolos 1383, 1384	flared hairpins 922, 923
vibrato bar lines 1118	font styles 933
duration before pitch note input 219	force 903
duration lines 1166, 1174	gradual. See gradual dynamics
appearance 1170	grand staff instruments 302, 307, 913
figured bass 942, 943, 947	grouping 930, 931
handles 1164, 1167, 1168	hairpins. See gradual dynamics
hiding 419, 1167, 1169, 1170	handles 419, 918, 919, 925, 926
inputting 358, 362, 364	hiding 909, 911, 916
playing techniques 1167, 1171	humanize 677, 935, 936
showing 419, 1167, 1169, 1170	hyphens 304, 909, 920
string indicators 372, 373, 974, 1166	immediate 903
dyads. See chords. See also chord symbols	inputting 302, 304, 307, 309, 679, 682
dynamic curve 934	intensity 421, 681, 908
dynamic glyphs 903	length 419, 501, 681, 915, 919
font styles 933	levels. See dynamic levels
dynamic levels 302, 304, 307, 309, 908, 934	linking 447, 448, 931–933
changing 681, 908	messa di voce. See messa di voce
playback 677, 934, 936	modifiers. See dynamic modifiers
resetting 661, 677, 681, 935–937	moving 448, 451, 465, 467, 501, 681, 904, 906, 916
dynamic modifiers 903, 914, 1313, 1323	917, 919, 926, 930–932
appearance 915, 916	muting in playback 211, 533
centered 916	niente. See niente
font styles 933	non-sustaining instruments 934
hairpins 916	overriding 679, 682
inputting 302, 304, 307, 309, 914	padding 912
moving 917	panel 307
poco a poco 923	parentheses 910
possibile 915	percussion kits 1405
showing 909	phrases 302, 304, 930, 935–937
subito 915, 916	placement 904
dynamics 903, 914	playback 211, 530, 531, 534, 677, 684, 752, 770,
abbreviating 915, 924	771, 913, 934, 936
alignment 905–907, 930–932	poco a poco 916, 923
appearance 911	popover 302, 304
articulations 935	position 904, 905
backgrounds 911	possibile 915
bar repeats 1225	repeats 534
barlines 906, 907, 911	reversing 465. See also retrograde
brackets 910	rfz 911

dynamics (continued)	editing (continued)
rotating 467	inputting vs. editing 206
selecting 413, 417	items 421, 503, 646
separators 304, 909	lyric text 1023–1025
sfz 911	mouse editing 208
showing 909	mouse input 207
signposts 438, 909	moving. See moving
size 422, 933	note durations 255, 419
spacing 925	notes 192
staff-relative placement 423	redoing 426, 427
subito 915, 916	rhythmic grid 212, 213
sustaining instruments 934	undoing 426, 427
swells. See messa di voce	editorial
syllables 920	accidentals 777
tempo marks 1316	chord symbols 870, 871
text 920, 933	dynamics 910
ties 302, 307, 448, 904	figured bass 941, 944
tracks. See Dynamics editor. See also Velocity	notes 1047, 1048
editor	slurs 1267, 1268
types 304, 903	ties 1343
ungrouping 931	editors 650
unlinking 447, 448, 933	adding 658, 699
velocity 674, 676, 908, 934, 936 voice-specific 302, 307, 677, 679, 913	closing 658 configurations 698, 699
volume 908, 934, 936	drum. See percussion editor
Dynamics editor 302, 674, 677, 903, 931	dynamics. See Dynamics editor
adding 658	histogram. See Histogram tool
closing 658	Key Editor. See Key Editor
constant points 680	MIDI CC. See MIDI CC editor. See also MIDI Pitch
copying points 660	Bend editor
deleting points 661	percussion. See percussion editor
height 656, 657	piano roll. See piano roll editor
hiding 677	pitch bends. See MIDI Pitch Bend editor. See also
inputting points 679	MIDI CC editor
linear points 680	playing techniques. See Playing Techniques editor
moving points 681	saving 698
selecting points 659	scrolling 657
showing 677	templates 698, 699
dynamics lanes. See Dynamics editor	tempo. See Tempo editor
Dynamics panel 307, 309	text 379
	velocity. See Velocity editor
E	EDO 1009
C	effects channels. See FX channels
East Asian elision slurs 1031	eighth notes 14, 196, 219, 254, 255
edges	beaming 822, 842
frames 634, 636	beats 295
margins 598	chords 247
pages 598	glissando lines 1101
Edit Chord Diagram dialog 885	grace notes 244
Edit Chord Symbol Appearance dialog 854	hiding 1041, 1060
Edit Chord Symbol Component dialog 856	Insert mode 232
Edit Endpoint Configurations dialog 558	metronome marks 289
Edit Flow Heading dialog 636	percussion 233, 665
Edit Font Styles dialog 737	pick-up bars 279, 283, 285
Edit Instrument Names dialog 180	playback 732, 752
Edit Percussion Kit dialog 140	quantization 91
Edit Playback Techniques dialog 771	rests 241, 1249
Edit Space Template dialog 723	rhythm dots 225, 841, 842, 844, 1043
Edit Stage Template dialog 716	rhythmic grid 212, 213
editing 206, 418, 421	showing 841, 1041, 1060 splitting notes 256, 841, 842, 844
area 140, 1406	swing playback 290, 537
flow headings 635, 636	tablature 237
handles 503	tabiatui C ZJ/

eighth notes (continued)	enabling <i>(continued)</i>
tempo equations 1327	tracks 86
ties 841, 842, 844	VST instruments 513
tremolos 403, 405, 1377	Write mode double-click 42, 191
tuplets 249, 252	enclosures
voices 227	bar numbers 809
elbowed beams. See centered beams	fingerings 958
electric guitar. See fretted instruments	layout names 982
electronics 110	lines 1192
glissando lines 1100	rehearsal marks 1196
elision slurs 1031	text 739, 1192, 1335–1337
inputting 382, 384	end barlines 801
size 1031	end repeat barlines 296, 799, 800
width 1016	counts. See repeat counts
empty bars	inputting 294, 296, 299, 301
deleting 795	playthroughs 534, 536, 1210, 1222
hiding 590, 1256, 1258	repeat endings 1210
inputting 297, 298	endings
multi-bar rests 1257, 1258	additional 399, 401
rests. See bar rests	arpeggio signs 1089–1091
showing 590, 1256, 1258	playthroughs 1210
statistics 105	repeat. See repeat endings
width 796	endpoint positions
empty pages	arpeggio signs 1092
deleting 25, 633, 1329	dynamics 907
staff spacing changes 608	lines 1177, 1183, 1185
empty staves 590	octave lines 898, 899
after flows 592	pedal lines 1148
hiding 590, 591, 605	repeat endings 1214
showing 590, 591, 605	slurs 791, 1262–1265, 1278, 1280 staff lines 1263
system dividers 1302	
tacets 623	ties 1352, 1354
empty voices 1422	trills 1073
enabling 217	tuplet brackets 1393
auto-save 104	Endpoint Setup dialog 552
channel effects 705, 711	endpoints 552
chord symbol playback 520	changing 507, 554, 555
click during playback 525	configurations 556, 557
double-click mode switching 42, 191	custom 558
dynamics linking 447, 448	deleting 558
EQ 705 independent voice playback 530, 531	expression maps 507, 552, 555
inserts 711	glissando lines 1096, 1099 instruments 554
instrument changes 135 instrument filters 436	moving 419, 448, 501 notehead brackets 1052
line collision avoidance 1179	percussion maps 507, 552, 555
Markdown 74	plug-ins 543
MIDI dovings 305	renaming 558
MIDI devices 265	saving 558
MIDI import 86	setup 552
MIDI thru 212	voices 554
mouse editing 208	Engrave mode 19, 489
mouse input 208	frame breaks 620
partial harp pedaling 1139	key commands 490
playback 527	make into frame 621
playhead following 524	make into system 618
plug-ins 513	moving items 501
sampled trills in playback 1086	note spacing 494
slur collision avoidance 1265	page breaks. See frame breaks
slurs linking 447	panels 36, 489, 491, 646
swing playback 290, 538–540	percentages 493
system track 416	playhead 524
text collision avoidance 1334	selecting items 411, 413, 414, 428, 490

Engrave mode (continued)	events
staff spacing 604	markers 519
switching 42, 489	exchanging. See switching
system breaks 617	excluding 119
toolbox 490	chord diagrams 881
engraving options	flows from layouts 119, 173
chord symbols 853	pauses from playback 997
engraving tools. See properties. See also default	playback 533
settings	players from flows 119, 169
enharmonic spelling	players from layouts 119, 172
accidentals 240, 460–463	repeats from playback 535
chord symbols 155, 853, 865, 866	slash voices from playback 1238
key signatures 1006, 1007	tempo changes from playback 528, 997
MIDI 84, 258	exclusion groups
modes 866	expression maps 745
notes 240, 460–463	exercises. See flows
pitch mappings 469, 478	expanding 419
respelling 202, 460–463	barlines 805–807
ensemble picker 112	bars 297, 299, 440, 441
ensembles 108, 126	caesuras 999
adding 112, 126	caret 218, 231
brackets 846, 847, 1295	duration 254, 255, 419, 997, 998
custom 112, 114, 127	editors 656, 657
divisi 1307	fermatas 997, 998
filters 434	flow headings 598, 599
groups. See player groups	gaps 998, 999
language 112	grace notes 985
player order 123	instruments 715, 716, 718
project templates 70, 76	items 419
saving 114, 127	Key Editor 656, 657
staff grouping 847, 1295	margins 585, 598–600
entrance	menus 41
instrument changes 136, 139	notes 254, 255, 985, 997, 998, 1388
labels 137–139	options 41
envelopes	pages 584
dynamics 677, 681	panning 715, 716, 718
EnvelopeShaper 705, 711	percussion grids 149
equal division of the octave 1009	ranges 151
equalization 705	selections 410, 412, 413
changing 711	slurs 1262
equations	spacing 587, 588, 598
tempo marks 290, 292, 1327	stage templates 715, 716, 718
erased backgrounds 1338	staves 149, 587, 588, 607, 1406
bar numbers 809	strings 151
bar repeats 1224	systems 587, 588, 597, 607
chord symbols 853, 868, 869	tuplets 1388
dynamics 911, 912	explicit rests 1249, 1250
fingerings 966	colors 1253
harp pedaling 1138	deleting 1254
lines 1193, 1194	hiding 1254
padding 739, 869, 912, 1138, 1163, 1194, 1337,	implicit rests 1252
1412	showing 1254
percussion legends 1411, 1412	exploding 218, 231
playing techniques 1162, 1163	chords 231
staff lines 868, 911, 956, 966, 1162, 1193, 1338,	MIDI import 87
1411	note input 218, 231
string indicators 974	exponential hairpins. See flared hairpins
text 739, 1162, 1194, 1337, 1338	Export Audio dialog 99
erasing. See deleting	Export File Names dialog 572
espressivo. See dynamic modifiers	Export Flows dialog 79
even staff spacing 588	Export MIDI dialog 94
event display. See track overview	Export MusicXML dialog 83
	Export Tempo Track dialog 97

exporting 77	expression maps (continued)
annotations 581	file format 744, 763
arrangements 575	filters 745
audio 98, 99	hiding playing techniques 1163
borders 581	importing 762
color graphics 580	legato 752
comments 486, 581	MIDI 935
crop marks 581	mutual exclusion groups 754, 759, 761
date 581	order 745
dynamics 101	pitch 745, 759
ensembles 76, 114	playback techniques 745, 756, 760
expression maps 763	playing techniques 770, 1163
file names 572	resetting 755
FLAC files 98, 99	switches 749, 757, 760
flows 79, 568, 570	transpose 746, 750, 752
font styles 737	trills 1085
fretted instrument tunings 154	volume 935
key commands 58	Expression Maps dialog 745
Key Editor configurations 698	expressive text. See dynamic modifiers
layouts 570	extended techniques noteheads 1034
lyrics 1015 markers 101	
	extending. See expanding
MIDI 94	extension lines
monochrome graphics 580	lyrics 384, 1012, 1026
MP3 files 98, 99	trills 1075–1077
MusicXML files 82, 83, 1215	extra staves 1300
note colors 581	condensing 1300
options 563	divisi. See divisi
output format 570	hiding 590, 591
page ranges 568, 575	moving 448, 451
paragraph styles 739	ossia staves. See ossia staves
path 572	showing 590, 591
PDF 570, 571	signposts 438, 1300
percussion kits 149	ties 243
percussion maps 768	extracts. See flows
playback templates 551	
players 79	F
playing techniques 101	•
PNG 570, 571	F clef. See clefs
rehearsal marks 101	facing pages 630, 631
repeats 534	factory default
signposts 581	playback templates 544
space templates 726	space templates 721
stage templates 720	stage templates 713
statistics 106	faders 700, 701, 703
stems 98, 99	moving 708
SVG 570, 571	resetting 708
tempo marks 101	fallback
tempo tracks 97	music font styles 737
text 101	playback techniques 771
TIFF 570, 571	playback templates 546
time 581	reverb 722, 723
voice colors 581	falls. See jazz articulations
watermarks 581	false harmonic. See pinch harmonics
WAV files 98, 99	families
expression maps 744, 745	fonts 72, 743
actions 750, 760	instruments. See instrument families
conditions 751, 760	fanned beams 840
creating 759–761	direction 840
dialog 745, 756	far send 722, 723
dynamics 752	fast-forwarding 523, 527, 540
endpoints 507, 552, 555–557	feathered beams. See fanned beams
exporting 763	and a second second

feedback	figured bass (continued)
comments. See comments	rows 945
fermatas 991, 992	showing 385, 939
appearance 421	signposts 385, 438, 938, 939, 948
barlines 996	simplifying 949
bowing marks 1165	size 949
breath marks 994	slashes 387
caesuras 994	staff-relative placement 946
changing 994	staves 385
colors 54	suspensions 387, 942
crosshairs 503	transposing 456, 458
Curlew marks 994	vertical position 939
deleting 443, 995	file formats 579
duration 421, 992, 997, 998	audio 98, 99
gradual tempo changes 997	backups 104
hiding 995	CSV 101
inputting 328–331	expression maps 744, 763
linking 994, 995	graphics files 579
moving 448, 501, 996	MIDI 84
multiple at same position 994	MusicXML 81
number per staff 995	PDF 579
overrides 994	percussion maps 768
placement 994	playback templates 543
playback 997, 998	videos 185
playing techniques 1165	file names 572
position 994	ingredients 572
showing 995	recipes 572
single staves 994	setting 572 tokens 638
stems 994 types 421, 992, 994	files 77
voices 995	different Dorico versions 72
figured bass 938, 942	exporting 77, 101, 570–572
accidentals 389	importing 77
appearance 948, 950, 951	missing fonts 72
brackets 387, 941, 944	opening 71
crosshairs 503	videos 187
deleting 443	filled noteheads 1034
duration 419, 942, 943, 947	fills 233, 244, 245. See also grace notes
fixing 950	films. See videos
font 948, 949	filters 417, 433
global 385	deselect 418
grace notes 943, 947	drums 140
handles 419, 942, 945, 947	dynamics 417
hiding 939	effects 705, 711, 712
hold lines 942	ensembles 112, 126, 127
input options 950, 951	equalization 705, 711, 712
inputting 385, 387, 389	expression maps 745
instruments 385	frequencies 705, 711, 712
inverting 946	harp pedaling 417
length 419, 501, 942, 943, 945, 947	Histogram tool 695
local 385, 938	inserts 705, 711, 712
moving 448, 501, 942, 943, 945, 947	instruments 110, 112, 433. See also instrument
navigation during input 389	filters
octaves 949	Key Editor 695
parentheses 387, 941, 944	key switches 90
pitches 455	lyrics 417, 1015, 1016
placement 945, 946	mixer 705, 707, 711, 712
players 385, 939	notes 417
popover 387	options 728, 730, 732
position 945	percussion 140
resetting 951	percussion maps 764
resolutions 385, 387, 942, 947	pitch 417
rests 385, 938, 940, 948	properties 646

filters (continued)	fingering (continued)
select 418	showing 959, 962
staves. See instrument filters	size 887, 957, 960
stem direction 417	slides. <i>See</i> fingering slides
tempo marks 417	slurs 957
text items 417	staff-relative placement 955
voices 417, 652, 695	string shift indicators 971, 972
final barlines 296, 799–801	strings 1040
end of systems 801	substitution 953, 954
inputting 294, 296, 299, 301, 801	tapping. See tapping
number of times played 536, 1210	thumb letter 882, 883, 885
repeat barlines 801	types 270, 970
final tempo 1325	underlines 958
Finale music fonts 734, 736	valved brass instruments 970
Find Tempo dialog 393	fingering slides 967
important markers 1205	deleting 969
finding. See searching	handles 967, 968
fine	hiding 969
barlines 801	length 969
d.c. al 1216	moving 501, 968
font 1217	resetting 968
hiding 1220	showing 969
inputting 402, 403	finials. See caret. See also annotations
sections 1216	first and second endings. See repeat endings
showing 1220	first page templates 631
size 1217	assigning to pages 594
finger tapping. See tapping	formatting 631
fingering 952	page numbers 1131
alignment 954	first steps 68
appearance 887, 958, 960, 961	first systems
arpeggio signs 966	indents 1305
backgrounds 966	page numbers 1131
borders 958	staff labels 1288
brackets 269, 270, 961, 962, 964	fit to paper 579. See also staff size
cautionary 961	five-line staff 1300
changing 883, 885, 954	noteheads 1401, 1403
chord diagrams 875, 876, 882, 883, 885	percussion kits 140, 1406, 1407
circles 958	percussion legends 1408
deleting 959	fixed tempo mode 528
design 958	fixing
enclosures 958	bars 613, 621
erased backgrounds 966	figured bass 950
font 887, 960, 961	frames 621
font styles 961	layouts 615
fretted instruments 962. See also tapping	note durations 243, 255, 257, 841
grace notes 957	pages 613, 621
hammer-ons. See hammer-ons	systems 613, 618
handles 954	FLAC files
hiding 882, 959, 962	exporting 98, 99
horn branch indicators 971	flageolet. See harmonics
inputting 269, 270	flags
inside the staff 956	above staves. See signposts
inverting 955	hiding 822, 1060
italics 961	markers. See markers
moving 501, 882, 965	notes 822, 824, 825, 1055
MusicXML import 973	resetting 825
parentheses 269, 270, 961, 962	showing 824, 1060
placement 952, 956, 964, 965	stems 822, 824, 825, 1055
popover 269, 270	flams. See grace notes. See also playing technique-
position 882, 952	specific noteheads
pull-offs. See hammer-ons	Flanger 705, 711
resetting 425	flared hairpins 922
separators 970	size 923

flat	flows (continued)
accidentals. See accidentals	going to 429
beams 828	headings. See flow headings
slurs 1270	hiding 173
flipping 423, 1057, 1271, 1346. See also inverting	importing 77, 78, 81, 84
flips. See jazz ornaments	indents 500, 1305
floor tom. See unpitched percussion	instrument change labels 138
flow cards 119	justification 597
flow headings 74, 630, 631, 634–636, 739	key signatures 1000
changing 635, 636	layouts 119
chord diagrams 879–881	lyricist 74, 980
default 634	merging 77, 84, 593
dialog 636	MIDI import 84
editing 635, 636	moving 621
exporting 101	multiple on pages 593
flow titles 596	MusicXML files 83
fonts 634	names 74, 101, 183, 184, 572, 978
frames 634	navigation 429
gaps 598, 599, 880	notation options 730
hiding 68, 595	numbers. <i>See</i> flow numbers opening 507
margins 598, 599, 880	, ,
moving 599, 608	order 74, 169
page numbers 596, 1131 page templates 594	page numbers 596, 641, 642 page templates 594
paragraph styles 634	panel 118
removing overrides 633	PDF files 570, 572
resetting 635	playback 529, 530, 554
showing 68, 595	players 119, 169
size 739	pre-roll 529
titles 596	printing 568
Flow Import Options dialog 78	project templates 76
flow names 74, 183, 184, 572	rehearsal marks 1197
adding 978	removing from layouts 173
flow numbers 169	removing players 169
changing 74, 169	selecting 410
deleting 635, 636	showing 173
flow headings 634–636	sorting 169
hiding 635, 636	splitting 487, 593
tokens 641	staff labels 1288
flow titles 74, 183, 184	staff size 602
adding 978	statistics 105
exporting 101	switching 507
flows 20, 119, 167	system dividers 1302
accidental duration rules 783, 784	systems 597
adding 168, 487	tacets 623, 624
adding players 169	tempo tracks 95
adding to layouts 173	timecodes 118
attacca 530	titles 68, 74, 101, 183, 184, 596, 631, 634, 978
audio 98, 99	tokens 640, 641
cards 118	transposing 456, 457
chord diagrams 879–881	trimming 295, 299, 301, 795
comments 482, 485	videos 118, 185, 187
composer 74, 979	voices 554
copying 77, 168	Flows panel 107, 118
copyright 74, 980	flutter tangua. See playing tashniques
default settings 730	flutter-tongue. See playing techniques
deleting 170 deleting empty bars 795	flz. See playing techniques folders
duplicating 168	backups 104
duration 641, 793–795	export path 572
end barlines 801	follow playhead 524
exporting 79, 568	scrubbing 527
gaps 530	follow tempo mode 528
3-6-00	. S. S. Compo mode SES

font styles 736, 737, 739, 1329	force (continued)
bar numbers. See paragraph styles	staff visibility 590
bar repeats 1226, 1229	systems 618
borders 739, 982	force duration 192, 257
changing 737, 743	activating 192
character styles 742	inputting notes with 257
chord diagrams 887	inputting rests with 241, 257
chord symbols 858	foreground colors 379, 739, 742
composer 979	formats. See file formats
condensing 739, 1296, 1298	formatting 583
copyright 980	altered unisons 782
default 743	arpeggio signs 1090, 1091
dialog 737	bar numbers 808, 811–813
divisi 1296	bar repeats 1229
dynamics 933	caps 1171, 1186
exporting 737	chord diagrams 885, 887
family 743	chord symbols 854, 856
figured bass 948, 949	dynamics 920, 933
fingerings 887, 960, 961	file names 572
flow headings 634, 739	flow headings 635, 636
glyphs 734, 736, 933	fonts 737
importing 737	frames 492, 626
instrument change labels 139	front matter 978
instrument names 1296	glissando lines 1097
layout names 982	grace notes 985
line text 1189	gradual dynamics 920
lyricist 980	hairpins 920
lyrics 1010, 1022, 1023, 1025	handles 503
markers 1204	instrument change labels 137–139
missing fonts 72	layouts 586, 626–628
music 734, 736	lines 1170, 1171, 1186
notations 734, 736	lyrics 1022, 1023, 1025
notes 734, 736	markers 391, 1203, 1204
numbered bar regions 1229, 1232	niente hairpins 929
page numbers 1130	notehead brackets 1052, 1054
paragraph styles. <i>See</i> paragraph styles	noteheads 1038, 1039
PDF files 581	page formatting 612, 630
percussion kits 1297	page templates 630
player group labels 1295, 1296	pages 583, 626–628, 978
playing techniques 1164	pedal lines 1151–1153, 1155
rehearsal marks. See paragraph styles	player group labels 1295, 1296
repeat markers 1217	repeat markers 1217
resetting 737, 739	slurs 1268–1270, 1280, 1282
rhythm slashes 1229, 1243	staff labels 180, 1296
size 737, 739	systems 491, 626
staff labels 1296, 1297	tablature font 1312
string indicators 960, 974	tacets 623, 625
substitutes 737	tempo marks 1324–1326
SVG files 581	text 379, 381, 736, 739, 741-743, 1329, 1333
tablature 1312	ties 1343-1345, 1352, 1354
tasto solo 949	time signatures 1376
tempo marks 1317	timecodes 1204
time signatures 1375, 1376	tuplets 1388, 1394
timecodes 1204	Formatting panel 489, 491
titles 631, 634, 739, 978	forte. See dynamics
verse numbers 1022, 1023	forum 68
force	forwards. See backwards
articulations 787	forzando. See dynamics
duration. See force duration	fps 189
dynamics 903	fractions
figured bass appearance 950, 951	arpeggio signs 1093, 1094
frames 621	chord symbols 853
horizontal 1192, 1393	figured bass 387

fractions (continued)	frames (continued)
fingerings 954	running headers 596
glissando lines 1101	selecting 490
guitar bends 1109	size 37
tempo marks 287, 291, 393, 1319	statistics 105
time signatures 277, 1359, 1360	staves 588, 597
tremolos 1383, 1384	systems 588, 597, 613
frame breaks 492, 583, 612, 620	timecodes 1206
bar repeats 621	tokens 638
barlines 616, 802	transport 31, 540
brackets 802	frequency
clefs 889	auto-save 103
copying to other layouts 626–628	bar numbers 808, 1233
deleting 616, 623	bar repeat counts 1227
divisi 1307	harmonics 1062
first page on the left 593	numbered bar region counts 1233
glissando lines 1099	pitches in playback 530
hiding staves 590	slash region counts 1244
inserting 614, 615, 621	timecodes 1208
key signatures 1005, 1006	trills 1076
lines 1195	Fretboard panel 204
moving 616	key commands 43
octave lines 900	frets 150, 1308
playing techniques 1168	adding 151, 237, 885
repeat endings 1213	brackets. See bracketed noteheads
signposts 438, 622	capos. See capos
slurs 1265	changing 1310
staff labels 1290	chord diagrams. See chord diagrams
staff size 602	deleting 151, 885
staff spacing 587	font styles 887, 1312
staff visibility 590	intervals 151
ties 1347	note input 204, 237
time signatures 1362	notes out of range 1310
frame chains	parentheses. See bracketed noteheads
music. See music frame chains	position 151
properties 629, 646–648	size 887, 1312
frame fullness indicator 493	spacing 151
frame rates 189	starting number 876, 885, 887
changing 185, 190	string number 1040
dialog 185	fretted instruments 150
drop frame timecodes 1206	adding 110, 131
non-drop frame timecodes 1206	arpeggio fingering 966
transport window 540, 543	capos. See capos
frames 636, 1335	changing tuning 110, 132, 151, 153
bars 105	chord diagrams 875, 877
breaks 583, 620	chord symbols 155, 158, 865
chord diagrams 879–881	detuned 154, 158
constraints 598	exporting tunings 154
copying 630, 631	fingerings 269, 962
dashed 634, 879 dimensions 37	frets 151
	glissando lines 1100, 1101 guitar bends 1103
duration 31, 540, 1206 editing 490	guitar techniques. <i>See</i> guitar techniques
flow headings 596, 598, 599, 634	harmonics 1062–1064, 1066
fullness 493	importing tunings 154
gaps 598–600	note input 204
hiding 425	open pitches 153
making from selection 621	panning. See stage templates
margins 598, 600	pinch harmonics 1069
measures 105	popover 272
moving 598, 599	reverb. See space templates
padding 583, 600	slides 967, 969, 1100, 1101
resetting 633	string indicators. See string indicators

fretted instruments (continued) strings 150, 151, 153, 154, 1040 tablature. See tablature thumbs 882, 883, 885 transposition 130, 151, 156–158 tuning 132, 150, 151, 154, 155, 158, 865 front matter 978	gaps (continued) barlines 868, 911, 1162, 1163, 1193, 1338, 1411, 1412 bars 1221, 1305 beams 838, 839 breath marks 997 caesuras 994, 997, 999
composer 631 copyright 631 lyricist 631 page templates 630, 631 performance instructions 630, 631 player list 638 title 630, 631	capos 151, 155, 156, 158, 159, 162, 853 chord diagrams 880 chord symbols 853, 868, 869, 874 clefs 889, 891 codas 500, 1220, 1221, 1305 dynamics 904, 909, 912 elision slurs 1031
fugues analysis 54, 1174 playback 936, 937 voices 227 full score layouts. <i>See</i> layouts	erased backgrounds. <i>See</i> erased backgrounds extender lines 1016, 1026 fermatas 997, 998 fingering slides 967 flow headings 598, 599
full screen 48 full stop. See period fullness frames 493	frames 598–600 galley view 607 H-bars 1258, 1259 hairpins 919
pages 493, 587, 588, 597, 601, 602 systems 493 fullness threshold horizontal justification 597	hyphens 1016, 1026, 1027 instrument changes 136 lines 1179, 1191 lyrics 1016, 1026, 1027
vertical justification 588, 605 functions key commands 61 removing key commands 63	margins 598 multi-bar rests 1258, 1259 notes. See note spacing ossia staves 587, 605
fundamental harmonics 1062 string pitches 151 funk noteheads 1037, 1038	paragraphs 739, 741 parentheses 874 pauses 997–999 pedal lines 1149, 1150
FX channels 703–705 adding 710 deleting 710 inserts 711 mixer 700, 701 names 710 reverb 712 volume 708	percussion legends 1411, 1412 playback 530, 997–999 playing techniques 1162, 1163 quantization 91 removing 255 rests 839 slurs 1264, 1265, 1269, 1273 staff labels 1289 staves 149, 500, 587, 588, 604, 605, 1216, 1305
G	stemlets 839 stems 833
G clef. See clefs galley view 39, 49 bar numbers 39, 811 dragging pages 430 flows 487 instrument changes 134	system indents 1289, 1305 systems 588, 1216 tacets 625 tempo marks 1326 text 739, 741, 742, 1162, 1191, 1333, 1334, 1337, 1338
instrument filters 434 instrument labels 49 staff labels 39 staff spacing 605, 607 gamelan. See instruments	ties 1345 time signatures 1372 trills 1083 Gate 705, 711 General MIDI 84, 90, 744, 758
gaps 501, 598 around items. <i>See</i> erased backgrounds articulations 788, 791 auxiliary notes 1083 bar numbers 814	Generate Chord Symbols From Selection dialog 319 generated trills 1085, 1086 playback 1086 generating chord symbols 319 harp pedaling 371

ghost notes 1047, 1048	Gould
guitar. See dead notes. See also bracketed	accidentals 276, 1009
noteheads	grace notes 233, 244, 245, 983
gli altri. See divisi	appearance 989
glissando lines 1096, 1125, 1174	arpeggio signs 1092
accidentals 1096	barlines 986
angles 1096, 1099	beams 989
changing 421	caret 214, 244
deleting 443	chords 244, 245, 247
direction 1040	clefs 890
duration 1101	default settings 983
endpoints 1096, 1099	deleting 443, 985
filter 417	duration 244, 990
formatting 1097	figured bass 943, 947
frame breaks 1099	fingerings 957
guitar bends. <i>See</i> guitar bends handles 1099	glissando lines 341, 342
	guitar bends 345, 346
harp pedaling 1100, 1101, 1133	hairpins 926
hiding 1098 inputting 332, 335, 341, 342, 1096	inputting 91, 192, 244, 985 inverting 464, 983
length 501, 1099	lines 1180
line styles 1097	messa di voce 926
moving 501, 1099	moving 448, 451, 465, 467, 985, 986
one note 1125	pedal lines 1148
panel 337, 342	percussion 245
playback 747, 1100, 1101, 1133	pitch 455
popover 335, 341	pitch mappings 469
segments 1099	placement 983
showing 1098	playback 529, 990
styles 1097	position 983, 986
system breaks 1099	quantization 91
text 1098	register 455
tie chains 1100, 1101	reversing 465. See also retrograde
types 335	rotating 467
global	scale mapping 471
chord symbols 310, 852	scrubbing 527
fermatas 991	size 422, 987
figured bass 385, 938	slashes 983, 987, 988
key commands 60	slurs 267, 983, 1262, 1263
note spacing 494–496 options 26	spacing 494, 495, 983 speed 990
pedal level 1145	stems 983, 987, 989
properties 629, 646–648	ties 243, 1348
glockenspiel. See instruments. See also transposing	transformations 463, 985
instruments	transposing 456
glyphs	trills 1085
accidentals 460–463	types 987
bracketed noteheads 1054	unscaling 985
chord symbols 856	voices 983
dynamics 933	gradient background 52
fonts 734, 736, 737, 933	gradual dynamics 903, 918
music symbols 378, 381, 639	abbreviating 924
pedal lines 1151	alignment 906, 907, 930–933
playing techniques 1160	angles 501, 919
substitute fonts 737	aperture 919
text 378, 381, 639	appearance 920, 922–924
trills 1071, 1072	barlines 907
go to. See navigation	centered text 916
Go To Bar dialog 430	consecutive 921, 925, 930, 935
Go To Page dialog 429	continuation lines 920
Go To Rehearsal Mark dialog 430	continuous hairpins 921
Golden Age music font 734, 736 gongs. <i>See</i> unpitched percussion	dashed 920 direction 304, 921, 925, 935
goriga, ace unpiteried percussion	un ecuon 304, 321, 323, 333

gradual dynamics <i>(continued)</i>	grand staff instruments (continued)
dotted 920, 924	centered beams 829, 832–834
duration 310, 419, 918, 925, 930, 931	chord symbols 862
end position 907, 919	cross-staff 832–835, 1059
flared hairpins 922, 923	dynamics 302, 307, 904, 913, 936, 937
font styles 933	hiding staves 590, 591, 605
grace notes 926	MIDI import 90
grouping 930, 931	MIDI recording 259
handles 419, 919	multi-bar rests 1257
hyphens 920	slurs 267
inputting 302, 304, 307, 309	split point 90
length 310, 419, 918, 924, 925, 930, 931	staff grouping 847
line style 920	staff spacing 605
linking 931–933	staves 588, 805
messa di voce 925, 926	stems 833, 1059
moving 448, 904, 906, 919, 925, 926, 930, 931	
niente. <i>See</i> niente	swing playback 539 ties 243
playback 934	tremolos 403, 405, 832, 835
poco a poco 916, 923	vertical justification 605
position 925	voices 214, 227, 936, 937, 1416
rotating 501, 919	graphical adjustments 501
spacing 925	graphics
start position 919	chord symbols 856
syllables 920	files. See graphics files
system breaks 919	graphics files 570, 579
tempo marks 1316	colors 580
ties 302, 307, 448	exporting 570–572
truncated 924, 925	file names 572
ungrouping 931	fonts 581
unlinking 933	formats 579
volume 934	image resolution 580
width 919	monochrome 580
gradual tempo changes 1085, 1314, 1323	graphs 696
barlines 1315	green notes
caesuras 997	Dynamics editor 677
continuation lines 1323–1325	tablature 1310
dashes 1326	grids
drawing 689	chord diagrams 879–882
exporting 101	gaps 149
fermatas 997	groups 148
final tempo 1325	Hub 68
formatting 1324–1326	percussion kits 147-149, 1297, 1406, 1407
gaps 1326	rhythmic 212, 213
hyphens 1324	staff labels 1288, 1291
inputting 287, 288, 291, 292, 691	staves 1297, 1406
length 419, 501	Groove Agent
lines 1323–1325	editing 515
moving 501	endpoints 515, 554
Play mode 517, 689	loading 513, 543, 549
poco a poco 1323	middle C 50
popover 288	MIDI trigger regions 408, 409, 559
position 1315	panning 713
style 1324, 1326	patterns 93, 559
syllables 1324	
	playback templates 543, 544, 549
Tempo editor 689	reverb 720
text 1316	space templates 720
thickness 1326	stage templates 713
trills 1087	groups
grand staff instruments 128	bar repeats 1229, 1230
barlines 805, 806	beams. See beam groups
beams 832–835, 1059	braces 845
braces 845	brackets 845
brackets 847	dynamics 930, 931

groups (continued)	guitar bends (continued)
guitar bends 1103, 1112	holds 1103, 1110, 1112, 1116
instruments. See instrument groups	inputting 335, 344–346
notes. See note grouping	intervals. See bend intervals
percussion kits 140, 147–149, 1297	length 501
players. <i>See</i> player groups	microtonal 347, 1107, 1109
playing techniques 1166, 1167, 1171, 1172	moving 501
rests. See note grouping	parentheses 1103
staff labels 1298	playback 1103
staff spacing 587, 605	popover 335, 345, 346
staves 805, 806	post-bends 347, 1107
tabs 47	pre-bends 1105
guide	releases 1103
bar numbers 49, 425, 811	runs 1103, 1112
instrument labels 49, 177, 178	segments 1112, 1116
lines 212, 503	shape 1112, 1116
page numbers 425, 1132	tablature 1309
guitar 1118	guitar post-bends 1107
adding 110, 112, 122, 131	bend intervals 1109
amp modeling 705, 711, 712	chords 1107
bends. <i>See</i> guitar bends	deleting 1112
capos. See capos	handles 1115
changing string for notes 1310	inputting 347
chord diagrams. See chord diagrams	microtonal 347, 1107
chord symbols. See chord symbols	moving 501, 1115
clefs 130, 895	shape 1115
dead notes 1122	guitar pre-bends 1105
dips 353, 1118	accidentals 1111
dives 348–350, 1108, 1114, 1116, 1118	bend intervals 1109
effects 515, 711	deleting 1112
fingerings 962	direction 1110
hammer-ons 355, 1120	handles 1114
harmonics 1062, 1064, 1066	inputting 346
lines 354, 355, 1103, 1108, 1112, 1114–1116, 1118	length 501, 1114
note input 237	moving 501, 1114
notes out of range 151, 1044	shape 1114
open pitches 153	guitar pre-dives. See guitar pre-bends
playback 520, 1103, 1108, 1118, 1122, 1238	guitar slides 1096
position in score 123–125	text 1098
pre-bends. See guitar pre-bends	guitar techniques 1118–1120, 1160
pre-dives. See guitar pre-bends	dead notes 1122
pull-offs 355, 1120	deleting 1124
scoops 351, 352, 1118	inputting 335, 344, 348–355, 357
score order 124	intervals 1123
slashes. See rhythm slashes	moving 501, 1123
slides 967	panel 337
string indicators. See string indicators	popover 335
strings 153	staff-relative placement 1123
strumming 966	•
tablature. <i>See</i> tablature	
tapping 357, 1119	Н
techniques. See guitar techniques	H-bars. See multi-bar rests
tuning 110, 130, 150, 151, 153	
vibrato bar. See vibrato bar	hairpins. See gradual dynamics
guitar bends 1103, 1108	half depressed pedal lines 1142, 1143, 1145, 1146
chords 1103, 1107	half notes 14, 196, 219, 254, 255
crosshairs 503	beats 295
	chords 247
deleting 443	glissando lines 1101
direction 423	hiding 1041, 1060
dives 1108	Insert mode 232
groups 1103, 1112	metronome marks 289
handles 1112, 1116	percussion 233, 665
hold lines 1110	pick-up bars 279, 283, 285

half notes (continued)	hammer-ons (continued)
quantization 91	popover 335
rests 241, 1249	slurs 1120
rhythm dots 225, 841, 842, 844, 1043	staff-relative placement 1123
rhythmic grid 212, 213	hand tool 39
showing 841, 1041, 1060	dragging pages 430
splitting notes 256, 841, 842, 844	hand-written fonts 734
tablature 237	handles
tempo equations 1327	arpeggio signs 1092
ties 841, 842, 844	beams 828
tremolos 403, 405, 1377	bend intervals 1112, 1114–1116
tuplets 249, 252	brackets 1054
voices 227	chord symbols 854, 856, 863
half-bar	duration 419
beam grouping 821, 842	dynamics 918, 919, 925, 926
cut common time 844	figured bass 942, 945, 947
note grouping 730, 841, 844	fingerings 954, 968
ties 730, 841, 844 half-diminished. <i>See</i> scales. <i>See also</i> intervals	glissando lines 1099 guitar bends 1112, 1114–1116
half-step trills 1078, 1085	hairpins 919, 925, 926
appearance 1083	jazz articulations 1127
hiding 1075, 1079	length 419
inputting 333, 337, 338	lines 1195
position 1084	lyrics 1017, 1020, 1026
showing 1075, 1079	MIDI trigger regions 559
half-steps 14, 775	moving 501, 926
accidentals 239, 775	note spacing 496, 498
bend intervals 1100, 1101, 1109, 1123	notehead brackets 1054
figured bass 389	numbered bar regions 1231
glissando lines 1096, 1100, 1101	octave lines 900
harp pedaling 1133	pedal lines 1143
pitch bends 683	percussion legends 1410
string pitches 151	playing techniques 1167, 1168, 1171
tonality systems 1009	releases 1112, 1116
trills. See half-step trills	repeat endings 1212, 1213
half-whole diminished	selecting 498, 503
chord symbols 316	slurs 1266, 1276, 1278
scales 471, 478	staff spacing 608
HALion Sonic Selection	stems 1059, 1382 string indicators 1168
editing 515 endpoints 515, 554	system spacing 608
independent voice playback 530	tempo marks 1314
loading 513, 543, 549	ties 1352, 1354–1356
panning 713	tuplet brackets 1391
playback templates 543, 544, 549	harmonic analysis. See figured bass
reverb 720	harmonic minor. See scales. See also key signatures
space templates 720	harmonics 1062
stage templates 713	accidentals 1065
HALion Symphonic Orchestra	appearance 1066, 1068, 1069
editing 515	artificial 1062
endpoints 515, 554	hiding 1063
independent voice playback 530	inputting 1063
loading 513, 543, 549	natural 1062
panning 713	noteheads 1038, 1063, 1066
playback templates 543, 544, 549	partials 1064
reverb 720	pitch 1064
space templates 720	playback 1062–1064
stage templates 713	question marks 1063
halving. See double	showing 1063
hammer-ons 1120	string number 1040, 1310
deleting 1124 inputting 355	styles 1066, 1069 tablature 1063, 1066
moving 501, 1123	harp. <i>See</i> instruments. <i>See also</i> harp pedaling
	p

harp pedal diagrams 1133, 1134	hemiola
placement 1139	forcing note durations 257
position 1139	independent time signatures 281–283, 285
showing 1134	Henze fermatas. See fermatas
harp pedaling 128, 1133	hexadecimal 378
appearance 1133, 1134	hi-hat. See unpitched percussion
borders 1137	hiding 43, 425, 438, 443, 697, 1226, 1243, 1339
calculating 371	accidental colors 778
crosshairs 503	accidentals 775, 776, 784, 785, 1065, 1079, 1111
diagrams. See harp pedal diagrams	attachment lines 426
erased backgrounds 1138	audio outputs in mixer 552
filter 417	backgrounds 868, 911, 1162, 1193, 1338, 1411
glissando lines 1100, 1101, 1133	bar numbers 808, 810, 811, 816, 819
hiding 1135, 1136	bar repeat counts 1228
inputting 358, 360, 369–371	bar rests 1251, 1252, 1254, 1256
moving 448, 451, 501	barlines 277, 801–803, 868, 911, 1162, 1193, 1338,
note names 1134	1360, 1411
notes out of range 1044	bars 590, 591, 623, 1257, 1258
padding 1138	beams 1060, 1241
partial 1139	borders 425, 739, 809, 982, 1137, 1192, 1335
playback 1133	braces 846, 848, 849
popover 360	brackets 776, 784, 846, 849, 871, 910, 941, 944,
showing 1135	1048, 1295
signposts 438, 1133, 1135, 1136	brackets on noteheads 1048
headers	capos 160, 161, 163
Dynamics editor 677	caps 1171
editors 658	caret 217
flows 634	cautionary accidentals 776, 784, 1065
Key Editor 650	cautionary key signatures 1006
MIDI CC editor 684	cautionary time signatures 1362
MIDI Pitch Bend editor 683	channels 707
percussion editor 663	chord diagram fingering 882, 885
piano roll editor 654, 661	chord diagrams 877, 878, 880, 881
Tempo editor 689	chord symbol parentheses 871
tracks 506, 507, 516, 517, 519, 520	chord symbols 318, 859, 860, 863, 867, 878
Velocity editor 674	circles 809, 928
heavy swing. <i>See</i> swing playback	clefs 324, 325, 892, 893
height	coda 1220
bars 587, 588, 605	colors 534, 560, 778, 1044, 1226, 1243, 1253, 1417
braces 848	comments 487
brackets 846, 847, 873, 1295	condensing colors 425
channels 707	continuation lines 1169, 1170
chord symbols 862, 867, 873	counts 810, 1223, 1228, 1234, 1245
drum pads 205	da capo 1220
editors 656	dal segno 1220
flared hairpins 923	dead notes 1122
hairpins 919, 923	divisi colors 425
handles 1278, 1283, 1352	divisi labels 1288
Key Editor 652, 656, 657	divisi staves 590, 591
keyboard 202	dynamics 909, 911, 916
lines 1184	Dynamics editor 658, 677
mixer 700, 702, 707	elision slurs 1031
notehead brackets 1054	empty staves 590
pages 584, 585, 588	fermatas 995
parentheses 873	figured bass 387, 939, 940, 942
pedal lines 1143, 1146	figured bass brackets 941, 944
percussion editor 656, 657	fine 1220
piano roll editor 656, 657	fingering slides 969
slurs 1282, 1283	fingerings 882, 959, 962
staves 587, 588, 598, 600, 601, 605	flags 822, 824, 825, 1060
systems 587, 588, 605	flared hairpins 922
ties 1354–1356	flow headings 68, 595
tracks 522, 657	flow numbers 635, 636
•	,

hiding (continued)	hiding (continued)
flow page numbers 596	separators 909
flow titles 596	signposts 425, 438, 619, 622
flows 173, 623	slash region counts 1245
Flows panel 118	staff labels 1288, 1290
glissando line text 1098	staff lines 868, 911, 966, 1162, 1193, 1338, 1411
guitar bend hold lines 1110	status bar tools 39
guitar pre-bend accidentals 1111	staves 119, 169, 172, 173, 433, 436, 590, 591, 623,
harmonics 1063	1309
harp pedaling 1135, 1136, 1139	stems 1060, 1241
highlights 425	string indicators 374, 419
Histogram tool 693	sub-brackets 849
hold lines 942, 1110	symbols 892, 899, 1163
hyphens 909	system dividers 1302
initial page numbers 1131	system track 416, 425
instrument change labels 138, 139	systemic barlines 802, 803
instrument changes 135, 138	tablature 1309
instrument names 1288, 1290, 1291	tabs 30
instrument transpositions 180, 1292	tacets 624
instruments 433, 590, 591, 623	Tempo editor 658
interchangeable time signatures 1360	tempo marks 287, 1318, 1324
jump bar 65, 66	text 1339
key signatures 110, 132, 273–275, 1000, 1002,	text borders 739, 982, 1192, 1335
1003, 1005, 1006	text on lines 1188
laissez vibrer ties 1349	ties 841
ledger lines 1042	time signatures 440, 1362, 1374, 1375
lines 419, 425, 942, 1169, 1170, 1295, 1324	timecodes 1208
margins 425	toolbar 29
markers 1201	tracks 521, 654
metronome marks 287, 1318	transport window 540
MIDI CC editor 658, 684	tre corde 1158
MIDI Pitch Bend editor 658	trill extension lines 1077
mixer 700–702, 707	trill intervals 1079
multi-bar rests 1258	trill marks 1075
niente 928	tuplets 1391, 1394
note colors 425, 581, 1044	Velocity editor 658, 674
notes 559, 1041, 1042, 1045, 1060, 1241	verse numbers 1030
numbered bar regions 1232, 1234	vibrato bar lines 419
octave lines 899	video window 188
padding rests 1242	voice colors 425, 581, 1417
page numbers 596, 1131, 1132	VST instruments 511
panels 30, 37, 41, 43, 108, 115	zones 30, 43
parentheses 776, 784, 871, 910, 941, 944, 1048	highlights
partial harp pedaling 1139	bar repeats 1224, 1226
pedal lines 1151–1153	chord symbol regions 863, 864
percussion legend signposts 1407	comments 487
player group labels 1295	dynamics 677, 679, 680, 682
players 169, 172	exporting 581
playhead 524, 527	flags. See signposts
playing techniques 362, 1163, 1169	hiding 425
Playing Techniques editor 673	MIDI 683, 684, 686, 688
prefixes 138	MIDI trigger regions 559, 560
quality in chord symbols 867	mouse editing 253, 445, 448, 451, 455
rectangles 809	music frames 489, 608
repeat counts 1223	notes 253, 445, 448, 451, 455
repeat markers 1220	numbered bar regions 1226
rest colors 1253	printing 581
rests 1251, 1254, 1256, 1258	search matches 57, 728, 730, 732
rhythm dots 1041, 1043, 1045	slash regions 1239, 1243
root in chord symbols 853, 867	stop positions 441
running headers 596	tempo changes 517, 689, 691
secondary brackets 849	tracks 506, 517
segno 1220	, -

Histogram tool 693, 694, 696, 697	horizontal position (continued) multi-bar rests 1258, 1259 notes 493, 494, 1043, 1418–1421 ornaments 1072 poco a poco 916 rehearsal marks 1196 rests 1249, 1254, 1258, 1259 rhythm dots 1044 staff labels 180 staves 597 string indicators 976 systems 500, 597 tempo marks 1314 text 739, 1333 time signatures 1372 trills 1072 tuplet brackets 1393 tuplets 1395
moving 501, 1112	horizontal spacing. <i>See</i> note spacing
showing 942, 1110	horns 128
holds. See pauses Holds and Pauses panel 330	branch indicators 960, 971 clefs 110, 132, 323, 894
Hollywood-style trills 1083	fingerings 960, 970
intervals 1084	key signatures 110, 132
position 1084	panning. See stage templates
showing 1083	reverb. See space templates
hooks	transposition 110, 130, 132
length 1214	hotkeys. <i>See</i> key commands
octave lines 900	hours
pedal lines 1142, 1143, 1146, 1151, 1152	timecodes 1206
playing techniques 1166, 1169	transport 31, 540
repeat endings 1214	HTML files
tuplets 1391 horizontal alignment	comments 486 Hub 68
chord symbols 867	opening projects 71
crosshairs 503	starting projects 70
dynamics 906, 930, 931	video tutorials 68
instrument names 180	humanize
items 503	dynamics 677, 935, 936
lyrics 1016, 1018	note durations 732
ornaments 1072	hymnals
staff labels 180	lyrics 495, 1022
staves 597	note spacing 495
systems 597	tick barlines 800
text 739, 1333 horizontal justification	hyphens dynamics 304, 909, 920, 923
staves 597	gaps 1027
systems 597	lyrics 382, 384, 1012, 1026, 1027
text 739	staff labels 1293
horizontal lines. See lines. See also glissando lines	tempo marks 1324
horizontal position 501	time signatures 1367, 1370
accidentals 778–780	Hz
arpeggio signs 1092	playback tuning 530
bar numbers 814	
chord symbols 859, 861	I
clefs 890, 891	
dynamics 904, 905, 916, 917	Iconica Sketch
H-bars 1258, 1259	editing 515
instrument changes 136 instrument names 180	endpoints 515, 554
lines 448, 451, 1178–1180, 1185, 1195	independent voice playback 530
lyrics 1016, 1018	loading 513, 543, 549
modifiers 916	panning 713 playback templates 543, 544, 549
	play back terriplates 5-5, 5-7, 5-7

Iconica Sketch (continued)	index
reverb 720	rehearsal marks 1197
space templates 720	tokens 638
stage templates 713	vertical stacking 504, 1165
illustrations	voice columns. See voice column index
exporting 570, 571	Indian drum notation 1414
images	Indiana chord symbols 853
exporting 570, 571	indicators
resolution 570, 571, 580	audio engine 37
videos 185	caret 913
immediate dynamics. See dynamics	clefs 895
implicit rests 22, 1249, 1250	fingerings 270, 971
colors 1253	frame fullness 493
deleting 1254	horn branches 971
explicit rests 1252	MIDI input 37
hiding 1251, 1254	octaves 895
showing 1254	string fingerings 971, 972, 1040
voices 1251	system fullness 493
Import Tempo Track dialog 96	tempo. <i>See</i> tempo marks
important markers 393, 1205	thumbs 270
importing 77	trill intervals 1078, 1084
Cubase data 744, 762	voices 913
drum sets 93, 150	information. See project information
expression maps 744, 762	ingredients 572
flows 77, 78, 84	init switches 749, 757
font styles 737	initial pages
fretted instrument tunings 154	left-hand page 593
Key Editor configurations 699 MIDI files 84	page numbers 593, 1131 initial trill notes 1085
MusicXML files 81, 82, 1215	initials
paragraph styles 739	
pedal lines 84, 90, 265	comments 481, 486 input pitch 210
percussion kits 93, 150	inputting 206, 209
percussion maps 768	accidentals 209, 239, 276, 775
playback templates 551	additional repeat endings 399, 401
playing techniques 86, 90	altered bass note chord symbols 310
space templates 726	arpeggio signs 332, 335, 339
stage templates 719	articulations 209, 266, 267
tempo tracks 95, 96	bar number changes 817, 819
tracks 84	bar number counts 397, 408
unpitched percussion 82, 84	bar repeats 397, 398, 407
inches	bar rests 242, 295
staff spacing 608	barlines 294, 296, 299, 301
unit of measurement 50	bars 294–299
incipits 802	beams 219, 822
including. See excluding	beats 295, 297, 299
indents 1305	bracketed noteheads 1048
codas 500, 1220, 1221, 1305	breath marks 328, 330, 331
final systems 597	caesuras 328, 330, 331
first systems 1305	capos 156, 157
removing 1305	caret 214, 217
staff labels 1289	centered beams 830
systems 500, 597, 1288–1290, 1305	channels 710
text 739	character styles 743
independent voice playback 507, 530	chord diagram shapes 885
changing endpoints 554	chord diagrams 859, 877, 878
disabling 531	chord symbol parentheses 310, 317, 871
enabling 530	chord symbol regions 317
inputting notes 664	chord symbols 310, 312, 317–319
piano roll editor 661	chords 192, 247, 253, 475
playing techniques 362, 364	clefs 321, 322, 324, 325
	comments 483, 484
	dips 353

inputting (continued)	inputting (continued)
dives 346, 348–350	nested slurs 1273
drum sets 93, 131	nested tuplets 1387
dynamic modifiers 302, 304, 307, 309, 914	niente 302, 304, 307, 309, 310, 928
dynamics 302, 304, 307, 309, 310, 679, 682, 914	notehead brackets 1048
editors 658, 699	noteheads 669, 1402
effects channels 710	notes 209, 219, 222, 231, 232, 237, 253, 257, 259,
elision slurs 382, 384	475, 664, 665
ensembles 112, 126, 127	notes in multiple voices 227
expression maps 759–761	notes in percussion kits 93, 233, 236, 665
fermatas 328–331	numbered bar regions 397, 408
figured bass 385, 387, 389	octave lines 321, 323, 324, 326, 327
figured bass hold lines 385, 387, 419, 942, 943	octaves 473
fingerings 269	ornaments 332, 333, 337, 338
flows 77, 168, 169, 487	panels 197
font styles 741, 743	panning 713
frame breaks 615, 621	paragraph styles 741
FX channels 710	parentheses 310, 317, 385, 387, 776, 871, 910, 941,
gaps 328, 330, 997–999	944, 1048, 1065
glissando lines 332, 335, 341, 342, 1096	pauses 328–331
grace notes 91, 244, 985	pedal lines 358, 360, 366–369
gradual dynamics 302, 304, 307, 309, 310	percussion kits 93, 131, 140, 143, 144, 233, 664,
gradual tempo changes 287, 288, 291, 292, 691	665, 669, 1402
guitar bend hold lines 1110	percussion legends 1408
guitar bends 335, 344–346	pick-up bars 277, 279, 283, 285, 440
guitar dips 335, 353	pitch mappings 469, 478
guitar dives 335, 348–350	playback techniques 760, 771
guitar lines 335, 354, 355	playback templates 549, 551
guitar post-bends 347	player groups 164
guitar pre-bends 346	players 112, 122, 127
guitar pre-dives 346	playing techniques 358, 362, 364, 664, 665, 669,
guitar scoops 335, 351, 352	1402
guitar tapping 335, 357	popovers 22, 197
hammer-ons 335, 355	position 206
harmonics 1063	post-bends 347
harp pedaling 358, 360, 369–371	pull-offs 335, 355
hold lines 419, 942, 943	register selection 222
inputting vs. editing 206	rehearsal marks 390
Insert mode 232	repeat endings 395, 398–401
instrument changes 219, 222	repeat markers 396, 398, 402, 403
instrument filters 437	rests 192, 202, 219, 241, 257
instruments 110, 122, 131	retakes 366, 367, 369, 1150
instruments in percussion kits 143	reverb 721, 725
intervals 473	rhythm dots 209, 219, 222, 225
jazz articulations 332, 334, 343, 344	rhythm slashes 397, 398, 406
jazz ornaments 334, 337, 338	rhythmic feels 288, 539
key commands 62	rhythmic grid 212, 213
Key Editor 654, 658, 664, 679, 686, 691, 699	right-hand fingerings 272
key signatures 273, 275, 276, 775	scoops 351, 352
layouts 171, 176	settings 207, 209, 310
left-hand fingerings 272	slash regions 397, 406
line text 1188	slash voices 229, 1238
lines 358, 362, 364, 375, 377	slurs 267, 355, 1273
lyrics 382, 384	soloists 125
markers 391, 392, 519	sounds 507, 513, 515, 549, 554, 555, 557
messa di voce 302, 304, 307, 309, 310, 926, 927	space templates 721–723, 725, 726
metronome marks 286, 287, 291	
	stage templates 713, 715, 716, 718, 719
MIDI 84, 258, 259, 265, 513, 543, 544, 549	staves 122, 126, 131, 1307
MIDI points 686, 688	stem direction 237
MIDI trigger regions 408, 409	stems 227, 1416. See also voices
mouse input 207, 208	string indicators 359, 361, 372, 374
multi-bar rests 1258	string indicators 358, 361, 372–374
mutual exclusion groups 761	strings 151

inputting (continued)	instrument change labels (continued)
swing playback 290	prefixes 137
switches 760	showing 138, 139
system breaks 615, 617, 618	size 139
system-attached text 378	suffixes 137
tablature 237, 1309	instrument changes 134, 135, 139
tapping 335, 357	allowing 135
tempo equations 287, 288, 291, 292	cues 136
tempo marks 286–288, 291, 292, 691	disallowing 135
text 378, 1188	inputting 131, 219, 222
ties 192, 243	labels. See instrument change labels
time signatures 277, 281, 282	language 56, 134, 137, 180
timecodes 391, 1202, 1207	position 136
tokens 638	staff labels 136
tremolos 396–398, 403, 405	instrument channels 700, 701, 703, 704
trill intervals 1081	instrument colors 516
trills 333, 337, 338	Dynamics editor 677, 682
tuplets 91, 249, 1387, 1388	MIDI CC editor 684, 688
Unicode 378	MIDI Pitch Bend editor 683, 688
unpitched percussion 664, 665	percussion editor 663
upbeats. See pick-up bars	piano roll editor 661
velocity 676	Playing Techniques editor 673
vibrato bar 344, 346, 348	stage templates 715, 716
vibrato bar dips 353	Velocity editor 674
vibrato bar dives 349, 350	instrument families 110
vibrato bar lines 354, 355, 419	barlines 805
vibrato bar scoops 351, 352	brackets 845–847
videos 187	ensemble picker 112
voices 227, 229, 453	glissando lines 1100
VST instruments 513, 543, 544, 549	instrument filters 434
Insert Bar Number Change dialog 817	instrument picker 110
Insert mode 192, 206, 439	markers 1202
activating 192, 232	MIDI import 86
caret 214, 232	playback templates 546, 549
deactivating 232	playing techniques 361, 1160 rehearsal marks 1196
inputting notes 232 scope 440, 441	repeat endings 1213
stop positions 439, 441, 442	repeat markers 1220
time signatures 281–283, 285, 440, 1359	stage templates 715, 716
tuplets 443	system objects 1303, 1304
Insert Music Text dialog 381	tempo marks 1314
insert masic rext dialog 501 insert mode	timecodes 1202
inserting, see inputting, see also insert mode	instrument filters 110, 112, 433, 434
inserts 705	activating 436
changing 711, 712	adding 437
loading 711	deactivating 436
removing 712	deleting 437
reverb 712, 722, 725	instruments 434, 437
inspector. See Track Inspector. See also properties	key commands 433, 434
instances	names 434, 437
adding 513	order 434
chord symbols 852	instrument groups 147, 163
plug-ins 507, 511	deleting 149
instrument change labels 128, 134, 139	filters 434
borders 139, 739	labels 1295
colors 139	naming 148
cues 136	percussion kits 147, 1297
editing 137, 138	instrument names 176, 1287
font 139	abbreviated 179, 180, 1291
font style 739	alignment 180, 1296
hiding 138, 139	baseline shift 180
moving 136, 501	borders 982
paragraph styles 139	changing 179

instrument names (continued)	instruments (continued)
colors 180, 1296	colors 516, 661, 663, 715, 716
Endpoint Setup dialog 552	combined parts 172
fonts 1296	combining into kits 144
hiding 1288, 1290, 1291	comments 481, 482, 485, 486
length 180, 1288, 1290	copying 123
mixer 700, 701	cross-staff 832
numbering 129, 130, 1291	deleting 125, 134
overline 180	divisi 1307
Play mode 516, 552, 701	doubling 49, 131
resetting 180, 182	dynamics 677, 913, 931, 934. See also Dynamics
saving as default 180	editor
showing 1288, 1290	empty staves 590
size 1296	endpoints 552, 554
solo 125	ensembles. See ensembles
staff labels 180, 639, 1288, 1290, 1291	expression maps 552, 745
stretch 180	families. See instrument families
subscript 180	figured bass 385
superscript 180	filters. See instrument filters
tokens 639	fretted 150
tracks 516. See also instrument tracks	fretted fingerings 962
underline 180	glissando lines 1100
instrument numbering 129, 130, 716, 1293	groups. See instrument groups
instrument picker 110	hiding 169, 172, 433
instrument pitches. See instrument transpositions	importing 84
instrument score orders	inputting notes 219, 222
changing 123	key signatures 110, 1002, 1006, 1007
instrument tracks 515, 516	labels 49, 134, 135, 137–139, 148, 177, 178, 1287
automation. See MIDI CC editor	1291, 1296, 1298
dynamics. See Dynamics editor	language 56, 110, 112, 182
MIDI. See MIDI CC editor	loading 513, 527, 543, 549
piano roll editor 661	merging. See condensing. See also reducing
velocity. See Velocity editor	MIDI 507, 512, 513
instrument transpositions 130, 1292	MIDI import 84
changing 110, 132	MIDI recording 258
clefs 892	mixer 700, 701, 703, 704, 708
hiding 180, 1292	moving 133, 166, 715, 716, 718
layout names 178	muting 532, 700, 702
layouts 178	names. See instrument names
order 1293	non-sustaining 934
parentheses 1293	numbering 129, 130
showing 180, 1292	order 123–125, 133, 146, 163
staff labels 180, 1292, 1293	panning 709, 713, 715, 716, 718
instrumental parts. See layouts	part layouts. See layouts
instrumentation lists 639, 978	percussion 146, 763, 1406
page templates 630, 631	percussion legends 1407, 1410
instruments 21, 128	percussion maps 552
adding 110, 112, 122, 126, 131	Play mode 516
adding to flows 169	playback 525, 527, 530–533, 543, 544, 546, 549,
adding to parts 172	552, 554, 744, 763
adding to percussion kits 143	players 121
arranging tools 443	Players panel 108
assigning to endpoints 554	plucked fingerings 962
automatic numbering 129	position in score 108, 123
barline joins. See barline joins	project templates 70, 76
beams 832	ranges 1044
brackets 846, 847	removing from kits 144
changes. See instrument changes	removing from parts 169, 172
changing existing 132, 145	repeats 533
changing transposition 132	reverb 712, 721–723, 725, 727
channels 700, 701, 703, 704	rhythm section 847, 859
chord symbols 310, 859	searching 110, 112
clefs 110, 132	showing 169, 172, 433

instruments (continued)	inverting 423, 425, 464, 465, 1057, 1271, 1346
showing staves 49	articulations 791
soloing 527, 532, 700, 702	beaming 826, 827
sorting 108, 123	chord symbols 862
staff grouping 847	colors 54
staff labels 180, 1291, 1293	duplex printing 577
staff size 602	figured bass 946
staff spacing 605	fingerings 955
stage templates. See stage templates	grace note stems 983
statistics 105	guitar bends 1110
staves 49, 590, 591, 913, 1300, 1406	guitar techniques 1123
strings 150	lines 1181, 1182
sustaining 934	notes 1057–1059
swing playback 539	pitches 464, 465, 476
tablature 1308, 1309	playing techniques 1165
templates 70, 76, 112, 114, 543, 713	resetting 425
tracks. See instrument tracks	slurs 1263, 1270, 1271
transposing 130, 173. See also instrument	stems 1057–1059
transpositions	ties 1346
tremolos 403, 405, 832	tuplets 1392
tuning 110, 150	invisible. <i>See</i> hiding
velocity 674. See also Velocity editor	ionian
volume 708, 913	chord symbols 316, 866
VST 507, 511, 513	scales 471, 478
intensity	irrational time signatures. See time signatures
dynamics 302, 307, 421, 677, 903, 908, 909, 934,	irregular
936	bars as pick-up bars 1364
interactive key commands map 60	time signatures 1360
interchangeable time signatures 1360	italics
ending 1375	chord diagrams 887
inputting 277, 280–282	chord symbols 155, 853, 858
interface. See user interface	composer 74, 739
interspersion	copyright 74, 739
accidentals 778	dedication 74, 739
intervals	dynamics 903
accidentals 333, 474, 1080	figured bass 949
adding 247, 253, 475	fingerings 887, 960, 961
auto-save 103	instrument change labels 139
chord symbols 314, 853	instrument names 1296
dips 1123	lyricist 74, 739
figured bass 949	lyrics 1022, 1023, 1025
fretted instruments 151	Markdown 74
glissando lines 1096	player group labels 1295, 1296
guitar bends. See bend intervals	project information 74, 739
handles 1112, 1114–1116	rehearsal marks 1199
harmonics 1062–1064, 1066, 1069	repeat endings 1213
microtonal 474	staff labels 180, 739, 1296
note input 222	subtitles 74, 739
octave divisions 1009	tasto solo 949
ornaments 1071	tempo marks 1317
pitch mappings 469, 478	text 379, 739, 742
popover 474	titles 74, 739
simplifying 949	items 206, 411
transposing 456, 457, 475	behind other items 411
trills 333, 337, 1078–1081, 1084	changing 421
vibrato bar dives and returns 1108	copying 445
inversions	deselecting 418
chord symbols 310, 521	editing 646
figured bass 385, 387, 938	resetting 424, 425
pitches 464, 465, 476 playback 521	selecting 206, 410–414, 418, 428 settings. <i>See</i> properties
Invert Pitches dialog 465	settings, see properties
Tivelet itelies dialog 705	

J	justification
lananoso	staves 588, 597, 605, 1305 systems 500, 588, 597, 605, 1305
Japanese chord symbols 853	vertical 588, 605
jazz	vertical 300, 003
articulations. See jazz articulations	
band templates 70, 76	K
chord symbols 853	
glyphs 734, 736	kerning
	accidentals 779
music fonts 734, 736	figured bass 945
player order 108, 123	key clicks. <i>See</i> playing techniques
staff grouping 847	key commands 17, 25, 58, 64
jazz articulations 1125, 1126	articulations 267
appearance 1127, 1128	assigning 62, 66
bend 1125	defining 57
changing 1127	Engrave mode 490
copying 788	finding 61, 64
deleting 1129	galley view 49
duration 1127	instrument filters 433, 434
handles 1127	Key Editor 654
inputting 332, 334, 343, 344	keyboard layouts 63
length 501, 1127	languages 63
line styles 1128	lower zone 43
moving 501, 1127	maps 60
ornaments. See jazz ornaments	MIDI 62
panel 337, 344	mouse input 192
playback 770, 771, 1125	muting 532
popover 334, 343	navigation 35, 429, 430
position 1127	notehead sets 1038
smooth 1125	page view 49
types 334, 1125, 1127	panels 43
jazz ornaments 1125, 1126	playback 525
inputting 334, 337, 338	played duration 672
popover 334	removing 63
types 334	resetting 64
Jazz Standards chord symbols 853	searching 60, 61
jeté. See playing techniques	soloing 532
job types 563, 575	text formatting 379
page ranges 568	zoom levels 432
printing 575	Key Editor 650, 652, 684
selecting 575	configurations 658, 698, 699
joins	controls 693, 694, 696, 697
attachment lines 426	copying 660, 670
barlines. See barline joins	deleting notes 671
beams 822, 824, 832, 835, 1059	dynamics. See Dynamics editor
pedal lines 1150	height 656
staves with barlines 807	histogram. See Histogram tool. See also Transform
stems 832, 835, 1059	tool
jump bar 64	
aliases 66, 67	inputting notes 664
Commands 64, 66	instruments 654
entries 64	key commands 43, 654, 656, 657
Go To 65	locking 654
showing 65, 66	MIDI CC. See MIDI CC editor
jumps	moving notes 666
hiding 1220	note duration 664, 665, 667, 671
inputting 402, 403	panel 650, 652
playback 535	percussion. See percussion editor
rehearsal marks 430, 1197	piano roll. See piano roll editor
repeat 1216	pitch bends. See MIDI Pitch Bend editor
showing 1220	playhead 524
3.110Willing 1220	playing techniques. <i>See</i> Playing Techniques editor
	rhythmic grid 652, 658
	scrolling 524, 650, 657

Key Editor (continued) selecting 659 selecting velocity bars 698 slurred notes 1285 tempo 689 toolbar 652 Transform tool. See Transform tool. See also Histogram tool transposing notes 668, 669 tuplets 661 velocity. See Velocity editor voices 530, 652, 654 zoom 650, 657	keyboards adding 110, 112, 122 beams 832–835 chord symbols 310, 859 cross-staff 832–834, 1059 glissando lines 1100 inputting notes 219, 258, 259 key command maps 60 layouts 63 MIDI 212, 258, 263, 661 panel 202 slashes. See rhythm slashes sounds 212, 525, 543
key signatures 1000, 1009 accidentals 274, 276, 456, 457, 460, 775, 1001 atonal 1002 barlines 801, 1003 cautionary 1005, 1006 changes 801, 1001, 1003 changing 273, 275, 421 clefs 1003 deleting 443 enharmonic equivalent 1006, 1007 filter 417	stems 833, 1059 tremolos 403, 405, 832 keys major 1002 minor 1002 signatures. See key signatures transposing 456, 457 kick drum. See unpitched percussion kits. See percussion kits kneed beams. See centered beams
hiding 110, 132, 273–275, 1000, 1002, 1003, 1006 inputting 273–276 instrument changes 136 instruments without 110, 132, 1000, 1002, 1007 major 1002 MIDI import 90 minor 1002 moving 136, 448, 451, 1004 multi-bar rests 1258, 1259 multiple 1000 none 110, 1002 octave divisions 1009 open 1002 panel 275, 276 placement 1003 polytonality 273, 275, 1000 popover 273, 274 position 273, 1003 respelling 1007 scales 1002 selecting 411, 414, 416, 417 showing 1003, 1006 signposts 273, 275, 438, 1000 start repeat barlines 801 tonality systems 1009 transposing 456, 457, 1007 transposing instruments 174, 730, 1007 types 274, 1002 Key Signatures, Tonality Systems, and Accidentals panel 275, 276 key switches 758 expression maps 744, 750 MIDI import 90	L I.v. ties. See laissez vibrer ties labels brackets 1295 instrument changes. See instrument change labels instruments 148, 180, 1287 markers 1201 percussion kits 148, 1297, 1406 player groups 148, 1295 staves. See staff labels laissez vibrer ties 1160, 1341, 1349 angle 1352 shape 1352 width 1349, 1352 landscape orientation 578, 579, 584 lanes. See editors. See also tracks languages 55 application 55 date and time 56 ensembles 112 instruments 56, 110, 112, 134, 137, 180, 182 key commands 25, 60, 63 staff labels 56 tokens 56 large noteheads 1036 selections 410 time signatures. See large time signatures large time signatures 1365, 1367 bar numbers 816 largo. See tempo marks latency
percussion maps 764 Keyboard panel 202 key commands 43 keyboard shortcuts. <i>See</i> key commands	changing value 264 MIDI recording 258, 263 lattice arrangement accidentals 778
	layers. See voices

layout cards 115, 119	layouts (continued)
disclosure arrows 41	flow ranges 568
numbers 115. See also layout numbers	flows 119, 173, 593, 594
opening 115	font size 737, 739
layout names 176, 178	formatting 583, 626, 627
accidentals 178	frame breaks 620
borders 982	frame chains. See music frame chains
changing 178	front matter 978
first pages 631	full scores 170
resetting 178	graphics files 570, 579
running headers 632	harp pedaling 1135
tokens 639	hiding staves 590, 591
layout numbers 115	image resolution 571
changing 175	indents 1305
order 175	instrument change labels 138, 139
layout options 26, 728	instrument filters. See instrument filters
bar numbers 808–810, 813	instrument order 123
copying to other layouts 626, 627	justification 588, 597, 605
dialog 728	Key Editor 650
saving as default 728	keyboard 60, 63
searching 728	large time signatures 1365, 1367
Layout Options dialog 728	Layouts panel 115
layout selector 30	left pages 593
order of layouts 175	locking 613, 615
switching layouts 42	margins 585, 598, 600
layouts 24, 115, 119, 170, 626	markers 1201, 1202
accidentals 460, 462, 463	MIDI import 90
adding flows 173	multi-bar rests 810, 1258, 1259
adding players 172	multiple windows 48
bar numbers 808, 810–812	MusicXML files 83
blank staves 592	naming 178. See also layout names
borders 982. See also margins	navigation 427–430
braces 846–849. See also staff grouping	note spacing 494, 495
brackets 846, 847, 849. See also staff grouping	note spelling 460, 462, 463
cards. See layout cards	numbered bar regions 1232
casting off 612, 613, 615, 616	numbers. See layout numbers
chord symbols 860	opening 32, 42
clefs 323, 892, 894, 899	opening multiple 44, 47
color mode 571	orchestral order 123–125, 163, 1295
combining players 172	order 175
comparing 47	orientation 578, 579, 584
concert pitch 174, 639, 981	page numbers 1130
condensing 626	page ranges 568, 575
copies 566	page size 578, 584
copying formatting 626–628	page template sets 586, 630
copying properties 629	page templates. See page templates
creating 90, 171, 176	page turns 620
cues. See cues	panel in Print mode 562
custom scores 170	panel in Setup mode 115, 170
deleting 176	paper sizes 578
divisi 1307	parts 170, 172, 626
dynamics 906	percussion kit presentation 1407
empty staves 590, 592	percussion legends 1407
enharmonic spelling 460, 462, 463	player order 123–125, 163, 1295
exporting 570, 575	players 119, 172
exporting 370, 373	printing 566, 575, 579
exporting MIDI 94	propagating parts 626–628
figured bass 939	properties 629, 646–648
file names 572	rehearsal marks 1196, 1199, 1304
fingering 959	removing flows 173
fit to paper 579	removing page overrides 633
fixing 613, 615	removing players 172
flow headings 595, 596, 634–636	renaming 178
110W Headings 333, 330, 034-030	Terrarriiriy 170

layouts (continued)	left zone (continued)
renumbering 175	Setup mode 108
repeat marker text 1219	showing 43
resetting 616, 633, 728	Write mode 196
restoring 176	left-foot pedals. See harp pedaling. See also pedal lines
running headers 596	left-hand fingering 962
scale size 579	erased backgrounds 966
selecting 30	hammer-ons. See hammer-ons
settings 728	inputting 269, 272
sorting 175	placement 953
staff filters. See instrument filters	popover 272
staff labels 176, 639, 1288, 1291	position 965
staff size 587	pull-offs. <i>See</i> hammer-ons
staff spacing 587, 588, 605, 1334	size 962
statistics 105	slides 967, 969
staves 590, 591	tapping. See tapping
switching 42	left-hand guitar tapping. See tapping
system dividers 1302	legal paper size 578
system formatting 587, 597, 605, 617, 626	legato
system objects 1303, 1304	note durations 255
tabs 32, 44	playback 732, 752, 1285
tacets 623-625	playing technique. See playing techniques. See also
text 378, 631, 1328, 1334, 1339	playback techniques
time signatures 1365, 1367, 1375	slurs 1261, 1285
timecodes 1202, 1207, 1208	legends
titles 630, 631, 634	percussion. See percussion legends
tokens 639, 981	leggiero. See dynamic modifiers
transposing 130, 170, 173, 174, 639, 981	Leipzig music font 734, 736
vertical justification 588	Leland music font 734, 736
view types 39	length 419, 501
zoom 41, 431	arpeggio signs 339, 340, 1092
Layouts panel	audio 99
Print mode 561, 562	bar repeat phrases 421, 1225
Setup mode 107, 115	barlines 805-807
lead sheets	bars 68, 277, 294, 440, 793–795, 997
adding instruments 122, 131	braces 848
barlines 803	brackets 1054
bars per system 613	chord symbol parentheses 872
capo chord symbols 159–163	continuation lines 1166, 1168, 1171
chord diagrams grid 879–882	divisi passages 448, 451
chord symbols 310, 318, 852	dynamics 310, 419, 681, 915, 919, 924
clefs 893	figured bass 942, 943, 945, 947
drums 140	fingering slides 969
key signatures 1003	flows 31, 68, 105, 294, 540, 638, 641, 793–795
multi-bar rests 1258	glissando lines 1099
percussion kits 140	grace note slashes 988
playback 1238	guitar bends 1112, 1114, 1116
project template 76	H-bars 1258
slashes. <i>See</i> rhythm slashes	hairpins 907, 925
systems per frame 613	hold lines 942, 943, 945, 947, 1112
leading 739, 741, 1333	hooks 501, 1143, 1214
learning materials 68	instrument names 137, 138, 179, 1288, 1290
ledger lines 1042	jazz articulations 1127
hiding 1042	laissez vibrer ties 1349
width 1042	lines 375, 377, 419, 1166–1168, 1171, 1183–1185,
left hand hooks. See lines	1195
left pages 630, 631	lyric extender lines 1026
starting from 593	lyric hyphens 1026, 1027
left pan 722, 723	messa di voce 925
left zone 36, 37	multi-bar rests 1258
Engrave mode 491	music 68, 294, 793–795, 997
hiding 43	notated duration of notes 671
Print mode 562	notehead brackets 1054

length (continued)	lines 1096, 1160, 1166, 1174, 1176
notes 255, 665, 667, 671, 672	accidentals 1185
octave lines 419, 900	alignment 503, 1185
pauses 997	angled 375, 1174, 1182
pedal lines 1143, 1147, 1150, 1154	annotations 1176
percussion legends 1410	appearance 1170, 1186
played duration of notes 671, 672	arpeggio signs. <i>See</i> arpeggio signs
player group names 166	attachments 375, 1174, 1177
player names 177, 1288, 1290	backgrounds 1193
playing techniques 1166, 1168, 1171	bar numbers 813, 814
projects 31, 68, 105, 294, 540, 638, 641, 793–795	barlines. See barlines
repeat endings 1212, 1214	beams. See beaming
reverb tail 99	brackets 845, 849, 851, 1295
slurs 1262, 1272	caesuras. See caesuras
staff labels 1288, 1290, 1291	caps 1171, 1176, 1186
stemlets 839	changing 1170, 1186
stems 828, 1059	chords 231, 339–342, 375, 377
string indicators 1166, 1168	collision avoidance 1179
system dividers 1303	colors 54
systems 500, 597	columns 1178, 1179
tempo marks 1314, 1326	components 1176
tuplet brackets 1391	cross-staff 377
lentando. See gradual tempo changes. See also tempo	crosshairs 503
marks	deleting 443
lento. See tempo marks	diagonal 375
let ring. See laissez vibrer ties	drawing 691
letter paper sizes 578, 584	duration 1183, 1184
letters	dynamics 677, 679, 682, 920
rehearsal marks 1198	enclosures 809
levels	end position 1185
channels 700, 701, 708	ends 1176
dynamics. See dynamic levels	Engrave mode 496, 1179
nested tuplets 1386	erased backgrounds 1193, 1194
pedal lines 1142, 1143, 1145, 1146. See also pedal	figured bass. See figured bass
level changes	fingerings 971
libraries 728	fonts 1189
fretted instrument tunings 154	frame breaks 1195
percussion 763	glissando. See glissando lines
project templates 76	grace notes 987, 1180
sound 507, 511, 513, 543, 744, 745, 763	gradual tempo changes 1326
libretto	groups 1295
exporting 1015	guide 212, 503
librettist 74, 640, 980	guitar bends. <i>See</i> guitar bends. <i>See also</i> vibrato bar
lieder. See flows. See also projects	handles 1195
lifts	harp pedaling 1133, 1139
jazz articulations. See jazz articulations	hiding 419, 942, 1169
pedal lines. See pedal retakes	holds. See hold lines
ligado. See hammer-ons	horizontal 375, 1174, 1177, 1178
light swing. See swing playback	horizontal text 1192
light theme 51	inputting 375, 377
Limiter 705, 711	Insert mode 441, 442
limits 694, 695, 697	jazz articulations 1125, 1128
histogram controls 694, 695, 697	joining notes. See beams
Lin One Dither 705, 711	ledger 1042
line breaks	length 501, 1183–1185, 1195
project information 74	lyrics 382–384, 1010, 1026, 1028. See also lyric
repeat markers 1219	extender lines
staff labels 180, 1293	markers 1202
text 378	MIDI 684, 686, 688
line spacing 587, 739, 741, 1333. See also staff spacing	moving 448, 451, 501, 1178–1182, 1195
linear points 680, 687, 689	noteheads 1034, 1185, 1399
inputting 679, 686, 691	notes. See stems. See also beaming
	octave lines. See octave lines

lines (continued)	Live Space dialog 722
order 1165, 1178	Live Stage dialog 715
padding 1194	loading
pauses. See caesuras. See also pauses	MIDI instruments 513, 527, 543, 549
pedal. See pedal lines	playback templates 549
placement 1178, 1181, 1182	reverb 711, 712, 725, 727
playback. See playhead	sounds 513, 527, 543, 549, 710-712, 725, 727
player groups. See player group labels	space templates 725, 727
playing techniques. See playing technique lines	stage templates 718
position 1177	video files 187
repeat endings. <i>See</i> repeat endings	VST instruments 513, 527, 543, 549
repeat marker text 1219	local
reversing 1187	chord symbols 310, 852
secondary beams 837	figured bass 385, 938
secondary brackets 849, 851	properties 629, 646–648
segments 1195	locations
showing 419, 942, 1169	backups folder 104
size 1183, 1189	lock
slurs 1261, 1268	duration. See lock duration
staff-relative placement 1181, 1182	frames 492, 615, 616
start position 1185	Key Editor 654
staves 1300	layouts 615, 616
stemlets. See stemlets	played durations 652, 671
stop position 441, 442	systems 491, 615, 616, 618
string indicators 372, 373, 419	lock duration 192, 459
string shift indicators 972	loco. See octave lines
system breaks 1176, 1195	locrian
system dividers. <i>See</i> system dividers	chord symbols 316, 866
tablature 1308	scales 471, 478
tempo marks 517, 689, 1323, 1325	lower case
text 739, 1176, 1188–1194, 1335	chord symbols 853
thickness 853	flow titles 641
through noteheads 1034, 1399	Roman numerals 641
ties 1343, 1344	lower limits. See limits
timecodes 1202	lower notes
trills 1076, 1077	percussion 233, 1399, 1402
tuplet brackets. See tuplet brackets	trills 1088
types 1170, 1174, 1177	lower zone 29, 36, 201
velocity 676	Engrave mode 646, 700
vertical 377, 1174, 1177–1179	hiding 43
vertical position 1165, 1177, 1181	key commands 43
vibrato bar. See vibrato bar	Key Editor. See Key Editor
width 597	Mixer panel. <i>See</i> Mixer panel Play mode 650, 700
wiggly 1076, 1089 linking 931	Properties panel. <i>See</i> Properties panel
barlines 805–807, 846	Setup mode 118
caesuras 991, 994	showing 43
dynamics 447, 448, 931–933	Write mode 646, 650, 700
fermatas 991, 994, 995	lute. See fretted instruments
flow names 183, 978	ly ties. See laissez vibrer ties
flow titles 183, 978	lydian
groups of dynamics 930, 931	chord symbols 316, 866
Key Editor 654	scales 471, 478
MIDI 448, 688	lyric extender lines 382–384, 1010, 1012, 1026, 1028
percussion maps to VST/MIDI 507, 555	extending 382
slurs 447, 1275, 1276	handles 1026
staves. See brackets. See also braces	inputting 382, 384
tracks 654	moving 501, 1026
lists	lyric hyphens 1012, 1026
comments 482	extending 382
Hub 68	gaps 1027
players 176, 639	handles 1026
little finger. See pinky finger	inputting 382

lyric hyphens (continued) moving 501, 1026, 1027	lyrics (continued) syllable types 384, 1012
paragraph styles 1023, 1026 lyric lines 383, 1010, 1028	text 1023–1025 ties 243, 257, 382, 1016, 1026, 1027, 1343
adding 382, 383	translations 383, 1010, 1011, 1029
changing 1011, 1029, 1030	types 383, 1010, 1012
copying 1013	verse numbers 1022, 1023, 1030
deleting 443 moving 1020	vertical position 1010, 1011, 1019, 1020, 1028–1030
navigation 384	zoom 1024
numbers 1028–1030	2001111024
offsets 1020	
placement 1017	M
position 1017, 1020	macOS
lyricist 74, 980	printing 569
adding 980	main chord symbols 154, 155, 160, 161, 163
bold 74, 739	transposing 158
exporting 101	major
first pages 631, 978	chord symbols 314, 853
fonts 739, 980	intervals 456–458, 474
italics 74, 739 tokens 640	keys 1002
lyrics 1010, 1329	scales 471, 478, 1002
alignment 1016, 1018	make into frame 492, 621
beaming 824	system 491, 618
changing 1011, 1023–1025, 1029	Manage Instrument Filters dialog 434
chorus 383, 1010, 1011, 1029	mandolin. See fretted instruments
colors 54, 1022	manual staff visibility 590, 591
copying 1013	manuscript paper 592
counts 1024	bar numbers 808
crosshairs 503	barlines 277, 800-803, 805
deleting 443	key signatures 273, 275
East Asian elision slurs 1031 editing 1023–1025	rests 1256, 1258
elision slurs 382, 384, 1031	staff labels 1288
exporting 1015	staves 122 width 584, 585, 597
extender lines. See lyric extender lines	Map Pitches dialog 469
filters 417, 1015, 1016	Map Scale dialog 471
font styles 1022, 1023, 1025	maps
gaps 1016	expression. See expression maps
handles 1017, 1020, 1026	key commands 60
hyphens. See lyric hyphens	percussion. See percussion maps
inputting 382, 384 italics 1022, 1025	pitches. <i>See</i> pitch mapping
lines. See lyric lines. See also lyric extender lines	scales. See scale mapping
melismatic 382, 384, 1016, 1026, 1027	marcato. See articulations
moving 448, 451, 501, 1018–1020, 1029, 1030	margins 598, 982 changing 500, 585
non-breaking spaces 382, 384, 1024	chord diagrams 880
note spacing 495, 1016, 1018	flow headings 599
offsets 1020	hiding 425
paragraph styles 1022, 1023	instrument names. See staff labels
placement 1016	music frames 598, 600, 608
popover 382–384	MusicXML files 81
position 1016 printing 1015	pages 583, 585, 598
saving 1015	staves 500, 597, 598, 600, 1288, 1289, 1305
selecting 413, 417, 1016	tacets 625
size 1022, 1023, 1025	marimba. See instruments. See also grand staff
slurs 1031, 1268	instruments mark-up. <i>See</i> comments. <i>See also</i> annotations
spaces 382, 384, 1024	Markdown 74
spacing 495, 1016, 1018, 1020, 1022, 1023, 1025	text items 57
staff-relative placement 1019, 1020	
statistics 105	

markers 1201, 1206	messa di voce 925
colors 54	aperture 919
comments. See comments	duration 310
deleting 392, 443	gaps 925
dialog 391	grace notes 926
exporting 94, 99, 101	handles 919, 925, 926
filter 417	inputting 302, 304, 307, 309, 927
flags. See signposts	length 925
font style 1204	moving 448, 904, 919, 925, 926
hiding 1201, 1220	showing 927
important 393, 1205	ties 302, 307, 448
importing 96	meter 1359
inputting 391, 519	beam grouping 822, 842
moving 448, 1204	changing 421
panel 392	channel levels 700, 701
repeats 395, 396, 1216	cut common time 844
showing 1201, 1220	irregular 793, 796
signposts. See signposts	note grouping 822, 841, 844, 1240
staff 1202	open 1360, 1367, 1369
staff spacing 587, 605	rest grouping 822, 841, 844
text 96, 391, 392, 1203	rhythm slashes 1240
timecodes 391, 1204	time signatures. See time signatures
track 519, 521	tremolos 1377
vertical position 587, 605, 1202	tuplets 1386
marks	metric modulation
rehearsal. See rehearsal marks	tuplets 1388
tempo. See tempo marks	metronome click. See click
trills 1071, 1072, 1075, 1084	metronome marks 1313, 1314, 1319
marquee tool 39	appearance 1321
Key Editor 659	approximate 1321
using 414, 659, 698	beat units 289, 421, 1319
martelé. See articulations	brackets 1318, 1321
masking. See hiding	changing 421, 692, 1319, 1321
master output volume 700, 701, 703, 704, 708	click 262, 518
master pages. See page templates	components 1321
matches	decimal places 287, 291, 1319
options search 57, 728, 730, 732	equations 292, 1327
Maximizer 705, 711	fonts 1317
measured tremolos. See tremolos	hiding 287, 1318
measurement	inputting 286, 287, 291, 691
units 50	moving 448, 501, 1322
measures. See bars	multiple positions 1303, 1304
medium swing. See swing playback	order 1322
melismatic lyrics 382, 384, 1016, 1026, 1027	parentheses 1318, 1321
melodic minor. See scales. See also key signatures	period 1321
melodies	playback 262, 518, 540, 1320
chords 247, 852, 859, 875, 877	popover 288
inputting 219, 222, 225. See also note input	range 1320
playback 525, 530, 532, 936, 937	relative tempo changes 1321
stems 227, 626	selecting 413
voices 227, 530, 626, 1416	showing 1318
meno. See tempo marks. See also dynamic modifiers	size 1317
Mensurstriche 806	staves 1304
merging	trills 1087
beams 821, 822	values 421, 692, 1319
flows 77, 84, 593	vertical positions 1303, 1304
notes 90, 247, 249, 257, 626, 841, 842, 844	mezzo
pedal lines 1150	dynamics. See dynamics
players 77, 78, 81, 84, 87, 90	microtones 783
projects 77	EDO 1009
rests 241, 257, 841, 842, 844, 1250, 1251	guitar bends 347, 1107, 1109
staves 626	identifying 37
voices 87, 90, 626	intervals 474, 475

microtones (continued)	MIDI (continued)
MIDI pitch 37	quantization 91
playback 747	range 128
transposing 475	recording. See MIDI recording
trills 1079–1081	slurs 1285
mid-system gaps	tempo 517, 528, 689
codas 1216, 1220, 1221	Tempo editor 689
middle C 50	tempo track 517
changing 50	tempo tracks 95–97
clefs 889	thru 212
expression maps 750	unlinking 448
fretted instruments 150, 151, 153, 158	values 687, 693, 694, 697
Groove Agent 93	volume 935
inversions 465, 476	MIDI CC editor 559, 683, 684
percussion maps 764	adding 658, 684
pitch mapping 469, 478	closing 658, 684
playback 50, 530, 750, 764	constant points 687
middle line	copying points 660
stem direction 1055	deleting points 661
MIDI	filter 695
accidental spelling 240	height 656
channels 507, 552, 700, 701, 703, 704	Histogram controls 694
commands 58, 62	inputting points 686
controllers. See MIDI controllers	linear points 687
copying 448, 660, 688	moving points 687
deleting 661	pedal lines 1158
devices. See MIDI devices	selecting points 659
dialog 84, 91, 94	Transform controls 697
editor. See MIDI CC editor. See also MIDI Pitch	transformations. See Transform tool. See also
Bend editor	Histogram tool
endpoints 552, 554, 556, 557	values 687, 693, 695, 696, 698
exporting 97	zoom 657
experting 97 expression maps 744, 745, 759, 760	MIDI channels 700, 701, 703, 704
fader 701	MIDI chamlels 700, 701, 703, 704 MIDI controllers 684, 935
files. See MIDI files	copying 448, 660, 688
glissando lines 1100, 1101	dynamics 935
Histogram tool 693, 695	editor. See MIDI CC editor. See also MIDI Pitch
importing 84, 91, 93	Bend editor
inputting 686, 688	inputting 658, 686, 688
instruments 507, 512, 516. See also MIDI	pedal lines 1158
instruments	Transform tool 696
Key Editor 684	transformations. See Transform tool. See also
linking 448	Histogram tool
loading instruments 513, 527, 543, 549	values 687, 693–698
markers 519	MIDI devices 265
middle C 50	activity 37
mixer 700, 701, 703, 704	chord symbols 310, 507, 520
navigation 62	disabling 265
note input 219, 231, 240	enabling 265
note range 128	expression maps 744, 759, 760
opening 71	note input setup 236
order 750	panning 713
overlapping notes 255	percussion kits 236
overriding 688	percussion maps 763, 767
pan 701, 703, 709	playback templates 543, 544 polychords 310
patterns 93	
pedal lines 1158	reverb 720
percussion maps 507, 555, 763, 764, 767	space templates 720
piano roll editor 661	stage templates 713
pitch bend 684, 747, 1100, 1101	warning 37
pitches 37	MIDI files 84
playback 516, 552, 763	dialog 84, 94
ports 507, 552	exporting 94

MIDI files (continued)	MIDI recording (continued)
grace notes 91	stopping 259
importing 84	sustain pedal controllers 265
key signatures 90	tempo mode 528
opening 71	time signatures 259
pedal lines 84, 90, 265	transport window 540
percussion maps 87	tremolos 263
playback overrides 673	trills 263
playing techniques 90	voices 258, 259
quantization 84, 91	MIDI thru 212
repeats 534	MIDI trid 212 MIDI trigger regions 559
requantizing 261	changing 421 handles 559
slurs 90	
sustain pedal controllers 265	highlights 560
tremolos 90	inputting 408, 409
trills 90	length 419
tuplets 91	moving 448
unpitched percussion 84	pitch 50
MIDI Import Options dialog 84	popover 408, 409
MIDI instruments 507, 512	velocity 408, 409, 559
endpoints 556, 557	viewing options 560
instances 512	millimeters
loading 513, 527, 543, 549	frame dimensions 37
numbering 512	staff spacing 608
panel 511	unit of measurement 50
MIDI Pitch Bend editor 683, 684	milliseconds 31, 540
adding 658	delay 752
closing 658	mini transport 29, 31
copying points 660	minims. See half notes
deleting points 661	minor
height 656	chord symbols 314, 853
moving points 687	intervals 456–458, 474
selecting points 659	keys 1002
transformations. See Transform tool. See also	scales 471, 478, 1002
Histogram tool	minutes
values 687, 695, 698	duration tokens 638, 641
zoom 657	timecodes 1206
MIDI points	transport 31, 540
copying 448	Missing Fonts dialog 72
linking 448	missing sounds
unlinking 448	loading 549
MIDI Quantize Options dialog 91	mixer 700, 701
MIDI recording 258, 259	channel strips 705
audio buffer size 263, 264	channels 700, 701, 703, 704, 707, 710
click settings 262, 518	filters 705, 707
count-in 263	height 702, 707
devices 265. See also MIDI devices	hiding 700–702
dialog 91	hiding audio outputs 552
grace notes 91, 985	muting tracks 532, 700-702
input pitch 210	panning 703, 709
latency 264	ports 700, 701
MIDI thru 212	resetting 532, 700, 708
optimization 263	scrolling 707
overlapping notes 255	showing 700–702
pedal lines 263, 265	soloing tracks 532, 700-702
pitch 210	soundtracks 189
quantization 91, 259	toolbar 702
repeats 261	videos 189
requantizing 261	volume 708
retrospective recording 260	Mixer panel 700
setup 263	key commands 43
slurs 263	•
starting 259	

mixolydian	movements (continued)
chord symbols 316, 866	splitting 487
scales 471, 478	tacets 623
mock-ups	movies. See videos
exporting 98	moving 427, 448, 451, 501
modal	accents 790
chord symbols 316, 866	accidentals 780
glissando lines 1100, 1101	arpeggio signs 1092
scales 471, 478	articulations 790, 791
moderato. See tempo marks	bar numbers 814
modern accidental cancellation 785	bar rests 1253
Modernist accidental duration rule 783, 784	barlines 443, 804
modes 19, 29	bars 614, 617, 618, 620, 621
chords 214, 866	braces 846, 847
Engrave 489	brackets 846, 847, 871, 874, 1054
glissando lines 1100, 1101	breath marks 994
Insert 214, 232, 249, 439	caesuras 994
jump bar 64–66	cancellation naturals 1004
Play 505	caret 218, 249
Print 561	channels 707
scale mapping 471, 478	chord diagrams 882
Setup 107	chord symbols 861, 862, 871, 874
tempo 528	clefs 136, 448, 451, 890, 891
transposing 471, 478	comments 486
Write 191	counts 1223, 1235, 1245
modifier keys	crosshairs 503
key commands 60	cursor 269, 317, 384, 389
searching 60	dives 1114, 1116
modifiers. See dynamic modifiers	dynamics 448, 681, 904, 906, 916, 917, 919, 926,
modulation wheel dynamics 935	930–933
molto	fermatas 994, 996
centered 916	figured bass 942, 945, 947
dynamics 304, 309, 914, 916	fingerings 882, 965, 968, 969
font style 933	flow headings 599, 608
marcato. See articulations	flows 169, 621
moving 917	frame breaks 616
tempo marks 286, 288, 292	frames 598, 599
monochrome graphics 580	glissando lines 1099
MonoDelay 705, 711	grace notes 985, 986, 988
monophonic legato 752, 1285	gradual dynamics 448, 904, 919
monophony. See polyphony	guitar bends 1112, 1114–1116
MonoToStereo 705, 711	H-bars 1259
moon noteheads 1037, 1038	hairpins 448, 904, 919, 925, 926
mordents. See ornaments	hammer-ons 1123
morendo. See gradual tempo changes. See also	hold lines 1112
dynamic modifiers	instrument changes 136
MorphFilter 705, 711	instruments 133, 134, 165, 715, 716, 718
mosso. See tempo marks	jazz articulations 1127
motors. See playing techniques	Key Editor 657
mouse editing	key signatures 136, 1004
activating 208	layouts 175
deactivating 208	lines 1178–1182, 1195
mouse input 206	lyric extender lines 1026
activating 192, 208	lyric hyphens 1026, 1027
deactivating 192, 208	lyrics 1018–1020, 1029, 1030
settings 207	marcato 790
movements 20, 167	markers 1204
adding 168	messa di voce 448, 919, 925, 926
exporting 79	MIDI points 687
flow headings 634	modifiers 917
importing 77, 78	multi-bar rests 1259
multiple on pages 593	navigating. See navigation
	notehead brackets 1052, 1054

on assistant (an extinuo d)	moulti la au va ata (a a utinu a al)
moving (continued)	multi-bar rests (continued)
notes 448, 453, 455, 494, 666, 668, 669, 1043,	tacets 623, 624
1418–1421	time signatures 1258, 1259
notes to other staves 451, 452, 668, 669, 832, 835	width 1258
notes to other strings 1310	multi-note tremolos. See tremolos
numbered bar region counts 1235	multi-pasting 446, 447
octave lines 900	multi-rests. See multi-bar rests
ornaments 1072	multi-segment slurs 1276–1278
pages 430, 524	multi-staff instruments 1300
panning 709	beams 832-835, 1059
parentheses 871, 874	cross-staff 832–835, 1059
pedal lines 90, 1143, 1147	hiding staves 590, 591, 605
•	
percussion 146	slurs 267
piano roll 657	stems 833, 1059
players 123–125, 165, 166	tremolos 832, 835
playhead 430, 523, 524, 527	multiple
playing techniques 1164, 1165, 1168	bar numbers per system 813
pull-offs 1123	bounce roll. See tremolos
•	
repeat counts 1223	codas 1217
resolutions 947	flows on pages 593
rests 494, 1253	movements 167
rhythm dots 1043, 1044, 1420	segnos 1217
rhythm slashes 1247	staff input 218, 231
selection. See navigation	multiple-voice contexts 1416
	articulations 788
slash region counts 1245	
slashes 988	dynamics 423, 913
slurs 1272, 1280	fermatas 993, 995
staccato 790	grace notes 983, 1263
staves 123-125, 500, 587, 598, 600, 608	guitar pre-bends 1110
stop positions 441	inputting notes 227
stress marks 790	note alignment 1418
	<u> </u>
string indicators 976, 1164, 1165, 1168	notes 1422
subito 916	ornaments 423, 1072
system breaks 616–618	rests 1249, 1251–1253
systems 608, 610, 617, 618, 621	rhythm dot consolidation 1043
tablature notes 1310	slashes 1241, 1246
tabs 47	slurs 1263
tacets 625	stem direction 983, 1056, 1422
tapping 1123	ties 1346
tempo marks 692	voice column index 1419
tenuto 790	music
text 501, 1333, 1334	arranging. See arranging
text on lines 1189–1191	condensing. See condensing
time signatures 1372, 1373	deleting 125, 134, 170, 440, 443, 793–795
tremolos 1382	editing 206
tuplets 451, 1395	extracts. See flows
vibrato bar 1116, 1164, 1168	fixing into frames 621
view 429, 430, 524, 657, 707	fixing into systems 618
mp. See dynamics	playing back. See playback
MP3 files	transforming. See transformations
exporting 98, 99	music area 33
muffed notes. See dead notes	making selections 410
multi-bar rests 623, 1224, 1257, 1258	moving music 429, 430, 524
bar numbers 808, 810	multiple windows 48
barlines 299	navigation. See navigation
clefs 1258, 1259	opening flows 507
hiding 1258	opening layouts 32, 42, 46
key signatures 1258, 1259	page arrangements 40, 49
moving 1259	panels 43
showing 1258	Play mode. See track overview
signposts 438, 1259	view options 39, 40, 49
single bars 1258	zoom options 41, 431, 432
splitting 1257–1259	•

music fonts 68	names <i>(continued)</i>
substitutes 737	mixer 703, 710
Music Fonts dialog 736	noteheads 1037
music frame chains 645	percussion kits 140, 148
propagating part formatting 626, 627	player groups 163, 166, 1295
music frames 636	players 176–179, 639, 1291
frame chains. See music frame chains	staff labels. See staff labels. See also instrument
fullness 493	names
highlights 489, 608	tokens 638
margins 598, 600, 608	naming schemes
padding 493, 598, 600, 608	file names 572
vertical justification 605	narrow time signatures 1375
music symbols	Nashville
character styles 742	chord symbols 313, 853
inputting 378, 381, 639	numbers 312
text 378, 381, 639	natural harmonics 1062
tokens 639	appearance 1066, 1068
MusicXML	hiding 1063
barlines 438	inputting 358, 1063
chord symbols 874	showing 1063
dialog 83	natural minor. See scales. See also key signatures
exporting 82, 83	naturale. <i>See</i> playing techniques
importing 81	naturals
opening 71	hiding 776, 784, 785, 1065
pedal lines 1159	inputting 239
percussion 82	parentheses 776, 784, 1065
repeat endings 1215	showing 776, 784, 785, 1065
resetting beaming 825	navigation 64, 427, 428
signposts 438	bars 430
staff labels 1288	caret 218
muted	chord symbols popover 317
colors 534	figured bass popover 389
notes. See dead notes	fingerings popover 269
mutes. See playing techniques	flows 429
muting	handles 498, 503, 608
channels 532, 703, 711	items 428
colors 534	jump bar 64, 65
deactivating 532, 700–702	Key Editor 657
effects 711	layouts 42, 46
inserts 711	lyrics popover 384
instruments 532	mixer 707
items 533, 534	music area 428
MIDI keyboards 212	note input 219, 222, 237
notes 211, 533, 534	notes 428
slash notes 453, 1236, 1238	pages 429, 430, 524
tracks 532, 700, 701	part layouts 42, 46, 507
voices 532	percussion editor 657
mutual exclusion groups 754	piano roll 657
editing 761	playback 523, 525, 527
Calcing 701	print preview area 35, 561
	rehearsal marks 430
N	rhythmic grid 212
	selections 410–413, 428
names	strings 151
channels 710	Write mode 428
composer 979	near send 722, 723
drum sets 140	nested
flow headings 634	slurs 1264, 1273
flows 183, 184, 572, 978	tuplets 1386, 1387
groups 148	new projects 70
instrument filters 434, 437	New York chord symbols 853
instruments. See instrument names	INEW TOTA CHOIL SYTHOOLS 033
layouts 176, 178, 572	
lyricist 980	

niente 928	note and rest colors (continued)
circle 928, 929	muted 534
	notehead sets 1037
deleting 928	
duration 310	notes out of range 53, 1044, 1308
inputting 302, 304, 307, 309, 928	printing 566, 581
moving 904, 919	rests 1253
styles 929	tablature 1308
text 928, 929	voices 53, 1417
no chord symbols 316	note brackets. See bracketed noteheads
nodes 1062	note durations 14, 196, 254, 671, 672
changing 1064	changing 255, 667
non-arpeggio signs. See arpeggio signs	chords 247
non-breaking spaces 382, 384, 1024	different 227
non-drop frame timecodes 1206	expression maps 745, 760
non-power of two time signatures. See time signatures	forcing 257, 841
non-sustaining instruments 934	glissando lines 1101
velocity 674. See also Velocity editor	hiding 196
non-transposing layouts 173	inputting 219, 222, 254, 255, 257
nonuplets. See tuplets	inputting beats 295
notated duration 671, 672	Key Editor 665, 667
played duration 671	metronome marks 289
requantizing 261	notated. See notated duration
tool 652	percussion 233, 665, 667
notation options 26, 730	playback 732, 752
barlines 798, 801	
	played. <i>See</i> played duration
beaming 821	quantization 91
dialog 730	rhythm dot consolidation 1043
percussion kits 1404	selecting 254, 256
rests 1252	showing 196
saving as default 730	slash regions 1240
searching 730	splitting 256
voices 1417	tablature 237
Notation Options dialog 730	tempo equations 290
notation reference 774	transformations 463
notation staves 1308	tuplets 249, 252
hiding 1309	voices 227
showing 1309	note event actions. See key switches
notations	note grouping 22, 841
appearance 646	beaming 821, 822, 824, 825, 841
changing 421	changing 257, 841
copying 445–447	cut common time 844
editing 646	hemiola 257
inputting 22, 266	meter 822, 842
panels 191	note input 22, 23
percussion kits 1404	pick-up bars 1364
popovers 22	rests 22
position 646	rhythm slashes 1240
properties 646	ties 243
selecting 412–414	time signatures 23
settings 728, 730	note input 219, 222, 225, 664
stacking order 504	adding notes 253, 475
tucking index 504	caret 214, 218
zoom options 41, 431, 432	chords 214, 247
Notations toolbox 197	Drum Pads panel 205
notches	Fretboard panel 204
pedal lines. <i>See</i> pedal retakes	fretted instruments 204
slurs 1267, 1268	grace notes 244
ties 1343	input pitch 210
note and rest colors 54, 1044, 1253	inputting vs. editing 206
changing 53, 54	Insert mode 214
exporting 570, 581	Keyboard panel 202
hiding 425, 534, 1044, 1417	lock duration 459
inverting 54	MIDI 258-260, 263

note input (continued)	note spelling (continued)
mouse input 208	layouts 462
multiple staves 218, 231	resetting 463
muting notes 211	transposing 475
percussion 93, 233, 236, 237, 665	note tools popover 473
piano keyboard 202	adding notes 253
pitch 210	transposing notes 458
playing notes back 211	note values. See note durations
register selection 222	note velocities
repitching notes 459	MIDI import 90, 263
rests 1250	notehead sets 1033, 1034, 1037, 1038
retrospective recording 260	colors 1037
rhythmic grid 213	designs 1034, 1037
starting 217	ledger lines 1042
stem direction 237	pitch-dependent 1037
strings 204	resetting 1039
tablature 222, 237	scale degree 1037
ties 243	types 1033
tuplets 249	notehead-attached lines. See lines
voices 227	noteheads 1034
note names 478	aikin 1037
case 56	arrows 1035
chord symbols 313, 315, 858	articulations 791
harp pedaling 1133, 1134, 1139	brackets. See bracketed noteheads
horn branch indicators 960	changing 1038, 1039
inversion 476	circular 1034
language 56	colors 54, 1037
middle C 50	crosses 1035
MIDI trigger regions 408, 409, 559	cues. See cues
noteheads 1037	designs 1034, 1037–1039. See also notehead sets
piano roll editor 661	diamond 1035, 1036, 1063, 1066
pitch mapping 478	dotted 1037
note spacing 490, 494, 495, 671, 833, 1253, 1259, 1418	dynamics 448
accidentals 780	editing 1038
activating 490	fermatas 994
barlines 804	five-line staff 1401
changing 494, 496, 1179, 1254, 1419	funk 1037
chord symbols 861	hairpins 448
copying to other layouts 627	harmonics 1063, 1066
cross-staff beams 833	hiding 1041, 1045
default 494, 495	large 1036
fullness 493	ledger lines 1042
galley view 39	lines 1185
grace notes 983	moon 1037
handles 496, 498	muted 1036
individual notes 496, 498	note names 1037
justification 493, 597	overlapping 1418
key signatures 1004, 1006	parentheses. See bracketed noteheads
layout options 495, 728	percussion 233, 665, 669, 1399, 1401–1403
layouts 494, 495	pitch-dependent 1037
lines 496, 1179	playing techniques 669, 1399, 1401, 1402
lyrics 495, 1016, 1018	rectangular 1037
rests 1254	resetting 1039
reverting 499	sets. See notehead sets
rhythm dots 1420	shapes 1034, 1037, 1038. <i>See also</i> notehead sets
stems 833	showing 1041, 1045
systems 493, 597	size 422, 587, 601, 902, 1034, 1038, 1039
time signatures 1362	slashes 1036, 1236, 1399
vertical lines 1179	square 1037
voices 1419, 1420	statistics 105 stemless 1060
note spelling 460, 461 adding notes 475	time signatures 1369
automatic 461	triangular 1035
aatomatic To n	titutiquidi 1000

noteheads (continued)	notes (continued)
types 1034	Key Editor 650, 661
unpitched percussion 1399, 1401	key signatures 456, 457, 460–463
walker 1037	laissez vibrer ties 1349
wedges 1035	ledger lines 1042
NotePerformer	length 255, 665, 667
trills 1086	lines. See lines. See also glissando lines
notes 22, 1033	lock duration 459
above staves 253, 455, 832, 852, 897, 1042, 1301	lyric alignment 1018
accidentals 196, 239, 455–457, 460–463, 775	moving 465, 467, 1043, 1399, 1402, 1418, 1420
adding to existing notes 253	moving graphically. See note spacing
alignment 906	moving rhythmically 448, 666
appearance 646	moving to other instruments 452, 669
arpeggio signs. See arpeggio signs	moving to other staves 451, 669, 832, 835
articulations 196, 788–790	moving to other strings 1310
auditioning 211 auxiliary 1083	multiple-voice contexts 1418, 1422 muting 532, 533, 1122, 1160
beaming 821, 822	navigation 428
below staves 253, 455, 832, 852, 897, 1042, 1301	notated duration 23, 671
brackets. See bracketed noteheads	note spacing 494, 495
brass fingerings 970	notehead designs 1034
changing pitch 455, 459	notehead sets 1033
chord symbol alignment 861	order 1420, 1421
chords 247, 249, 319	out of range 53, 1044, 1310
colors 53, 54, 534, 1037, 1044, 1417	overlapping 255, 1417–1419
condensing. See condensing	overrides 672, 673
copying 445–447, 670, 788	parentheses 1047, 1048
crossing to other staves 451, 832, 835	partials 1062
cues. See cues	pedal lines 1147
dead notes 1122	percussion editor 659, 663–667, 669
deleting 440, 443, 671, 793, 1381	percussion kits 140, 233, 665, 1397, 1399, 1406,
deselecting 418	1413
dotted 225, 822, 841, 844	percussion maps 764
durations 196, 254–256, 665, 667, 671	piano roll editor 650, 659, 661, 664, 666–668
dynamics 302, 674, 677, 903. See also Dynamics	pitch 455, 459
editor	pitch mappings 469
dynamics alignment 905, 906	pitch-dependent noteheads 1037
editing 192, 646	Play mode 664
editorial. See bracketed noteheads. See also	playback 525, 530, 532, 533, 744
comments	played duration 671–673
enharmonic spelling 460–463	popover 473
filters 417	properties 646
fixing duration 257, 841 fonts 734, 736	ranges 53, 1044 register 222, 455, 459
ghost notes 1048	removing stem direction changes 1059
glissando lines. <i>See</i> glissando lines	repitching 459
grace notes 244, 983, 985	requantizing 261
grouping 822, 841	resetting 673
guitar bends 345, 346, 1103	respelling 460–463
guitar post-bends 347, 1107	rests 1250
guitar pre-bends 346, 1105	retakes 1147
harmonics. See harmonics	reversing 465. See also retrograde
harp pedaling 1133, 1134	rhythm dots 225, 1043, 1044, 1420
hiding 559, 1041, 1045, 1241	rhythm slashes 1237
hiding ledger lines 1042	rhythmic grid 212
hiding stems 1060	rolls. See tremolos
horizontal spacing. See note spacing	rotating 467
horn branch indicators 971	scale mapping 471
inputting 209, 219, 222, 225, 232, 233, 247, 257,	secondary beams 836
664, 665	selecting 411–414, 418, 428, 659
Insert mode 232, 439	showing 1041, 1045, 1241
inverting 464, 465, 476	size 422, 587, 601, 902
iazz articulations. See iazz articulations	slash regions 1241

notes <i>(continued)</i>	numbers (continued)
slashes 1236	condensing 1298
slurs 196, 788, 1264	empty bars 105
spacing. <i>See</i> note spacing	exporting 105, 106
speed 254–256, 840, 1313	figured bass. See figured bass
spelling 460–463	flows. See flow numbers
splitting 192, 256, 1351	frets. See frets. See also tablature
staff spacing 587	hyphens 1026, 1027
statistics 105	instruments 125, 129, 130, 716, 1293
stem direction 453, 1055, 1057, 1058, 1413	layouts 175
stem length 1059	lyric lines 1028–1030
stemlets 839	moving 501
stems. See stems	multi-bar rests 1257
string fingerings 971, 972, 1040	numbered bar regions 1231–1233
string indicators. See string indicators	pages 1130, 1131
strings 1310	plug-in instances 507, 511, 512
tablature 1310	rehearsal marks 1197, 1198
terminology 14	repeats 536, 1210
ties 23, 243, 790, 1348	rhythm slashes 1243
time signatures 1369	slash region counts 1243
transforming 463	slur segments 1277
transposing 454–458, 475, 668	staff labels 1293, 1298
tremolos. See tremolos	staff lines 592, 1406, 1407
trill intervals 1080, 1081	statistics 105
trills 1075	staves 105, 590, 1300, 1301
tuplets 1386, 1388	strings. See string indicators
types 196	systems 105, 613
unbeaming 824	systems per frame 613
undamped 1349	tablature. <i>See</i> tablature
unisons 1418	time signatures 1368
unscaling 985, 1388	tuplets 1394
velocity 674. See also Velocity editor	value fields 649
voices 227, 453, 454	verses 1030
Notes panel 191, 196	numerators
Notes toolbox 192	styles 1367, 1368
November music font 734, 736	time signatures 1359
nudging. See moving	numeric value fields 649
numbered bar regions 810, 1231	nut
changing number 1233	chord diagrams 876
counts 1232–1234	fretted instruments 151
font style 1229, 1232	tablature 154, 156, 1308
frequency 1233	
handles 419, 1231	0
hiding 1232	9
highlights 1226	oboe. See instruments
inputting 408	octatonic
length 419	chord symbols 316
moving 448	scales 471
panel 398	octave divisions 1009
parentheses 1234	EDO 1009
placement 1235	playback 747, 1100, 1101
popover 397	transposing 456, 457
showing 1232	octave lines 897
staff-relative placement 1235	alignment 898, 899
systems 1232	crosshairs 503
numbers	deleting 443
backups 104	Engrave mode 900
bar repeats 1226, 1227	filter 417
barlines 536, 1210	frame breaks 900
bars. See bar numbers	handles 900
bars per system 613	hiding 899
beam lines 837	hooks 900
chord diagrams 882, 883, 885	inputting 321, 323, 324, 326, 327
-	inpacting 321, 323, 327, 320, 327

octave lines (continued)	opening 71
layouts 899	auto-saved files 102, 103
length 419, 501, 900	documentation 68
moving 448, 451, 501	editors 658, 699
panel 327	files 71, 102, 103
placement 504	flows 507
popover 322, 323, 326	Key Editor 650, 658, 699
position 504, 898, 899	layouts 42
selecting 413	MIDI files 71, 84
showing 899	mixer 700-702
signposts 899	MusicXML files 71
size 422	panels 43
stacking order 900	projects 70, 71, 102, 103
staff-relative placement 423	Properties panel 43, 201, 646
system breaks 900	sound libraries 515
-	
tucking index 504	tabs 44, 46
types 323, 897	templates 70
octave transpositions 455–457	transport window 540 video tutorials 68
adding notes 253	
cautionary accidentals 784	video window 188
clefs 130, 322, 323, 894, 895	VST instruments 515
figured bass 949	windows 48, 515
instruments 130	zones 43
inversions 464, 465, 476	optical spacing
octave lines 323, 897	cross-staff beams 833
pitch mapping 469, 478	optimized staves 587, 588, 590. See also condensing
scale mapping 471, 478	optional notes. See bracketed noteheads. See also
Octaver 705, 711	parenthesized chord symbols
octuplets. See tuplets	options 26, 646
odd-numbered layouts	items 646
booklets 576	layout 728
printing 566, 576	notation 646, 730
offsets 501, 649	page sizes 579
accidentals 780	playback 732
bar numbers 813–815, 817–819	preferences 57
chord symbols 862, 874	properties 646
fret numbers 885	searching 57, 728, 730, 732
instrument changes 136	text formatting 379
lyric lines 1020	toolbar 29
multi-bar rests 1258, 1259	transport 29, 31
notes. See note spacing	workspaces 29, 30
played duration 652, 666, 667, 671–673	zoom 37, 41, 431, 432
rehearsal marks 1197	orchestral
resetting 425	cues. See cues
rhythm dots 1420	instrument filters. See instrument filters
text 1333, 1334	order 123, 124, 133, 163, 175, 1295
timecodes 185, 1207	panning 709
tuplets 1395	project templates 70, 76, 112
videos 185	shorthand 112
voice columns 1419–1421	staff grouping 847, 1295
omissions	stage templates 713
chord diagrams 876, 885	orchestrating. See arranging
chord symbols 314	order 504
opacity 438, 571, 580	accidentals 778, 780, 1001
open	actions 750
key signatures 1002	articulations 789
meter 277, 281, 282, 1214, 1360, 1367, 1369	band 123
strings. See open strings	chord symbols 867
time signatures 277, 281, 282, 1360, 1367, 1369	comments 486
open strings 1062	expression maps 745
chord diagrams 876, 885	fermatas 1165
harmonics 1062	flows 74, 169
pitches 151, 153	frame chains 645
the contract of the contract o	

instrument filters 434 instruments 125, 129, 130, 133, 146, 177, 178, 1293 jazz 123 key signatures 1001 layouts 175 lines 1178 metronome marks 1322 MIDI messages 750 names 133, 177, 178 notes 1420, 1421 orchestral 123–125, 133, 163, 1295 pages 40, 49 players 123–125, 163, 1295 playing techniques 1165 rehearsal marks 1197 repeat markers 1217 rhythm dots 1043, 1420 score 123–125, 163, 1295 staff labels 1293 string indicators 1165 tabs 47 tempo marks 1322	ossia staves 1301 condensing 1301 moving 448, 451 playback 1301 signposts 438, 1301 staff spacing 587, 605 vertical spacing 587, 604, 605 ottava lines. See octave lines outputs audio export 57 mixer 552, 700, 701 panning 713, 715, 716 plug-ins 552 reverb 721–723, 725 volume 708 overdubbing MIDI recording 261 overlapping accidentals 778, 780 articulations 791 bar numbers 814 barlines 907 dynamics 907 notes 249, 255, 438, 607, 1043, 1417–1420
voices 730, 1417, 1419	slash regions 1246
Orff instruments. See instruments	slurs 1265
organ. See instruments	staves 584, 587, 601, 607
orientation	text 438, 607, 1334
changing 584 exporting 579	voices 1043, 1417–1420 overline text 379, 739, 742
landscape 578, 579	instrument names 180
portrait 578, 579	staff labels 180
printing 566, 579	Override Percussion Noteheads dialog 1401
ornaments 1071	overrides
acciaccaturas. See grace notes	barlines 299, 301, 438, 801
accidentals 1071, 1084	beams 822, 824, 825, 835
alignment 1072	clefs 110, 323-325, 892, 894
appoggiaturas. See grace notes	dynamics 679, 682
changing 421	endpoints 556
colors 54	flow headings 633, 634
crosshairs 503	MIDI points 688
deleting 443 filter 417	note duration 672, 673 octave lines 899
inputting 332, 333, 337, 338	paragraph styles 1333
intervals 1071	placement 423
jazz 1126. See also jazz articulations	playback templates 543, 544, 546, 549, 556, 557
length 419	played duration 673
moving 448, 451, 465, 467, 501, 1072	removing 673
panel 337, 338	rests 241
placement 1072	space templates 722, 723, 725, 727
popover 333, 337	stage templates 718
position 1072	text 1333
reversing 465. See also retrograde	transposition 110, 323, 892, 894, 899
rotating 467 selecting 413	velocity 673 overscroll 430
slurs 1073	overtones. See partials
staff-relative placement 423	overtones. See partials
text borders 739, 1336	
trills. See trills	P
types 333	padding
Ornaments panel 338, 340, 342	auxiliary notes 1083
	chord diagrams 880
	chord symbols 853, 869, 874

padding (continued) clefs 891 dynamics 912 frames 583 harp pedaling 1138 lines 1194 music frames 493, 598, 600 percussion legends 1412 playing techniques 1163 rests. See padding rests silence 99 text 739, 1194, 1337 time signatures 1372 trills 1083	page numbers (continued) showing 596, 1132 size 1130 tokens 641, 642 total 642 page ranges exporting 568 flows 568 printing 568 selecting 575 page size 578, 579 changing 584 graphics files 570 layout options 728
padding rests 1249	MusicXML files 81
hiding 1242	new projects 68
slash regions 1242	page template overrides 1329
page arrangements 39, 40, 49 page breaks. <i>See</i> frame breaks	removing 633 page template sets 630
page formatting 583	applying 586
bars per system 613	flow headings 630, 634
blank staves 592	layouts 586
casting off 612	page templates 25, 630, 631
copying 611	assigning to pages 594
divisi 1307	composer 631
empty staves 590, 592	copying 630, 631
fixing 612, 613, 615, 621, 626–629	default 631
flow headings 583, 634 formatting 630	first 594, 631 flow headings. <i>See</i> flow headings
left pages 593	page numbers 632, 1130
locking 615	project templates 76
make into frame 621	sets. See page template sets
make into system 618	titles 631
moving systems 610	types 631
multi-bar rests 1259	page turns. <i>See</i> frame breaks
multiple flows 593	page view 39, 49
page size 584 page templates 586, 630, 631	arrangements 40, 49 bar numbers 811
resetting 616, 633	flows 487
staff size 601	navigation 429, 430
staff spacing 587, 604, 611, 1334	page numbers 1132
staves 590, 591	pages
systems 500, 587, 613	arrangements 40, 49
tacets 624	background color 52, 54
text 736, 737, 739, 742, 743, 1334 titles 630, 634	breaks. <i>See</i> frame breaks changing view 49
page margins 583, 598	color 52, 54
changing 585, 600	copying 630, 631
hiding 425	deleting 633
page numbers 632, 1130	dragging 430
appearance 1130	edges. <i>See</i> page margins
count 642	editing 633
deleting 1130	exporting 568, 570, 575
flow headings 596, 1131 flows 641, 642	facing 630, 631 flow headings. <i>See</i> flow headings
font styles 1130	formatting 978
guide 1132	frames. See frames
hiding 596, 1131, 1132	fullness 493, 587, 588, 601, 602
horizontal alignment 1130	going to 429
initial 593, 1131	height 584, 585, 588
numeral style 1131	hiding empty staves 590
page templates 632	layouts 583, 612, 613, 630
paragraph styles 1130	left 630, 631

pages (continued)	panels (continued)
locking 615	print options 563
making from selection 621	properties 646
margins 583, 585, 598–600	repeat endings 398
multiple flows 593	repeat markers 398
navigation 429, 430	rhythm slashes 398
numbers. <i>See</i> page numbers	Setup mode 107
orientation 584	showing 30, 41, 43, 201
page templates. See page templates. See also flow	tempo 291, 292
headings	time signatures 280, 282, 285
printing 568, 575, 579	tonality systems 275
ranges 575	tremolos 398, 405
rectangles. See frames	VST instruments. See track inspector
right 630, 631	Write mode 191, 196, 200, 646
setup 579	panning 701, 703, 709, 713, 715, 716, 718, 722, 723
size. See page size	
	paper color 52
staff spacing 611 statistics 105	
	duplex printing 577
templates. See page templates. See also flow	orientation 578, 579
headings	size 578, 579, 584
tokens 642	paradiddle 219, 254, 1386
total number 105, 642	paragraph styles 736, 739, 811, 1199
turns. See frame breaks	bar numbers 811, 812
view options 37	borders 739
width 584, 585, 597	changing 739, 741, 743, 1333
Pages panel 489	composer 979
palettes. See panels	condensing 1296
palm mute. See playing techniques. See also guitar	copyright 980
techniques	creating 741
panels 36, 197	default 743
accidentals 275	deleting 739
arpeggio signs 337, 340	dialog 739
bar repeats 398	divisi 1296
barlines 296, 301	exporting 739
bars 296, 298	flow headings 634
clefs 324, 325, 327	horizontal alignment 739
drum pads 205	importing 739
dynamics 307, 309	inputting text 378
Engrave mode 489, 646	instrument change labels 139
flows 107, 118	instrument names 1296
formatting 491	lyricist 980
fretboard 204	lyrics 1022, 1023
glissando lines 337, 342	missing fonts 72
guitar techniques 337, 346, 350, 352, 353, 355	overrides 1333
hiding 30, 41, 43	page numbers 1130
holds 330	percussion kits 1297
jazz articulations 337, 344	player group labels 1295, 1296
Key Editor 650	rehearsal marks 1199
key signatures 275, 276	repeat markers 1217
keyboard 202	resetting 1333
layouts 107, 115, 562	saving as default 739
MIDI instruments. See track inspector	staff labels 1296, 1297
mixer 700	tacets 623
notations 200	titles 631, 739, 978
notes 196	verse numbers 1022, 1023
octave lines 327	Paragraph Styles dialog 739
ornaments 337, 338, 340, 342, 344	parallel
pauses 330	lines 821, 836, 993, 1096, 1166, 1302
pedal lines 361, 368	parent styles
Play mode 505	paragraph styles 739, 741
players 107, 108	parentheses
playing techniques 361, 364, 368	accidentals 776, 784, 1065
Print mode 561	bar numbers 820

parentheses (continued)	patches
bar repeats 1226, 1228	endpoints 552
capo chord symbols 155, 853	playback 552, 744, 763
chord symbols. See parenthesized chord symbols	path
counts 1228, 1232, 1234, 1243, 1245	audio 98
dynamics 910	backups 104
figured bass 387, 941, 944	flows 79
fingerings 269, 270, 961, 962	layouts 572
fret numbers 1103, 1108	MIDI files 94
ghost notes. See bracketed noteheads	MusicXML files 82
guitar bends 1103, 1105	projects 638
harmonics 1065	tempo tracks 97
	patterns
hiding 871	1
inputting 310, 317, 385, 387, 776, 871, 910, 941,	chord diagrams 875, 883–885
944, 1048, 1065	drum sets 93
instrument transpositions 1293	Groove Agent 93
metronome marks 1318, 1321	inversion 464, 465
moving 874, 1054	mapping 469, 471, 478
noteheads. See bracketed noteheads	MIDI trigger regions 408, 409, 559
numbered bar regions 1232, 1234	pitches 468, 478
octave line numerals 897	repeating 445, 468, 478
padding 874	retrograde 465
pedal continuation signs 1155, 1156	rotating 467
percussion notes. See bracketed noteheads	scales 471, 478
playing techniques 1168	pauses 991, 993
shape 872, 944, 1048	appearance 421
showing 871	barlines 996
size 873	breath marks. See breath marks
slash regions 1243, 1245	caesuras. See caesuras
staff labels 1293	changing 994
string shift indicators 1040	colors 54
style 872	crosshairs 503
tablature 1066, 1103, 1105, 1108	default settings 993
tempo marks 1318, 1321	deleting 443, 1254
thickness 872	duration 421, 997–999
tie chains 1050	fermatas 992, 995
time signatures 277, 281, 1367, 1370	filter 417
trills 1083	hiding 1254
vibrato bar dives and returns 1108	3
	inputting 328–331
parenthesized chord symbols 870, 1047	linked 994
capos 155, 853	moving 448, 501, 996
moving 874	multiple at same position 994
padding 874	panel 330
showing 871	playback 527, 997–999
single 871	popover 328, 329
size 870, 872, 873	position 993
style 872	rests. See rests
part formatting 626–628	selecting 413, 417
system formatting 626	single staves 994
part layouts. See layouts	staff-relative placement 993
part names 176, 178	types 329, 991, 997
partial	PDF files 579
beams 836	color 580
capos 156, 157	exporting 570–572
harp pedaling 1139	file names 572
hiding. See erased backgrounds	flows 570, 572
	fonts 581
partial bars. See pick-up bars	
partials 1062, 1064	key commands 58
parts. See layouts	layout numbers 175
pasting. See copying	layouts 570, 571
pataflafla. See grace notes. See also sixteenth notes	page size 570
	project preview 74
	peaking 708

pedal level changes 1142, 1143, 1145, 1146	pedal retakes (continued)
end level 1146	removing 1147
handles 1143	types 1144
inputting 1145	pedals
removing 1147	harp pedaling. See harp pedaling
start level 1145, 1146	piano. See pedal lines
pedal lines 1133, 1141	percentages
alignment 1142, 1143, 1146, 1147, 1149, 1150	Engrave mode 493
appearance 1151, 1153, 1156–1158	horizontal spacing 493, 495, 597
brackets 1155, 1156	note duration 752, 1285
changing 421	scale size 422, 566, 579, 873, 962
colors 54	tempo marks 1314, 1321, 1325
continuation lines 1141, 1151, 1153-1155	vertical spacing 493, 588, 605
crosshairs 503	percussion
dashed 1153	adding 110, 112, 122, 131, 143
dashes 1154	articulations 1399
deleting 443	drum sets. See drum sets
duration 1158	grace notes 245
end signs 1152, 1153	groups 163, 1295
Engrave mode 1143	instrument changes 131, 134
filter 417	kits. See percussion kits
formatting 1151–1153, 1155	laissez vibrer ties 1349
gaps 1154	legends. See percussion legends
grace notes 1148	MIDI 37, 650, 663, 684, 763
handles 1143	note input 93, 233, 236, 237, 664, 665
harp pedaling. See harp pedaling	noteheads 669, 1399, 1401, 1402
hiding 1151–1153	panning. See stage templates
hooks 1143, 1151, 1152	part layouts 172, 1407
inputting 358, 360, 366, 368	part names 176, 178
length 419, 501, 1143, 1147, 1150	pitched percussion. See instruments
levels. See pedal level changes	playing techniques 769
lifts 1142	reverb. See stage templates
merging 1150	rudiments 219, 245, 254, 983, 1377, 1383, 1386
MIDI controllers 1158	staff labels 1291, 1295, 1297
MIDI import 84, 90, 265 MIDI recording 263, 265	staff lines 140, 149, 1406, 1407 system objects 1304
moving 90, 448, 501, 1143, 1147	tremolos 769, 1399
MusicXML import 1159	unpitched percussion. See unpitched percussion
muting in playback 533	percussion editor 663
notes 1147	copying notes 670
order 1147	deleting notes 671
panel 361, 368	height 656, 657
parentheses 1155, 1156	inputting notes 664
percussion 1160	moving notes 666, 669
playback 1158	navigation 657
popover 360, 366	note duration 665, 667, 671, 672
position 1147, 1148	played vs. notated durations 671
releases 1151	playhead 524
removing retakes 1147	playing techniques 663
retakes. <i>See</i> pedal retakes	scrolling 524, 657
signposts 438	selecting notes 659
splitting 1149	tools 652
staff-relative placement 1147	tracks 515
start signs 1151, 1156	zoom 657
text 1156–1158	Percussion Instrument Playing Techniques dialog 1399
thickness 1155	percussion kits 140, 1397
types 360, 1141	adding instruments 143
pedal retakes 1142	adding to players 110, 131
handles 1143	caret 233
inputting 360, 366–369, 1150	changing instruments 145
notes 1147	creating 110, 131, 140, 143, 144
pedal level 1146	drum sets. See drum sets
	dvnamics 1405

percussion kits (continued)	percussion maps 763
editing area 140, 1406	creating 767
exporting 149	custom 767
filtering instruments 140	dialog 764
five-line staff 1300, 1406	endpoints 507, 552, 555
gap sizes 149	exporting 768
grace notes 245	file format 768
grids 147–149, 1406	filters 764
Groove Agent 559	importing 768
groups 147–149	linking 507, 555
hits 1236, 1239, 1241	MIDI import 87
importing 150	MIDI notes 37, 763
individual instruments vs. kits 1397	note input 236
inputting notes 93, 233, 665	playback techniques 764
instrument order 146	resetting 764
legends 1407	Percussion Maps dialog 764
MIDI 37, 650, 663, 684, 763	percussion stickings 1405
moving notes 452	perfect intervals 456–458, 474
naming 140, 147, 148	performance instructions 630, 631, 978, 1329
notation options 1404	adding 378
notations 1404	parts 378
note input 236, 237, 664	playing techniques. See playing techniques
noteheads 669, 1399, 1401–1403	period 14
patterns 559	dynamics 915, 916, 924
playing techniques 669, 1398, 1399, 1402	lyrics 1012
presentation types 140, 1397, 1406, 1407	possibile 915
removing instruments 144	rhythm dots 192, 225
rests 730	subito 915, 916
rhythm slashes 1236, 1238, 1239, 1241	tempo marks 1321
routing 554	Petaluma music font 734, 736
rudiments 245, 983	Phaser 705, 711
setting up 140, 236	phrases
single-line instruments 1406	bar repeats 421, 1225
spacing 149	chord symbol regions 863
staff labels 140, 147, 148, 1288, 1297, 1406	dynamics 302, 930, 935–937
staff lines 140, 149, 1406, 1407	slurs 1261
staff position 146, 236, 1399	phrygian
staff-relative legend placement 423	chord symbols 316, 866
staves 140, 1397, 1406, 1407	scales 471, 478
stem direction 140, 237, 730, 1413	piano 128
stickings 1405	arpeggio signs 339, 340
tracks 506, 516	beams 832–835
voices 140, 730, 1413, 1414	braces 848
percussion legends 1407	chord symbol playback 520
adding 1408	cross-staff 832–835, 1059
backgrounds 1411	depressed notes. See bracketed noteheads
changing 1409	dynamics. See dynamics
crosshairs 503	glissando lines 1100
erased backgrounds 1411, 1412	hand marks. See lines
handles 1410	level changes 1142, 1147
instrument names 1410	panning. See stage templates
layouts 1407	pedal lines. <i>See</i> pedal lines
length 1410	playback 1158
padding 1412	position in score 123–125
position 1407	retakes 1142, 1147, 1150
ranges 1407, 1410	reverb. See space templates
signposts 438, 1407	score order 123–125
sounding instruments 1410	slurs 267
staff-relative placement 423	stems 227, 833, 1416
text 1411	substitution fingering 953
types 1407, 1409	tremolos 403, 405, 832
cypes 1707, 1703	voices 227, 1416
	101003 <u></u> 7, 1-10

piano roll editor 661	pitch (continued)
copying notes 670	middle C 50
deleting notes 671	MIDI 37, 650, 661, 663, 683, 684, 744, 763, 1100
height 656, 657	MIDI trigger regions 408, 409, 559
independent voice playback 661	note input 222, 239
inputting notes 664	noteheads 1033, 1037
middle C 50	octave lines 326, 327, 897
moving notes 666	open strings 151, 153
navigation 657	ornaments 1071
note duration 664, 667, 671, 672	partials 1062, 1064
pitch 50, 661, 664, 668	piano roll editor 661, 668
played vs. notated durations 671	playback 530
playhead 524	popover 473
scrolling 524, 657	ranges 747, 1044, 1100, 1101
selecting notes 659	repeating 468, 478
tools 652	reversing 465. See also retrograde
tracks 515	
	rhythm slashes 229, 1238
transposing notes 668	rotating 467, 477
tuplets 661	strings 151, 153, 885, 1040, 1133
zoom 657	transposed 130, 174
piccolo. See instruments. See also transposing	transposing. See transposing. See also transposed
instruments	pitch
pick-up bars 1360, 1364	trills 1078, 1080, 1081, 1083, 1085, 1088
deleting beats 295, 440, 793, 794	pitch before duration 222
inputting 277, 279, 283, 285, 440	accidentals 209
signposts 438	activating 192
turning bars into 440, 1364	articulations 209
pictures	rhythm dots 209
videos 185	pitch bends 1096, 1103
pincé. See ornaments	expression maps 747
pinch harmonics 1066, 1069	glissando lines 747, 1100, 1101
PingPongDelay 705, 711	guitar. <i>See</i> guitar bends
pinky finger 962	microtonal 747
inputting 272	MIDI controllers 683, 686
popover 272	pitch contour emphasis 936
pit band. See bands. See also project templates	pitch mapping 469, 478
pitch	pitched percussion. See instruments. See also
accidentals 239, 456, 457, 460–463, 775	transposing instruments
bends. See pitch bends	più. See tempo marks. See also dynamic modifiers
changing 50, 153, 454–459, 668	pizzicato. See playing techniques
changing string 1310	placement
chord diagrams 885	articulations 791
clefs 324, 325, 889	breath marks 994
click 262, 518	caesuras 994
concert 174	changing 423
contour emphasis 936	chord symbols 862
dips 1123	dynamics 904
display 37	fermatas 994
expression maps 745, 759	fingerings 952, 956
filters 417	grace notes 983
fretted instrument strings 153	harp pedal diagrams 1139
guitar strings 153	lines 1178, 1181, 1182
guitar techniques 1123	lyrics 1016
harmonics 1062–1064	octave lines 900
identifying 37	order 504
input 210	ornaments 1072
instruments 130, 132	pauses 993
inverting 464, 465, 476	pedal lines 1147
jazz articulations 1125	playing techniques 423, 1164
key signatures 1000	rehearsal marks 1196
mapping 469, 471	
	rests 1249, 1252, 1253
metronome click 262, 518	slurs 1262, 1264, 1270
microtonal 474, 783, 1009	tempo marks 1314

placement (continued)	playback <i>(continued)</i>
ties 1345, 1354	default settings 549, 718, 725, 727
tremolos 1378	default tempo 443, 1313
tucking index 504, 900	delay 705, 710, 711, 752, 1101
voices 1418	dynamic curve 934
plain font 736, 737, 739, 1329	dynamics 211, 530, 531, 677, 752, 913, 934, 936
bar numbers 811	elapsed time 540, 543
chord symbols 858	endpoints 507, 552, 554–557
figured bass 949	excluding items 533
fingerings 887, 960	exporting audio 98, 99
playing techniques 1160	expression maps 744, 745
rehearsal marks 1199	faders 700, 701, 708
string indicators 974	fast-forwarding 523
tablature 1312	fermatas 997, 998
tasto solo 949	fixed tempo 528
tempo marks 1317	flows 554
time signatures 1375, 1376	follow tempo 528
Play mode 19, 505	gap between flows 530
channels. See channels. See also tracks	gaps 997–999
deleting notes 671	ghost notes 1048
Endpoint Setup dialog 552	glissando lines 747, 1100, 1101, 1133
exporting expression maps 763	grace notes 990
expression maps 744, 756	guitar bends 1103
inputting notes 664	harmonics 1062–1064
loading sounds 513, 543, 549	hiding notes 1241
MIDI instruments 507, 512, 513, 543, 549	instrument sounds 513, 515, 543, 549
mixer. See mixer	instruments 530, 531, 744, 763
moving notes 666	jazz articulations 770, 1125
note durations 665, 667, 671, 672 overrides 673	Keyboard panel 202 legato 732, 752, 1285
panels 36, 505, 507	line 523, 524
percussion editor 663	loading sounds 513, 515, 543, 549
percussion maps 763	marcato 792
piano roll editor 661	metronome 540
playback 525, 732	metronome click 518
playhead. See playhead	microtones 747
switching 42, 505	MIDI controllers 684
toolboxes 505	MIDI thru 212
track overview 506	mixer. See mixer
tracks 515	multiple windows 48
transport 31, 540	muting 532, 533, 700
VST and MIDI panel 511	mutual exclusion groups 761
VST instruments 507, 511, 513, 543, 549	note durations 671, 732, 752
window elements 505	note velocity 674
zooming 522, 657	notes 211, 530, 531
playback 525, 543, 770, 1307	number of times played 536, 1210
accents 792	options. See playback options
activating 29, 525, 527	ornaments 1071
arpeggio signs 1093, 1094	ossia staves 1301
articulations 530, 531, 732, 745, 792	overrides 673
audio buffer size 263, 264	panning 709, 713, 718
bar repeats 1225	patches 552
bracketed noteheads 1048	pauses 997–999
breath marks 997	pedal lines 1158
bypassing inserts 711	percussion 507, 555, 663, 669, 763, 764, 1398,
caesuras 997, 999	1399, 1401, 1402
changing sound libraries 549	pitch 530
channels. See channels. See also tracks	playhead. See playhead
chord symbols 507, 520, 521	playing techniques 530, 531, 760, 770, 771
chords 211	playthroughs 533–536, 1210
click 262, 517, 518, 525, 540, 689	plug-ins 701
deactivating 527	pre-roll 529
dead notes 1122	preferences 57

olayback <i>(continued)</i>	playback techniques (continued)
recording notes 260	playback templates 543
repeats 534–536, 1210	resetting 771
resetting volume 708	playback templates 543, 544
reverb 703, 704, 712, 720, 721, 725, 727	
	changing 549
rewinding 523	creating 507, 513, 515, 549, 554, 555
scrubbing 527	custom 543, 546, 549
selections 525	dialog 544, 546
silence playback template 543, 544	endpoint configurations 511, 552, 556, 557
slashes 453, 1236, 1238, 1241	exporting 551
slurs 267, 530, 531, 732, 1285	factory default 544
soloing 532, 700	fallback 546
sounds 513, 515, 543, 549	file format 543
space templates 721	importing 551
spatial sounds. See stage templates. See also space	metronome click 262, 518
templates	overriding 543
staccato 792	resetting 549
stage templates 713	space templates 546, 551, 720
starting 525	stage templates. See stage templates
swing 537–540	track inspector 507
templates. See playback templates	played duration 671, 990, 1384
tempo 517, 528, 540, 689, 997, 1319, 1320, 1325	changing 672, 673
tempo equations 1327	key commands 672
tenuto 792	locking 652, 666, 667, 671
timecode 540, 543, 1201, 1206	notated duration 671
transport 540, 543	overrides 672, 673
tremolos 530, 531, 769, 1383, 1384	resetting 673
trills 1085–1087	slurs 1285
tuning 530	tool 652
velocity 674	player cards 108, 119
vibrato bar dives and returns 1108	disclosure arrows 41
voices 530, 531, 554	player group labels 1287, 1295
volume 211, 700, 701, 708	fonts 1295, 1296
olayback options 26, 732	hiding 1295
dialog 732	showing 1295
dynamics 934, 936	player groups 108, 163
pedal lines 1158	adding players 165
repeats 534	bracket grouping 806
saving as default 732	creating 90, 164
searching 732	deleting 167
slurs 1285	ensembles 112
swing playback 538	filters 434
timing 792, 1093	labels. See player group labels
tremolos 1383	MIDI import 90
trills 1085	moving players 165
Playback Options dialog 732 Playback Technique Combinations dialog 756	naming 166 panning 716
olayback techniques 552, 760, 770, 771, 787, 1160	removing players 166
attribute 771	player labels
combinations 756, 760	hiding 138, 139, 1295
creating 771	showing 138, 139, 1295
deleting 761, 771	staff labels 1287, 1291, 1295, 1298
direction 771	player names 176
display 37	changing 177
editing 771	groups. See player group labels
endpoints 552	hiding 1288, 1290
expression maps 744, 745	instrument tracks 516
fallback 771	length 1288, 1290
identifying 37	resetting 177, 178
mutual exclusion groups 761	showing 1288, 1290
percussion 769	staff labels 1288, 1290, 1291
percussion maps 764	tokens 639

players 20, 119, 121	players (continued)
adding 110, 112, 122, 126, 127, 131, 165	statistics 105
adding to flows 169	staves 590, 591
brackets 846, 847, 1295	swing playback 539, 540
cards 108	system dividers 1302
changing transposition 132	tablature 1308, 1309
chord symbols 310, 859	tokens 639
clefs 892	transposition 130
colors 516, 661, 663	volume 708, 913
combined parts 172	Players panel 107, 108
condensing 626	playhead 523
copying 123	color 53
deleting 125, 134, 167	fast-forwarding 523
divisi 1307	following 37, 524
duplicating 123	hiding 524, 527
empty staves 590	moving 430, 523, 524, 527
ensembles 108, 126	pausing 527
exporting 79	playback 525, 540
exporting audio 98	position 525
exporting MIDI 94	repeats 534
extra staves 1300	rewinding 523
figured bass 385, 939	showing 524, 527
flows 119, 169	transport 540, 543
groups. <i>See</i> player groups	zooming 522, 657
hiding 169, 172	playing technique lines 1166, 1171
importing 77, 78	appearance 1169, 1170
instrument change labels 138, 139	caps 1171
instrument order 133	changing 1170, 1173
instruments 21, 49, 128, 131, 132	components 1168
layouts 119, 172, 178	default settings 1166
lists 176, 639	duration 419, 1167, 1169
maximum number 121	hiding 1169, 1170
merging 77, 78, 81, 84, 87, 90	showing 1169, 1170, 1172
MIDI import 84	system breaks 1168
moving 123, 124, 166	playing technique-specific noteheads 983, 1160, 1397,
moving between groups 165	1399, 1401
moving instruments between 133	
	appearance 1403 articulations 769
multiple instruments 49, 131, 177, 178, 1291	
muting 532, 700	changing 669, 1402
naming 176–179, 1291	creating 1402
numbering instruments 129, 130	inputting 233, 665
octave lines 899	playback 769
ossia staves 1301	playing techniques 1160
panel 107, 108	adding text 1161
panning 709, 713	backgrounds 1162
part layouts. See layouts	brackets 1168
percussion kits 143, 144	changing 421, 669, 1402
pitch 130	collision avoidance 1165
player names 177, 178	colors 54
position in score 108, 123, 124	combinations 756, 760, 769
removing from flows 169	continuation lines 1166, 1170–1172
removing from groups 166	creating 1402
renaming 177	crosshairs 503
reverb. <i>See</i> space templates	deleting 443
saving 114	dialog 771
section players 108, 121, 122	display 37
showing 169, 172	divisi 1307
single players 108, 121, 122	duplicating 1169
soloing 532, 700	duration 419, 1167, 1169, 1172
soloists 125	editor. See Playing Techniques editor
sorting 108, 123	endpoint configurations 557
staff labels 1291	erased backgrounds 1162, 1163
staff size 602	exporting 101

olaying techniques <i>(continued)</i> expression maps 744, 745, 770	plucked instruments <i>(continued)</i> popover 272
fermatas 1165	slides 967, 969
filter 417	string indicators. See string indicators
font 1160	string indicators. See string indicators
frame breaks 1168	tablature. <i>See</i> tablature
grouping 1166, 1171, 1172	tuning 150
guitar. See guitar techniques. See also vibrato bar	plug-ins 543
handles 1167, 1168, 1171	allowing 513
harmonics. See harmonics	blocking 513
hiding 362, 1163	changing 515, 543, 712
identifying 37	configurations 546, 552, 554, 556–558
inputting 358, 362, 364	endpoints 507, 543, 552, 554, 555
length 419, 501, 1166, 1168	expression maps 507, 555, 745
lines. See playing technique lines	instances 507, 511
MIDI import 86, 87, 90	loading 513, 527, 543, 549, 710–712, 722, 725
moving 448, 451, 465, 467, 501, 1164, 1165, 1168	mixer 552, 701, 705
muting 533	opening 515
noteheads 669, 769, 1399, 1401–1403	percussion maps 507, 555
order 1165	playback 507, 511, 543, 701
padding 1163	reference 68
panel 361, 364	reverb 712, 722, 725
parentheses 1168	saving 556–558
percussion 769, 1398, 1399, 1401, 1405	windows 515
placement 1164	plus sign
playback 530, 531, 744, 745, 770, 771	caret 214
popover 358, 362	chord symbols 853
position 1164, 1168	mutes. See playing techniques
repeating 1169	rim shots. See playing techniques. See also playing
reversing 465. See also retrograde	technique-specific noteheads
rotating 467	tapping 1119
selecting 413	time signatures 277, 1360
showing 1163	PNG files 579
signposts 438, 1163	color 580
size 422	exporting 570–572
staff-relative placement 423	file names 572
system breaks 1168	layout numbers 175
text 1160, 1161	layouts 570, 571
ties 362, 364	project preview 74
tracks. See Playing Techniques editor	resolution 580
types 358, 1160	transparent 571
ungrouping 1173	poco a poco
vertical position 1165	centered 916
voices 362, 364, 530, 531	dynamics 304, 309, 914, 916, 923
Playing Techniques editor 673	font style 933
hiding 673	moving 917
showing 673	tempo marks 1323
olaying techniques lanes. <i>See</i> Playing Techniques	points
editor	constant 680, 687
Playing Techniques panel 364, 368	copying 660, 682, 688
olaythroughs 534, 1210 bar numbers 820	deleting 661
	dynamics 677, 679–681
changing 536, 1210, 1211	linear 680, 687
dividing 1211	MIDI 684, 686, 687
MIDI recording 261 muting 533	selecting 659 staff spacing 608
optional notes. <i>See</i> bracketed noteheads repeats 535, 536, 997, 1210, 1211	tempo changes 689, 691 unit of measurement 50
total number 536, 1210	polychord chord symbols 315, 852
plops. See jazz articulations	arrangement 867
olucked instruments	inputting 310
arpeggio fingering 966	polymeter 281, 282, 1359
fingerings 269, 962	1 3 , - 4

polyphony 1416	ports (continued)
adding voices 227	percussion maps 507, 552, 555
changing voices 453	setup 552
condensing. See condensing	Tempo editor 689
MIDI import 87	tempo track 517
MIDI recording 258, 259	position
playback 530, 531, 936, 937	arpeggio signs 1092
polytonality 273, 275, 1000	articulations 788, 790
popovers 22, 197	clefs 209, 889, 890
add intervals. See note tools popover	dynamics 310, 904
arpeggio signs 335, 339	figured bass 945
bar repeats 397, 407	fingerings 952
barlines 294, 296, 297, 299, 301	grace notes 983
bars 294, 295, 297	gradual dynamics 925
beats 295	hairpins 925
changing items 421	inputting 206
chord symbols 312, 317	Insert mode 439, 441, 442
clefs 322, 324	instruments in percussion kits 146
commands. See jump bar	items 425, 646
dynamics 302, 304	jazz articulations 1127
ensembles. <i>See</i> ensemble picker	key signatures 1003
figured bass 387, 389	lines 1177
fingerings 269, 270	new items 206
glissando lines 335, 341	notes in multiple-voice contexts 1418
guitar techniques 335, 345, 348, 349, 351,	octave lines 898, 899
353–355, 357	order 504
harp pedaling 360	pauses 993
holds 328, 329	pedal lines 1148
instrument filters 434	resetting 425
instruments. See instrument picker	rhythmic 23
jazz articulations 334, 343	slurs 1262, 1264, 1270
key signatures 273, 274	stage. <i>See</i> stage templates
lyrics 382–384	stop 439, 441, 442
metronome marks 288	string indicators 976
MIDI trigger regions 408, 409	trill intervals 1084
note tools 253, 458, 473	tucking index 504
numbered bar regions 397	vertical order 504
octave lines 322, 323, 326	videos 187
ornaments 333, 337, 339, 341, 343	possibile. See dynamic modifiers
pauses 328, 329	post-bends. See guitar post-bends
pedal lines 360, 366	pre-bends. See guitar pre-bends
playing techniques 358, 362, 366	pre-dives. See guitar pre-bends
repeat endings 395	pre-roll 529
repeat markers 396	duration 529
repeats 395, 403, 407	flows 530
rhythm slashes 397	preamble 978
string indicators 361	barlines 802, 803
tempo 287, 288	clefs 893
time signatures 277, 281, 283	key signatures 1003
transpose 475	page templates 630
tremolos 396, 397, 403	precipitando. See gradual tempo changes. See also
trills 333, 1081	tempo marks
tuplets 249, 251	preferences
port de voix. <i>See</i> ornaments	colors 51
portamento. See glissando lines	comments 485, 486
portrait orientation 578, 579, 584	key commands 58, 62
status bar 39	MIDI 265
ports 507, 517, 552, 689	missing fonts 72
changing 554	mouse input 207
chords track 507	notations input 209, 310
expression maps 507, 552, 555	note input 209, 210, 222
instruments 554	pedal lines 265
mixer 701	selection tools 39

preferences (continued)	printing (continued)
sustain pedal controllers 265	duplex 566, 577
theme 51	flows 568
Preferences dialog 57	job types 575
prefixes	key commands 58
dynamics 914	landscape 575, 578
fingerings 971 hiding 138	layouts 566 lyrics 1015
instrument change labels 56, 137, 138	macOS options 569
rehearsal marks 1199	note colors 581
presentation types 140	options 563
changing 1407	orientation 578
dynamics 1405	page sizes 578, 579
editing area 140, 1406	paper sizes 578
percussion kits 1397, 1406	PDF files 570
presets 26	portrait 575, 578
background color 52	preview 35, 425
chord symbols 853	ranges 566, 568
effects 758	scale size 566
instrument filters 434	signposts 581
staff size 601	spreads 575
zoom 41	text 101
pressure. See playing techniques. See also lines	time 581 voice colors 581
presto. See tempo marks preview	watermarks 581
color 52	program change actions 744, 750, 758
file names 572	Project Info dialog 74
font styles 737, 739	project information 74
images 74, 101	composer 979
note spacing 495	copyright 980
print preview 35, 561	exporting 76, 101
projects 74, 101	flow titles 183, 978
previous versions 72	lyricist 980
primary	page templates 631, 978
beams 836	project templates 76
instruments 654, 682, 686, 688	titles 978
primary bar number sequence 817	tokens 74, 183, 631, 640
changing 817, 819	Project Statistics dialog 105, 106
returning to 819	project templates 70, 76
primes 638, 641	categories 76 Hub 68
primo repeat endings 1210	MIDI import 84
Print mode 19, 561	starting projects 70
landscape orientation 575	project window 28
page setup 579	dark 51, 54
panels 36, 561–563	Engrave mode 489
portrait orientation 575	light 51
printers 574	opening multiple 48
switching 42, 561	Play mode 505
Print Options panel 561, 563	Print mode 561
print preview area 35	Setup mode 107
navigation 35, 561	splitting 47
printers 574	theme 51
selecting 566	width 39, 48
printing 561, 566	Write mode 191
annotations 581	projects 19, 74, 77, 119, 167
arrangements 575	audio 98
booklets 576	auto-save 101–103
borders 581 comments 486, 581	backup location 104 backups 104
copies 566	composer 979
crop marks 581	copyright 980
date 581	default font styles 743
	· y

projects <i>(continued)</i> different Dorico versions 72 duration 638	punctuation duration 638, 641 timecodes 1206
exporting 82, 83, 94, 97 exporting flows 79	Q
file path 104, 572, 638 flows 77–79, 167, 168, 184, 487	qualifiers 304, 309
font styles 743 frame rates 190	quality chord symbols 310, 314, 853, 867
full screen mode 48 Hub 68	intervals 474, 475 transposing 456, 457, 475
importing flows 77, 78, 81 layouts. <i>See</i> layouts	quantization 91
lyricist 980	changing 261 grace notes 91
merging 77 MIDI files 94	MIDI import 84, 90, 91 MIDI recording 91, 259, 263
missing fonts 72 movements 167	requantizing 261
multiple windows 48	splitting notes 256 tuplets 91
MusicXML files 82, 83 opening 48, 71, 102, 103	quarter depressed pedal lines 1142, 1143, 1145, 1146 quarter notes 14, 196, 219, 254, 255
PDF files 570, 579 preview 74	beats 295 chords 247
recent 71 recovering 102, 103	glissando lines 1101
settings 26, 728, 730, 732	grace notes 244 hiding 1041, 1060
splitting flows 487 start area 33	Insert mode 232 metronome marks 289
starting 70	percussion 233, 665
statistics 105 tabs 47	pick-up bars 279, 283, 285 playback 732, 752
templates. See project templates titles 68, 184, 631, 634, 978	quantization 91 rests 241, 1249
tokens 638, 640 videos 185, 187	rhythm dots 225, 841, 842, 844, 1043
window 28	rhythmic grid 212, 213 showing 841, 1041, 1060
workspaces 42 proofreading	splitting notes 256, 841, 842, 844 swing playback 537
accidentals 778 cautionary accidentals 778	tablature 237
Propagate Part Formatting dialog 628	tempo equations 1327 ties 841, 842, 844
propagating part formatting 626, 627	tremolos 403, 405, 1377 tuplets 249, 252
properties 629 properties 646	voices 227
copying to other layouts 629	quarter tones 783, 1009 accidentals 783, 1009
global 647, 648 local 647, 648	guitar bends 347, 1107, 1109 octave divisions 1009
notations 646 notes 646	tonality systems 1009
scope 646-648	transposing 475 quartet templates 70, 76, 713
searching 646 selected items 646	staff grouping 847 quavers. See eighth notes
values 649 videos 185	question marks
Properties panel 646	harmonics 1063 tablature 455, 1308
disclosure arrow 37 key commands 43	quick tool selector 652 quintet templates 70, 76, 713
Write mode 191, 201 pulgar. See thumbs	staff grouping 847
pull-offs. See hammer-ons	quintuplets. <i>See</i> tuplets quotation marks
	duration tokens 638, 641

R	rectangle (continued)
L C VCT LATE	music. See music frames. See also frames
rack. See VST and MIDI panel	noteheads 1037
rallentando. <i>See</i> gradual tempo changes. <i>See also</i>	notes 661, 663, 671
tempo marks	text enclosures 739, 982, 1335, 1336
randomization 694, 695, 697	redo 29, 426
ranges	history 427
arpeggio signs 339, 340, 1092	reducing 170, 453, 601, 626
bar numbers 810, 1232–1234	condensing. See condensing
colors 53, 54, 1044	note durations 255, 256
copying notes 447	notes into chord symbols 319
counts 1232–1234	reeds 170
cues 902	adding 110, 112, 122, 131
dynamics in playback 934, 936	instrument changes 134
flows 568	part names 176, 178
glissando lines 747, 1099–1101	staff labels 1291
instruments 128, 151	transposition 130
keys 202	regions
lines 377, 1092, 1183	bar repeats. See bar repeats
metronome marks 1319, 1320	bars. See numbered bar regions
notes 151, 747, 1044, 1100, 1101	chord symbols. See chord symbol regions
numbered bar regions 1232–1234	counts 1226, 1232, 1243
pages 566, 568	dynamics 677
percussion legends 1410	Key Editor 650, 659, 661, 663, 673, 677, 683, 684,
pitches 151, 747, 1044, 1100, 1101	689, 696, 698
selecting 410	MIDI notes. See MIDI trigger regions. See also MIDI
slurs 1266	CC editor
strings 151	notes 661, 663
rasterizing. See staff size	Play mode. See colored regions
rastral size 601	playing techniques 673
ratamacue. See grace notes. See also tuplets	selecting 410, 414, 659, 696, 698
rates	slashes 1239, 1240. See also rhythm slashes
frames 189	tempo 689
ratios	register
grace notes 987	changing 455, 457, 458
note spacing 495	clefs 324, 325, 889, 895
swing playback 537	note input 222
tuplets 1394, 1395	octave lines 326, 327, 897
re-strikes. See guitar pre-bends	plug-ins 513
read-only mode 71, 121	transposing 458, 895
recent projects 68, 71	rehearsal marks 1196
recipes 572	barlines 1196
recording	colors 54, 1199
audio 98	crosshairs 503
click settings 262, 518	deleting 443
count-in 263	enclosures 1196
devices 265	exporting 101
input pitch 210	filter 417
MIDI. See MIDI recording	font 1199
pedal lines 263	going to 430
playing techniques 263	index 1197
retrospective recording 260, 540	inputting 390
tempo 528	moving 448, 501
Recover Auto-saved Projects dialog 102	multiple positions 1196, 1303, 1304
recovering 260	navigation 430
backups 104	order 1197
files 101–104	placement 1196
notes 229, 260, 1238	position 1196, 1304
rectangle	prefixes 1199
above systems. See system track	selecting 411, 414, 416, 417
bar number enclosures 809	sequences 1197, 1198
borders 739, 1336	size 422, 1199
colored. See signposts	staff-relative placement 1196, 1304

rehearsal marks (continued)	repeat endings (continued)
starting number 1197	appearance 1214
staves 1304	bar numbers 820
suffixes 1199	crosshairs 503
tempo marks 1196	deleting 443
types 1198	exporting 534
vertical positions 1303, 1304	filter 417
relative channel change actions 758	final segments 1214
relative tempo changes 1314, 1321	font style 1213
releases	frame breaks 1213
guitar bends 1103	handles 1212, 1213
handles 1112, 1116	hooks 1214
tremolos 396, 403, 405, 1379	inputting 395, 398–401
reloading	length 501, 1212
video files 187	MIDI recording 261
removing. See deleting	moving 448, 501, 1212
Rename Player dialog 177	multiple positions 1213, 1303, 1304
Rename Player Group dialog 166	MusicXML files 1215
renaming	number of playthroughs 1210
channels 710	optional notes. See bracketed noteheads
drum sets 140	panel 398, 400, 401
endpoints 558	playback 534, 535, 997
files 68	playthroughs 1210, 1211
flows 183, 978	popover 395, 399
groups 148	position 1213, 1304
instrument filters 434, 437	segments 1210, 1213
instruments 176, 179	selecting 411, 414, 416, 417
layouts 176, 178	size 1212, 1213
percussion kits 140, 148	staves 1304
player groups 166	system breaks 1213
players 176–178	text 1213
staves 176, 179	types 395
titles 183, 978	vertical positions 1303, 1304
renumbering	repeat jumps. See repeat markers
bars 817–819	repeat markers 1216
flows 169	bar numbers 820
instrument filters 434, 437	barlines 801
instruments 130	changing 421
layouts 175	crosshairs 503 deleting 443
repeat barlines 799, 800, 1216 brackets 1210, 1214	3
	exporting 534 filter 417
counts. <i>See</i> repeat counts end of systems 801	fonts 1217
exporting 534	hiding 1220
inputting 294, 296, 299, 301	index 1217
MIDI recording 261	inputting 396, 398, 402, 403
number of times played 536, 1210	lines 1219
panel 296, 301	MIDI recording 261
playback 534, 535, 997	moving 448, 501
playthroughs 536, 1210	multiple 1217
popover 294, 296, 299	multiple positions 1220, 1303, 1304
repeat endings 1210, 1214	number of times played 536
start of systems 801	optional notes. See bracketed noteheads
text. See repeat counts	order 1217
repeat counts 1222	panel 398, 403
changing 536, 1210	paragraph styles 1217
hiding 1223	playback 534, 535, 997
location 1223	popover 396, 402
moving 1223	position 1220, 1304
showing 1223	showing 1220
repeat endings 1210	size 1217
additional endings 399, 401	staff-relative placement 1221
alignment 1213	staves 1304

repeat markers (continued)	resetting (continued)
text 1218	items 424, 425
types 396	key commands 64
vertical positions 1303, 1304	layout names 178
word wrapping 1219	layouts 176, 616, 633, 728
Repeat Pitches dialog 468	mute states 532, 700
repeat sections. See repeat markers	note spacing 499
Repeat Structures panel 398	note velocity 677
repeating. See copying. See also repeats	noteheads 1039
repeats	options 57, 728, 730, 732
barlines. See repeat barlines	page color 52
bars 1224, 1231	page size 584, 728
counts 536, 1210, 1226, 1232	page templates 594
dynamics 534	pages 633
endings. See repeat endings	paragraph styles 739, 1333
export 534	part layouts 176
font style 1229	percussion maps 764
frequency 533, 1227, 1233	playback overrides 673
grouping 1229, 1230	playback techniques 771
length 421, 1225	playback templates 549
markers. See repeat markers	played duration 673
moving counts 501	player names 177, 178
muting 533	position 425, 504
notes. See tremolos. See also bar repeats	preferences 57
numbers 536, 1210, 1217, 1226, 1232, 1243	rests 1252, 1254
optional notes. See bracketed noteheads	secondary beams 837
playback 533–536, 997, 1210	solo states 532, 700
playing techniques 1169	space templates 725
tempo marks 534	staff labels 182
repeats popover 395	staff spacing 610
repitching notes 459	stage templates 718
replacing 421	staves 590, 591, 608, 616
fonts 72, 737	stems 825, 1059
Key Editor configurations 698	systems 608, 616
replying	tempo 1314
comments 481, 484	text 1333
requantizing notes 261, 666, 667, 671	trill intervals 1082
resetting 443	velocity 677
accidentals 775	vertical spacing 610
appearance 424	voice order 1421
background color 52	voicing 521
background color 32 bar numbers 818, 819	
	volume 708
beaming 825, 827, 831, 835, 837	resolution
capos 157–159	changing 571 figured bass 385, 387, 942, 947
casting off 616	
channel names 710	images 580
channel volume 708	rhythmic grid 37, 213, 658
character styles 742	respelling
chord diagrams 883, 885	accidentals 202, 460–463
chord symbol voicing 521	chord symbols 155, 865, 866
chord symbols 866	key signatures 1007
colors 53, 54	notes 202, 460–463, 469, 471, 478
cross-staff beaming 831, 835	rest grouping. See note grouping
dynamic levels 936, 937	restating
dynamics 661, 935, 936	accidentals 783, 784
expression maps 755	restorative
faders 708	clefs 324, 325
figured bass 951	pedal lines 1156, 1158
fingering slides 968	text 1156, 1158
fingerings 883, 965	restoring. See resetting. See also hiding
flow headings 635	rests 22, 1249
font styles 737, 739	alignment 1249, 1252, 1253
instrument names 180, 182	bar rests. See bar rests

rests (continued)	reviewing
beaming 821, 822, 839	comments 481
changing type 1252	print preview 35, 425, 561
colors 54, 1253. See also note and rest colors	rewinding 523, 527, 540
consolidation 730, 1250–1252, 1257, 1258	rfz. See dynamics
deleting 255, 440, 793–795, 1254, 1256	rhythm
dotted 730	chord symbols 319
durations 254	locking 459
empty bars 1256, 1258	
	requantizing 261 reversing 465, 477. <i>See also</i> retrograde
explicit 1249, 1250, 1252	
figured bass 385, 938, 940, 948	rotating 467, 477
filling in 255	slashes. <i>See</i> rhythm slashes
forcing duration 241, 257, 841	tablature 1309
grouping. See note grouping	ties 841, 842, 844
H-bars. See multi-bar rests	rhythm dots 225, 841, 842
hiding 1242, 1254, 1256, 1258	Chord mode 249
implicit 1249, 1250, 1252	compound time signatures 1240
inputting 192, 202, 219, 241, 242, 257	consolidation 1043
inputting items at 209, 310	cut common time signatures 844
moving 494, 1253, 1259. See also note spacing	deleting 1041, 1045
multi-bar rests. See multi-bar rests	hiding 1041, 1043, 1045
notation options 1252	inputting 209, 219, 222, 225, 254
padding 1242	Insert mode 439
percussion kits 730	moving 1043, 1044, 1420
placement 1249, 1252, 1253	number 225, 254
position 1249, 1252, 1253	pitch before duration 209
resetting 1252, 1254	rhythm slashes 1240
restoring 1254	showing 1043
showing 1254, 1256, 1258	spacing 495, 1043
spacing. See note spacing	splitting notes 256
voices 1249, 1251–1253, 1256	tremolos 403, 405
width 1258	voices 1043, 1418, 1420
retakes. See pedal retakes	rhythm section
reticles. See crosshairs	adding 110, 112, 122, 126, 131
retrieving. See recovering. See also retrospective	brackets 847, 1295
recording	chord symbols 852, 859, 860
retrograde 465, 477	playback 1238
retrospective recording 260, 540	slashes. See rhythm slashes
reverb 703–705, 713, 720	staff grouping 847, 1295
adding 710, 721, 725	rhythm slashes 1236, 1239
changing 712, 721, 725, 727	appearance 1246
channels 701	bar rests 1251
default settings 727	beaming 1241
deleting 710	caret 214, 229
	changing number 1243
hiding 707 mixer 701	
	counts 1243, 1245
saving 722, 723, 725	deleting 443
showing 707	filter 417
tail 99	font style 1229, 1243
templates. See space templates. See also stage	frequency 1244
templates	hiding rests 1242
REVerence 705, 711, 712, 727	highlights 1239, 1243
reverse	inputting 229, 398, 406
lines 1187	moving 448, 451, 1247
pitches 465, 477	moving counts 501
playback. See scrubbing	note grouping 841, 1240
printing 576, 577	panel 398
rhythms 465, 477	parentheses 1245
stems 829, 830, 832, 835, 1055, 1057–1059	percussion kits 140, 146, 233, 1238
Reverse and Invert Pitches dialog 465	pitch 229, 1238
Reverse Rhythms dialog 465	placement 1245
reverting. See resetting	playback 1238
-	popover 397, 406

rhythm slashes <i>(continued)</i> regions 1236, 1239, 1243 rests 1242, 1251	ritenuto. <i>See</i> gradual tempo changes. <i>See also</i> tempo marks rolled chords. <i>See</i> arpeggio signs
rhythm dots 1240 splitting 1240	rolls. See tremolos. See also tuplets Roman numerals
staff position 146, 1247	flow numbers 641
staff-relative placement 1245	harmonic analysis 938
stem direction 1058, 1246	page numbers 1131
stemless 214, 229	tokens 641
stems 1241	Romantic
type 1237	trills 1085
vertical position 1247	rooms
viewing options 1243	panning. See stage templates
voices 229, 453, 1236, 1237, 1246 rhythmic feel 537	reverb. <i>See</i> space templates RoomWorks SE 705, 711
changing 539	roots
default settings 537	chord symbols 310, 313, 315, 853, 867
deleting changes 540	Ross chord symbols 853
popover 290	Rotary 705, 711
signposts 438, 539, 540	rotating 467
rhythmic grid 37, 212	hairpins 501, 919
attachment lines 426	pitches 467, 477
changing 213	rhythms 467, 477
color 53	slurs 1280
key commands 58, 62	text 1295
Key Editor 652, 658	ties 1352
resolution 37, 213 selecting music 417	chord symbol parentheses 870, 872
rhythmic notation 23, 1236	figured bass brackets 944
rhythmic position 23	notehead brackets 1047, 1048
attachment lines 426	rounded rectangle
playback 523	borders 739, 1336
rhythmic position-attached lines. See lines	text enclosures 739, 1336
rich black 580	routing 507, 516, 554, 555
ride bell. See unpitched percussion. See also playing	rows
technique-specific noteheads	bar numbers 814
right hand hooks. See lines	buttons. See toolbar. See also lower zone
right pages 630, 631	chord diagrams 879–882
starting from 593	chord symbols 155, 160, 161, 163, 853
right pan 722, 723 right zone 36, 37	dynamics 906, 930, 931
9	figured bass 945 rubato
hiding 43 Print mode 563	expressive text 304, 914
Setup mode 115	system-attached text 378, 739
showing 43	tempo marks 288, 1313
Write mode 200	text 378, 739
right-foot pedals. See harp pedaling. See also pedal lines	rudimental drumming. See unpitched percussion ruffs. See grace notes
right-hand fingering 962	rulers
arpeggio signs 966	crosshairs 503
brackets 964	Play mode 506
inputting 269	rhythmic grid 212
placement 953	running headers 631
popover 272	exporting 101
tapping. See tapping	flow titles 68, 74, 596, 978
right-hand guitar tapping. See tapping	fonts 739
rim shots. See playing techniques. See also playing	hiding 596
technique-specific noteheads	page numbers 596
rinforzando. See dynamics	page templates 632
rips. See jazz articulations. See also glissando lines ritardando. See gradual tempo changes. See also	project titles 68, 74, 978
tempo marks	runs grace notes 245
	guitar bends 1103, 1112

Russian	scale multiplication 694, 695, 697
instrument names 56	scale size
	accidentals 777
S	barlines 799–801 chord diagrams 880
6 4070 4074	chord symbol components 854, 856
S-shaped slurs 1270, 1271	cues 494, 495
salzedo breath marks. See breath marks	fingerings 957, 962
sample libraries. <i>See</i> sound libraries	grace notes 494, 495, 983, 987
sample rate 37, 263, 264	note spacing 494, 495
sampled trills 1085, 1086 disabling 1086	notes 422
enabling 1086	printing 566, 578, 579
Save Endpoint Configuration dialog 558	staves 601, 602, 604, 605
saving 68, 101	scales 1009
audio 94, 98, 99	degrees 853, 1037
auto-save. See auto-save	EDO 1009
backups 104	exercises. See flows
character styles as default 742	key signatures 1000, 1002
chord diagram shapes 885	major 471, 478, 1002
comments 486	mapping 471, 478
custom ensembles 114	minor 471, 478, 1002
editors 698	modal 471, 478
endpoint configurations 556–558	octave divisions 1009
ensembles 114	transposing 457, 471, 478
expression maps 763	values. See scale multiplication. See also Histogram
folder location 104	tool
font styles as default 737	scissors 192
graphics files 570, 572	activating 192
import settings 84	slashes 1240
instrument names as default 180	ties 1351
Key Editor configurations 698	SCOOPS
layout options as default 728	deleting 1124
lyrics 1015	inputting 343, 344, 351, 352
MIDI files 84, 94	jazz. See jazz articulations
MusicXML files 82	popover 334, 335 vibrato bar 1118
notation options as default 730	scope
paragraph styles as default 739	crosshairs 503
PDF files 570	Insert mode 440, 441
percussion kits 149	jump bar 64
percussion maps 768	properties 647, 648
playback options as default 732	scordatura 151, 153
playback templates 551	scores. See layouts
players 114	scrapes. See playing techniques
players 114 plug-in instances 556, 557	scroll view. See galley view
PNG files 570	scrolling 430
project templates 84	Key Editor 650, 657
settings as default 84, 728, 730, 732, 737, 739	mixer 707
space templates 722, 725, 726	percussion editor 657
stage templates 715, 718–720	piano roll editor 657
SVG files 570	playback 524, 527
text 101	scrubbing 31, 527, 540
TIFF files 570	searching 57
saxophone. See instruments. See also transposing	ensembles 112
instruments	instruments 110
scale degrees	key commands 58, 60, 61
chord symbols 312, 853	layout options 728
mapping 471	notation options 730
Nashville numbers 313	notes 417
noteheads 1037	playback options 732 preferences 57
popover 474	properties 646
trills 1078, 1080, 1081	Sebastian music font 734, 736
scale mapping 471, 478	Sebastian music font /34, /30

Second Viennese School accidental duration rule 783, 784	selecting 39, 410–412, 418, 427 bars 411, 412, 414, 416
second voices	beats 417
adding 227	blue 931, 1275
bar rests 242, 1256	changing the selection. <i>See</i> navigation
secondary beams 836	chord symbols 414, 416, 417
changing 837	chords 211
direction 836	dynamics 413, 417
lines 837	Engrave mode 411, 413, 414, 428
resetting 837	everything 410, 414, 416, 417
rests 839	extending selection 410, 412, 413
splitting 824	filters 417, 418
secondary brackets 849, 851	flows 410
braces 850	handles 503
hiding 849	items 206, 410–412, 428, 490, 659
showing 849	items behind other items 411
sub-brackets 850	Key Editor 659
sub-sub-brackets 851	key signatures 414, 416, 417
secondary instruments 654, 682, 686, 688	lyrics 413, 417, 1016
secondo	marquee 39, 414, 659, 698
repeat endings 1210	more 410, 412, 413
seconds	notations 39, 414, 428
duration tokens 638, 641	note spacing handles 498
timecodes 1206	notes 39, 211, 411, 412, 414, 417, 428, 659
transport 31, 540	panels 197, 200, 201
section players 121	playback 525, 540
adding 122, 126, 127	points 659
divisi 1307	redoing 426, 427
empty staves 590	rehearsal marks 414, 416, 417
ensembles 112, 126, 127	repeat endings 414, 416, 417
MIDI import 84	staff spacing handles 608
ossia staves 1301	status bar 37
staff labels 1287	staves 410
staves 590, 591	system objects 414, 416, 417
sections	system spacing handles 608
coda 1216	system track 414
fine 1216	system-attached text 414, 416, 417
hiding 41, 1220	tempo marks 414, 416, 417
repeat 1216	time signatures 414, 416, 417
showing 41, 1220	tools 37, 39, 192, 652
segments	tracks 86
caps 1186	transposing selections 456
final 1214	undoing 426, 427
glissando lines 1099	velocity bars 698
guitar bends 1112, 1116	voices 413, 417, 453, 654, 659
hairpins 919	Write mode 192, 410–414, 416, 417, 428
hooks 1214	selectors
length 1212, 1214	layouts 29, 30
lines 1195	panels 197, 200, 201
moving 501	semibreves. <i>See</i> whole notes
playing technique continuation lines 1171	semiquavers. See sixteenth notes
playthroughs 1211	semitones. See half-steps
repeat endings 399, 401, 1211–1214	sends 705
slurs 1276, 1277	loading 711
tuplets 1389	mixer 700, 701
segno 1216	removing 712
font 1217	separators
hiding 1220	beams 838, 842
inputting 402, 403	chord symbols 858, 867
multiple 1217	duration tokens 641
sections 1216	dynamics 304, 909
showing 1220	fingerings 970
size 1217	staff labels 1293

separators (continued)	shape (continued)
systems. See system dividers	chord diagrams 875, 881, 883–885
time signatures 1367, 1370	figured bass brackets 944
timecodes 1206	guitar bends 1112, 1114–1116
tokens 638, 641	multi-segment slurs 1278
septuplets. See tuplets	notehead brackets 1048, 1052, 1054
sequences	noteheads 1034, 1037
bar numbers 817–819	parentheses 872, 944, 1048
page numbers 593	slurs 1265, 1266, 1276, 1278, 1280, 1284
playback 527, 534	text enclosures 739, 1336
rehearsal marks 1197	ties 1352
staff labels 129, 130	tuplet brackets 1391–1393
subordinate 818	sharing staves. See condensing. See also divisi
types 1198	sharps. See accidentals
sets	shifts
drum sets. See drum sets	clefs 323, 894
page templates. See page template sets	octaves 323, 455–458, 463, 894
setting up audio devices 57, 263, 264	pitches. <i>See</i> rotating rhythms. <i>See</i> rotating
drum sets 140	
	short
duplex printing 566	barlines 800, 801
key commands 62	dynamics 915, 916, 924
MIDI recording 263	notes 91, 219, 244, 254, 494, 983
percussion kit note input 236	notes in playback 91, 732, 751, 792, 990
percussion kits 140	percussion notes 665
windows 42	scores. See condensing. See also layouts
workspaces 42	stemlets 839
settings 26, 728	tempo text 1316
audio 57	shortcuts. See key commands
copying properties 629	shoulder offset
default 57, 728, 730, 732	notehead brackets 1052
flow-specific 730	slurs 1284
harp pedals 1133	ties 1356, 1357
individual items. See properties	showing. See hiding
layout-specific 728	shrinking. See size
MIDI import 84	side stick. See unpitched percussion. See also playing
mouse input 207	technique-specific noteheads
notations input 209, 310	signatures
note input 209, 210, 222	annotations 581
preferences 57	key signatures. <i>See</i> key signatures
properties 646–648	printing 581
videos 185	time signatures. See time signatures
Setup mode 19, 107	signposts 438
adding players 126	barlines 299, 301, 443, 796, 798, 1375
ensembles 126	bars 796
flows. See flows	chord symbols 852, 859, 863
instruments. See instruments	clefs 892
layouts. See layouts	dynamics 909
panels 36, 107, 108, 115, 118	exporting 570, 581
percussion 140	extra staves 1300
player groups 163	figured bass 385, 938, 939, 948
players. <i>See</i> players	frame breaks 622
signposts 438	harp pedaling 1133, 1135, 1136
switching 42, 107	hiding 425, 438
sextuplets. See tuplets	key signatures 273, 275, 1000
sfz. See dynamics	multi-bar rests 1259
shadow notes 206	octave lines 899
color 53	ossia staves 448, 451, 1301
shakes. See jazz ornaments	percussion legends 1407
shape	pick-up bars 1364
bar number enclosures 809	playing techniques 1163
beaming 826, 828-832, 835, 836, 838, 840, 1059	printing 566, 581
borders 739, 809, 1336	showing 438

signposts (continued)	sixteenth notes (continued)
staff changes 1300	glissando lines 1101
staves 448, 451	grace notes 244
system breaks 617, 619	•
	hiding 1041, 1060 Insert mode 232
tempo marks 1318, 1319, 1321	
text 1339	metronome marks 289
time signatures 796, 1364, 1367, 1369, 1374, 1375	percussion 233, 665
trills 1078–1081	pick-up bars 279, 283, 285
tuplets 1391, 1394	quantization 91
silence	rests 241, 1249
hairpins. <i>See</i> niente	rhythmic grid 212, 213
leading. See pre-roll	showing 1041, 1060
MIDI keyboards 212	splitting notes 256
missing sounds 549	swing playback 290, 537
muting items 533	tablature 237
notes 1122	tremolos 403, 405, 1377
playback template 543, 544, 549	tuplets 249, 252
rests. See rests	voices 227
simile	size 601
dynamics 304, 309, 914	absolute 737, 739
hiding 1169	accidentals 777, 858
playing techniques 1169	arpeggio sign fingerings 966
showing 1169	audio buffer 263, 264
simple time signatures. <i>See</i> time signatures	bar numbers 811, 812
simplifying	barlines 805, 806
accidentals 461	bars 439, 440, 494, 587, 597, 605, 793, 1305
figured bass 949	beams 826, 828, 838
time signatures 1372	brackets 846, 847, 873, 1295
singers 112, 128. See also vocal staves	channels 707
single bar rests	chord diagrams 880, 887
bar counts 1258	chord symbols 422, 858, 870, 873
H-bars 1258	cues 902
hiding 1256	dynamics 422, 933
showing 1256	elision slurs 1016, 1031
single barlines 299, 301, 799–801	figured bass 949
single players 121, 125	fingerings 887, 957, 960, 966, 1312
adding 122, 126, 127	flared hairpins 923
empty staves 590	flow headings 739
ensembles 112, 126, 127	font styles 379, 737, 739, 1333
extra staves 1300	fret numbers 887
MIDI import 84	gaps 149, 1269, 1345
ossia staves 1301	grace notes 422, 983, 987
staff labels 1287	H-bars 1258
staff size 602	instrument change labels 139
	instrument names 1296
staves 590, 591	Key Editor 656, 657
single-line	
percussion kits 1406, 1407	laissez vibrer ties 1349
staves 1300	left-hand fingering 962
single-note tremolos. See tremolos	line text 1189
single-sided printing 566	lyrics 1022–1025
single-stroke caesuras 330, 993	measures 597, 1305
single-voice contexts 1416	metronome marks 1317
articulations 788	mixer 707
grace notes 983	multi-bar rests 1258
guitar pre-bends 1110	noteheads 587, 601, 902, 1034, 1038, 1039
stem direction 983, 1055	notes 422, 587, 601, 902
tie curvature direction 1345	octave lines 422
six-line staff	page numbers 1130
tablature. <i>See</i> tablature	pages 578, 584, 728
sixteenth notes 14, 196, 219, 254, 255, 983	paper 578, 579
beaming 822, 842	paragraph styles 739
beats 295	parentheses 873
chords 247	percussion editor 656, 657
CITOT 43 (=T/	percussion curer usu, us/

size (continued)	slash regions (continued)
piano roll editor 656, 657	viewing options 1243
player group labels 1295, 1296	voices 1236, 1246
playing techniques 422	slash voices 1236, 1377
project window 39, 48	bar rests 1251
rastral 601	caret 214, 229
rehearsal marks 422, 1199	changing 453, 1237
repeat endings 1212, 1213	hiding stems 1060
repeat markers 1217	inputting 229
slurs 1280	moving 1247
space 601	multiple-voice contexts 1246
staff labels 1296, 1297	percussion kits 140, 233, 1238
staff-relative 737, 739	playback 1236, 1238
staves 587, 601, 602, 728	popover 397
system objects 587, 602	rests 1251
systems 597	staff position 1247
tablature 1312	stem direction 1058
tasto solo 949	stemless 214, 229
tempo marks 1317	vertical position 1247
text 379, 737, 739, 1333	slashes 1236
ties 1352	bar rests 1251
time signatures 1365, 1367, 1375	caesuras. See caesuras
titles 739	chord symbols 853, 867
tracks 522, 656, 657	double 1302, 1377
unit of measurement 50	dynamics 304, 909
video window 188	figured bass 387
	grace notes 983, 987, 988, 990
sketch staves 110, 112	
slants	noteheads 1034, 1036, 1236, 1399
beams 828, 989	notes. See slash voices. See also tremolo strokes
pedal line hooks 1152	pauses. See caesuras
slap tongue. See playing techniques	percussion 1399
slash notation 1236	regions. <i>See</i> slash regions
slash regions 1239	rests 1251
beaming 1241	stemless 1237
beat grouping 1240	stems. See tremolo strokes
chord symbols 859, 863, 1239	systems. See system dividers
compound time signatures 1240	time signatures 1367, 1370
counts 1243, 1245	tremolos. <i>See</i> tremolo strokes
default settings 1240	triple 1377
deleting 443	voices. See slash voices
filter 417	slides
font style 1229	fingerings. See fingering slides
handles 419	guitar 1096
hiding other notes 1241	jazz. See jazz articulations
hiding rests 1242	Key Editor 650
highlights 1239, 1243	pitch. See glissando lines. See also pitch bends
inputting 406	tempo 31
length 419	zoom 650
moving 448, 451, 1247	slight bends. <i>See</i> guitar bends
moving counts 501	slots 507, 705
multiple 1246	slur segments 1276, 1278
note grouping 841, 1240	number 1277
overlapping 1246	slurs 1160, 1261, 1342
parentheses 1245	angles 1265, 1280
placement 1245	arpeggio signs. See curved arpeggio signs
popover 397, 406	articulations 789, 791, 1264
rests 1242	bar numbers 814
showing other notes 1241	collision avoidance 1265, 1273
staff position 1247	colors 54
staff-relative placement 1245	control points 1278
stem direction 1246	copying 445, 447, 788
stems 1241	cross-staff 267, 1265, 1272
vertical position 1247	cross-voice 267, 1272

slurs (continued)	small notes 422
crosshairs 503	cues. See cues
curvature 1263, 1270, 1271, 1284	grace notes. See grace notes
dashed 1267–1269	harmonics. See harmonics
deleting 443	staves. See staff size
dotted 1267–1269	trills. See trills
duration 1285	tuplets 1386. See also tuplet numbers
East Asian elision 1031	smart quotes 638, 641
editorial 1267, 1268	smears. See jazz ornaments
elision 1031	smooth
endpoints 1264, 1265, 1278, 1280	dynamics 680
Engrave mode 1278	glissando lines 1096, 1100, 1101
filter 417	jazz articulations 1125
fingerings 957	MIDI 687
flat slurs 1270	slur shapes 1278
formatting 1268–1270, 1280, 1282	tie shapes 1352
frame breaks 1265	smorzando. See gradual tempo changes. See also
gap size 1269	tempo marks
gaps 1265, 1273	SMPTE. See timecodes. See also markers
grace notes 267, 983, 1262, 1263	SMuFL 734, 736
guitar techniques 355	accidentals 381
hammer-ons 355, 1120	chord symbols 858
handles 1266, 1276, 1278	dynamics 933
height 1282, 1283	figured bass 949
inputting 202, 267, 355, 1273	fingerings 960
inverting 1263, 1270, 1271	metronome marks 1317
large pitch ranges 1266	music symbols 381
length 419, 1262	noteheads 381
linking 447, 1275, 1276	tempo marks 1317
lyrics 1031, 1268	time signatures 1376
MIDI import 90	tokens 639
MIDI recording 263	snap pizzicato. See playing techniques
moving 448, 451, 1280	snapping pitches
multi-segment 1278	pitches 469, 478
muting 533	scales 471, 478
nested 1264	snare drum. See unpitched percussion
nested slurs 1273	snare rolls. See tremolos
notehead brackets 1054	solfège chord symbols 313, 853
ornaments 1073	solid
overlapping 1265	lines 1174, 1186
panel 196	slurs 1267, 1268
placement 504, 1262–1265, 1270, 1271	
	tempo marks 1325 ties 1343
playback 267, 530, 531, 732, 1285 position 504, 1262–1265, 1270	solo
pull-offs 355, 1120	indication 378
ranges 1266	players. <i>See</i> soloists. <i>See also</i> single players
rotating 1280	scrubbing 527 staff labels 125
segments. See slur segments	
selecting 413, 428	system objects 1304
shape 1265, 1266, 1276–1278, 1280, 1284	soloing 700, 701
short 1266 shoulder offset 1284	channels 532, 703
staff lines 1263	deactivating 532, 700–702
	instruments 527, 532
stem direction 1264, 1270	playback 527, 530, 531
styles 1267, 1268	tracks 532
system breaks 1265	voices 532
thickness 1282	soloists 125
ties 1262, 1264	panning 716
ties vs. slurs 1342	system objects 1304
tucking index 504	sonata. See flows
unlinking 447, 1276	songbooks 19, 74, 119, 167
within slurs 1273	composer 979
	copyright 980

songbooks (continued)	spacing <i>(continued)</i>
lyricist 980	chord symbols 853, 861, 862, 867–869, 874
titles 978	clefs 889, 891
songs. See flows	condensing 626
sordino. See playing techniques	cross-staff beams 833
sorting	cues 494, 495
comments 486	flow headings 599
flows 169	frame fullness 493
instruments 123–125	frets 151
layouts 175	galley view 39
players 108, 123–125	gaps 494
sostenuto pedal 1141	grace notes 494, 495
MIDI controller 1158	gradual dynamics 925
start signs 1151	hyphens 1016, 1026, 1027
text 1156, 1157	layout options 728
sound libraries 543, 763	lyrics 495, 1016, 1018, 1020, 1022, 1023,
changing 549	1025–1027
delay 752	mixer 707
documentation 68	notes. See note spacing
expression maps 745	percussion 140, 149, 1407
loading sounds 513, 527, 543, 549	rehearsal marks 1196
missing sounds 549	rests. See note spacing
panning. See stage templates. See also space	rhythm dots 495, 1043, 1420
templates	staff lines 140, 149, 1407
percussion maps 767	staves. See staff spacing
playback 744, 745, 763	stems 833
trills 1085	systems. See system spacing. See also staff spacing
sounding	tacets 625
duration 671, 990, 1384. See also played duration	text 739, 742, 1333
percussion legend ranges 1407, 1410	time signatures 1372
pitch. See sounding pitch. See also concert pitch	voice columns 1419–1421
sounding pitch 174, 1062	spatial sounds. See panning. See also reverb
harmonics 1066	speech bubbles
input pitch 210	comments. See comments
layouts 173	speed
playback 530	arpeggio signs 1093, 1094
sounds. See playback	beaming. See fanned beams
soundtracks	bpm 1319
audio 189	changing 286, 528, 691, 692, 997, 1319, 1325
volume 189	frame rates 189
source instruments 902	grace notes 990
source notes 967	playback 528, 997, 1313
pitch mapping 469, 478	swing playback 537
scale mapping 471, 478	tempo marks 1313, 1319, 1323, 1325
space size 587, 601, 602	tremolos 1381
space templates 713, 720, 721	trills 1076, 1085, 1087
changing 725, 727	videos 189
creating 722, 725	spelling
dialog 721–723	accidentals 240, 460–463
exporting 726	chord symbols 154, 155, 852, 864, 865
expression maps 747	notes 240, 460–463
factory default 721	spiccato. See playing techniques
importing 726	spin boxes 649
percussion maps 764	split point 90
playback templates 546, 551	split stems 781
resetting 725	appearance 782
spacing 494, 587, 604, 605	splitting 256
accidentals 494, 495, 778–780	barline joins 806
arpeggio signs 1092	bars 616, 617, 620, 621, 796, 1360, 1372
bars 494–496, 796, 1179, 1254	beams 730, 821, 824, 836, 839, 841, 842, 844
caesuras 332	brackets 1051
capos 155, 853	flows 487, 568, 570
chord diagrams 880	multi-bar rests 1257–1259

splitting (continued)	staff labels (continued)
notehead brackets 1051	hiding 1288, 1290
notes 192, 256, 257, 453, 730, 841, 842, 844, 1240,	indents 1289, 1296, 1305
1351, 1413	instrument change labels 138, 139
PDF files 570	instrument changes 136
pedal lines 1149	instrument names 56, 147, 148, 176, 179, 180, 182
phrases 453, 1307	639, 1288, 1291
project window 47	italics 180, 739
repeat marker text 1219	language 56
rests 241, 257, 841, 844, 1251	length 1288, 1290, 1291
slash regions 1240	line breaks 1293
staves 402, 403, 617, 620, 621, 626, 1216, 1307	MusicXML import 1288
ties 256, 257, 730, 841, 842, 1351	numbering 129, 130, 1291, 1298
tuplets 1389	overline 180
voices 453, 1413	paragraph styles 739, 1296
spreads	parentheses 1293
histogram controls 694, 695, 697	percussion 140, 147, 148, 1291, 1297, 1406, 1410
page arrangement 40, 49, 575	player groups. See player group labels
square	player names 177, 1291
accidental brackets 776, 1065	project templates 76
bracketed noteheads 1047, 1048, 1054	resetting 182
brackets 849–851, 1174	separators 1293
figured bass brackets 944	showing 1288, 1290
noteheads 1037	size 1296, 1297
squeal. See pinch harmonics	solo 125
squeezes. See jazz ornaments	stretch 180
staccatissimo. See articulations	subscript 180
staccato. See articulations. See also playback	superscript 180
techniques	systems 1290
stacking order 504	tokens 639
accidentals 778, 780	transposing instruments 1287, 1292, 1293
bowing marks 1165	underline 180
changing 900	staff lines
chord symbols 160, 161, 163, 853, 867	erasing 868, 911, 956, 966, 974, 1162, 1193, 1338,
fermatas 1165	1411
lines 1178	fingerings 966
octave lines 504	number 140, 592, 1406, 1407
playing techniques 1165	percussion 140, 149, 1407
signposts 438	slurs 1263
slurs 504	spacing 140, 149, 1407
string indicators 1165	string indicators 974
tuplets 504	tablature 151, 1308
staff grouping	text 1162, 1193, 1338
barline joins 805, 806	ties 1354
changing 846	staff position
default settings 76, 846, 847	lines 1092, 1182–1184
ensemble types 846, 847	note input 236
player groups 163	percussion 669, 1398, 1399, 1402
staff labels 176, 1287	percussion kits 146, 236
alignment 180, 1289, 1296	staff size 579, 587, 601
baseline shift 180	changing 587, 602, 604
brackets 1295	custom 604
changing 179, 1291–1293	dialog 604
colors 180, 1296	individual staves 602
condensed staves 1296, 1298	layouts 587, 601, 602
Cubase 1288	MusicXML files 81
default settings 76	rastral size 601
divisi 1298	space size 601
first system 1288, 1305	staff spacing 490, 587, 604
flows 1288	activating 490
fonts 739, 1296	changing 587, 588, 604, 608
galley view 39	condensing 626
grouping 147, 148, 1295, 1297, 1298	copying 611, 612

staff spacing (continued) default settings 587, 605	staff-relative placement (continued) rehearsal marks 1196
divisi 588	repeat markers 1221
final systems 597	resetting 425
flow headings 599	slash region counts 1245
fullness 493	slurs 1271
galley view 605, 607	string indicators 372–374, 974, 976
handles 608	tapping 1123
hiding staves 590, 591	text 423
horizontal 493, 597	trills 423
justification 493, 588, 597, 605	tuplet brackets 1392
layout options 728	stage templates 713, 720
layouts 587	changing 718
moving systems 610	creating 715, 716, 718
rehearsal marks 1196	dialog 713, 715, 716
reverting 610	exporting 720
system fullness 493	expression maps 747
systems 493 text collision avoidance 1334	factory default 713
staff text. See staff-attached text	importing 719 percussion maps 764
staff-attached text 1328, 1329	
	resetting 718
alignment 739, 1333	stars
backgrounds 1338 borders 739, 1335	pedal lines 1141, 1153 start area 33
	start position
erased backgrounds 1338 exporting 101	frames 612, 620
formatting 379, 381, 739, 1333	lines 1185
hiding 1339	
inputting 378	pages 612, 620 playback 523
moving 465, 467, 501, 1333	systems 612, 617
padding 739, 1337	trills 1073
paragraph styles 1333	videos 187
reversing 465. See also retrograde	start repeat barlines 296, 799, 800
rotating 467	counts. See repeat counts
selecting 411	inputting 294, 296, 299, 301
showing 1339	key signatures 801
signposts 438	playthroughs 534, 1222
staff-relative placement 423	system breaks 801
staff-relative font size 737, 739	start signs
staff-relative placement	lines 1168, 1176
articulations 791	pedal lines 1151, 1156
bar numbers 815	starting 217
beaming 826, 827	area 33
changing 423	Hub 68
cue labels 423	interchangeable time signatures 277, 281, 282,
dynamics 423, 904	1360, 1375
figured bass 946	MIDI recording 259
fingering 964	note input 217, 219, 222
fingerings 955, 956	playback 525
guitar bends 423	players 33
guitar pre-bends 1110	projects 33, 70
hammer-ons 1123	timecode values 1207
harmonics 1068	workspaces 42
left-hand fingerings 965	statistics 105
lines 1181, 1182	exporting 106
lyrics 1019, 1020	status bar 37
numbered bar region counts 1235	selection tools 39
octave lines 423, 898	view types 39, 40
ornaments 423	width 39
pedal lines 1147	staves 14, 1300
percussion legends 423	adding 122, 126, 131, 1300, 1307
playing techniques 423	arranging tools 443
pull-offs 1123	bar numbers 811, 813

staves (continued)	staves (continued)
bar rests. See bar rests	reducing 626
barlines 805–807	rehearsal marks 1303, 1304
beaming 832–835	renaming 179
brackets 76, 846, 847, 1295	repeat endings 1303, 1304
casting off 612–615	repeat markers 1221
chord symbols 173, 310, 859, 860, 862, 863	selecting 410
clefs 895	showing 49, 169, 172, 433, 434, 436, 437, 590–592
collision avoidance 587, 588, 605, 607, 608	single-line 1202, 1207, 1208, 1297, 1300, 1406
color 54	size. See staff size
comments 481, 482, 485	slurs 1272, 1275
condensing. See condensing	slurs linking 447
copying items 445, 446	spacing. See staff spacing
crossing notes 832, 835	splitting 402, 403, 1216
dialog 604	staff labels. See staff labels
dividers. See system dividers. See also divide	statistics 105
arrows	stem length 1059
divisi 1307	string indicators. See string indicators
dynamics 302, 307, 423, 913	swing playback 539
dynamics linking 447, 931	system breaks 617
empty. See empty staves. See also blank staves	system dividers 1302
extra 1300	system objects 1303, 1304
fermatas 995	tablature 1308, 1309
figured bass 385, 938	tacets 623
filtering. See instrument filters. See also filters	tempo marks 1303, 1304
fingerings 956, 966	text 378, 1303, 1304
five-line 1297, 1300, 1406	ties 243, 1348, 1354
fixing 612–615	time signatures 281–283, 285, 1303, 1304, 1359,
galley view 49	1365–1367, 1372
gaps 500, 588, 1216, 1305	timecodes 1202, 1207, 1208
glissando lines 341, 342	transposing instruments 130
grids 1297, 1406	tremolos 832, 835
groups 163, 806, 847. See also staff grouping	vertical spacing. See staff spacing
height 587, 588, 598, 600, 601	voices 227
hiding 119, 169, 172, 173, 433, 434, 436, 437,	VST instruments 515
590–592, 1309	white 54
indents 500, 597, 1288, 1289, 1305	width 597
inputting on multiple 209, 218, 231	Stein-Zimmermann accidentals 276, 1009
instrument change labels 138, 139	stem direction 1055
instrument changes 134, 137, 138	beam groups 1057
key signatures 273, 275, 1000	beam placement 826, 834
labels. See staff labels	centered beams 830
language 56	changing 453, 1057, 1058, 1246
large time signatures 1367	chords 1056
layout options 587	cross-staff beams 832, 1059
margins 597, 598, 600, 1288, 1289, 1305	drum sets 145
markers 1202	filters 417
metronome marks 1303, 1304	grace notes 983, 989
moving 500, 587, 598, 600, 608	guitar pre-bends 1110
multiple voices 227, 626	middle line 1055
names. See staff labels. See also instrument names	multiple-voice contexts 1056
notation 1308, 1309	notes crossed to other staves 832, 835, 1422
note input 218, 231	notes on middle line of staff 1055
notes 451	percussion kits 140, 145, 237, 730, 1413, 1414
number 105, 590, 592, 613, 1300, 1301	resetting 827, 1059
order 123–125	rhythm slashes 1058, 1246
ossia staves. <i>See</i> ossia staves	single-voice contexts 1055, 1058
page view 49	slurs 1264, 1270
pauses 993	staff-relative placement 827
percussion 1406, 1407	ties 1057
pick-up bars. See pick-up bars	voices 453, 1055, 1058, 1416
playback 525	
rasterizing. See staff size	

stemless	straight playback. See swing playback
noteheads 1060	stress marks. See articulations
rhythm slashes 214, 229, 1237	stretch
stemlets 839	instrument names 180
gaps 839	lyrics 1022, 1023, 1025
length 839	note spacing 494
stems 821, 1055	pages 588, 605
altered unisons 781	staff labels 180
articulations 791	systems 493, 588, 597, 605
audio 98, 99	text 379, 739, 742
beam placement 834	strikethrough text 379, 739, 742
beaming 824, 828, 833	string designation. See string indicators
combining. See voices	string indicators 962, 974, 1040
cross-staff 832, 835, 1059	deleting 975
deleting tremolos 1381	duration 419, 1166, 1167
direction. See stem direction	font 960, 974
double 227, 781, 1416. <i>See also</i> voices	handles 1168
durations 196, 219, 254–256 fermatas 994	horizontal position 976
	inputting 358, 361, 372–374
flags 1055	inside staff 374, 974, 975 length 1166, 1168
gaps 833. <i>See also</i> note spacing grace notes 987, 989	lines 372, 373, 419, 1166, 1167
handles 1059, 1382	moving 448, 451, 501, 976, 1164, 1165, 1168
hiding 1060	order 1165
inputting 227, 1416. See also voices	outside staff 372, 373, 974
length 828, 989, 1059	panel 361, 373
percussion kits 140, 145, 237, 730, 1413, 1414	placement 976
resetting 825, 1059	popover 358, 361, 372
reverse 829, 830, 832, 835, 1055, 1057–1059	position 976
rhythm slashes 1237, 1241, 1246	string number 1040
showing 1060	string instruments 128, 150
slashes 1377	adding 110, 112, 122, 126, 131
slurs 1264	bowing marks 358, 361, 1164
split stems 781, 782	brackets 847, 1295
stemlets. See stemlets	chord symbols 859
tablature 1309	fingering shifts 971
ties 1057	glissando lines 1100, 1101
tremolos 1377, 1380, 1382	groups 163
unbeaming 824	panning. See stage templates
voices 227, 453, 1055, 1058, 1416, 1420, 1421	player order 108, 123
step input. See note input	playing techniques. See playing techniques
step-wise movement	reverb. <i>See</i> space templates
scrub playback 527	string number 1040
stereo pan 701, 703	substitution fingering 953
changing 709	system objects 1304
StereoEnhancer 705, 711	string pitches
stickings 1405	changing 153, 1040
stop positions 439	fretted instruments 153
adding 441	string shift indicators 971
deleting 442	angles 971
moving 441	direction 972, 1040
stopped pitch 1062	inputting 269, 270, 971 thickness 971
Fretboard panel 204 harmonics 1066	stringendo. See gradual tempo changes. See also
stopping. See starting	tempo marks
stopping finger. See left-hand fingering	strings
straight lines 1174	adding 151
duration 638, 641	assigning notes to 1040
glissando lines 1096	bends. See guitar bends
guitar bends 1103	bowing marks 358, 361, 1164
jazz articulations 1128	capos. See capos
pedal lines 1141	changing 1040, 1310
quotes 638, 641	changing pitch 151

strings (continued)	subordinate bar numbers 818
chord diagrams 876, 885	adding 819
color 53	changing 819
deleting 151	subscript chord symbols 853
fingering 962, 1040. <i>See also</i> string indicators	•
fretted instruments 110, 150, 151	instrument names 180
hammer-ons. See hammer-ons	staff labels 180
harmonics 1062	text 379, 742
indicators. See string indicators	subsequent repeats
notes out of range 1044, 1310	bar numbers 820
numbers. See string indicators	substitution fingering 953
pitches 151, 1040	handles 954
pull-offs. See hammer-ons	position 954
ranges 151	substitution font styles 737
resetting 1310	subtitles 74, 630, 631, 634–636, 739. <i>See also</i> flow
slurs. See hammer-ons	headings
tapping. See tapping	suffixes
tuning 110, 150, 151, 530, 1040	dynamics 914
strokes	instrument changes 56, 137
figured bass 387	playing techniques 1161
grace notes 244, 245, 983, 987	rehearsal marks 1199
slurs 1267, 1268	timecodes 1206
ties 1343	sul ponticello. See playing techniques
tremolos 1377, 1378, 1380–1382	sul tasto. <i>See</i> playing techniques
structures	super locrian scales 471, 478
documentation 15	superscript
meters 277, 821, 841, 1240, 1359, 1360	chord symbols 853
repeat 398, 534, 1210, 1216, 1224	instrument names 180
strumming	staff labels 180
	text 379, 742
arpeggios. See arpeggio signs	
fingering 966	trill intervals 1084
rhythm slashes 229, 1238	SuperVision 705, 711
studio	suppressing
panning. See stage templates	highlights 425, 438, 1226, 1243. See also hiding
reverb. See space templates	playback 533, 534
styles	staves 590, 591
appearance 424	suspensions
breath marks 993	brackets 944
caesuras 993	chord symbols 314
fermatas 992	figured bass 385, 387, 942, 945, 947
fonts 736, 737	sustain pedal 1141
glissando lines 1096, 1097	continuation lines 1153
jazz articulations 1128	Engrave mode 1143
margins 583	handles 1143
niente hairpins 929	inputting 360, 366, 368
page numbers 1130	level changes 369, 1142, 1145
parentheses 872, 944, 1048	merging 1150
resetting 424	MIDI controller 265, 1158
slurs 1267, 1268	MusicXML import 1159
tempo marks 1314, 1323	popover 360, 366
text 736, 739, 742	removing retakes/level changes 1147
ties 1343	retakes 367, 369, 1142, 1144
time signatures 1367, 1369, 1371	splitting 1149
sub-brackets. See secondary brackets	start signs 1151
sub-sub-brackets. See secondary brackets	text 1156, 1157
subdivision	sustaining instruments 934
bars 841, 842, 844, 1240	SVG files 579
cut common time 844	color 580
slash regions 1240	exporting 570–572
tempo equations 1327	file names 572
time signatures 277, 842, 1367, 1368	fonts 581
subito. See dynamic modifiers	layout numbers 175
Sables, See aynamic mounters	layouts 570, 571
	,

swapping. See switching	syncopation
swash arpeggio signs 1089, 1091	beat grouping 841
swells. See messa di voce	stemlets 839
swing playback 537	system breaks 491, 583, 617
disabling 540	automatic 613, 615
enabling 290, 538, 539	bar repeats 613, 617
popover 290	barlines 616, 801, 802
ratios 537	brackets 802
triplets 537	clefs 889
Swiss army triplet. See grace notes. See also tuplets	copying to other layouts 626–628
switches 749, 757	deleting 616, 619
creating 759, 760	divisi 1307
properties 646	dynamics 919
switching 454	glissando lines 1099
flows 429, 430, 507	hairpins 919
galley view 49	hiding staves 590
handles 498, 503	inserting 614, 615, 617
instruments. See instrument changes	key signatures 1005, 1006
layouts 29, 42, 46	lines 1176, 1195
modes 42	make into system 618
note order 1421	moving 616
notes 452, 498, 1420	octave lines 900
page view 49	playing technique lines 1168
rehearsal marks 1197	playing techniques 1168
selection 411, 428, 498	repeat endings 1213
staff spacing handles 608	signposts 438, 617, 619
tabs 46	slurs 1265
view type 49	staff labels 1290
voices 454	staff size 602
windows 42, 48	staff spacing 587
syllables	staff visibility 590
beaming 824	ties 1347
dynamics 920	time signatures 1362
lyrics 1012, 1016, 1018	system dividers 1302
position 1016	hiding 1302
tempo marks 1324	showing 1302
types 1012	width 1303
symbols	system formatting 583
bar repeats 1224, 1229, 1230	casting off. See casting off
bar rests 1253	condensing. See condensing
caret 214	copying to other layouts 626, 627
chords. See chord symbols. See also chord	frame breaks. See frame breaks
diagrams	indents 1288, 1305
coda 1218	note spacing. See note spacing
ornaments 1071	staff labels 1288, 1290
pedal lines 1142, 1151, 1153, 1156	system breaks. See system breaks
playing techniques 1160	system dividers. See system dividers
repeats. See repeat markers. See also repeat	system objects. See system objects
barlines	system objects. See system objects system fullness indicator 493
segno 1218	system objects 1303
speech bubbles. <i>See</i> comments	copying 414
text 378, 381	layouts 1303
vibrato bar 1118	lines 375, 1174
symphony. See flows	positions 1304
syncing dynamics 693	rehearsal marks 1196
dynamics 682	repeat counts 1222
instruments 652, 682, 688	repeat endings 1210, 1213
Key Editor 652	repeat markers 1220
MIDI 688	selecting 411, 414, 416, 417
tracks 652	size 587, 602
videos to music 187	tempo marks 1313, 1314
	text 378
	time signatures 1366, 1372

system spacing 490, 587, 604	systems (continued)
changing 587, 588, 608	justification 588, 597
default settings 587, 605	key signatures 1003
handles 498, 608	length 500, 597
justification 588, 605	lyrics 1017, 1020, 1028, 1030
system text. See system-attached text	make into system 618
system track 414	margins 597, 1288, 1289, 1305
deleting music 794	moving 608, 610, 617, 618, 621
hiding 416, 425	number 105, 613
inputting bars 299	numbered bar regions 1232
inputting beats 299	rehearsal marks 1196
selecting music 416, 417	repeat barlines 801
stop positions 441, 442	resetting 616
system-attached text 1328, 1329	sections 1216
alignment 739, 1333	selecting 410, 413
backgrounds 1338	spacing. See system spacing
borders 739, 1335	splitting 1216
copying 414	staff labels 1288, 1290, 1298, 1305
erased backgrounds 1338	staff size 602
exporting 101	start position 500
formatting 379, 381, 739, 1333	statistics 105
hiding 1339	staves. See staves
inputting 378	text. See system-attached text
markers 96	timecodes 1207, 1208
moving 501, 1333	tonality 1009
multiple positions 1304	track. See system track
padding 739, 1337	trill marks 1075
paragraph styles 1333	
selecting 411, 414, 416, 417	vertical position. <i>See</i> system spacing width 500, 597
showing 1339	Width 500, 597
signposts 438 staff-relative placement 423	Т
staves 1303, 1304	
tempo tracks 96	tabla notation 1414
systemic barlines 802, 803	tablature 1308
braces 845	appearance 1312
brackets 845	beaming 1309
	bend intervals 1109
hiding 802, 803	bends. See guitar bends
secondary brackets 849, 850	bracketed noteheads 1047, 1048, 1103, 1108
showing 802, 803 sub-brackets 849, 850	capos 154, 156, 157
	caret 214
sub-sub-brackets 851	changing string for notes 1310
text alignment 739, 1333	chords 222, 237, 1048, 1050
systems	clefs 889
alignment 588, 597	color 53
bar numbers 808, 813, 815, 1232	colors 54
barlines 801–803	dead notes 1122
breaks. See system breaks	default notation 219, 222
casting off 612–616	dives 1108, 1116
changing indents 1305	font style 1312
chord symbols 860, 862	frets 151, 156, 157
clefs 893	green notes 1308, 1310
coda gap 1220, 1221	guitar bends 1103, 1309
condensed staves. See condensing	harmonics 1063, 1066
dividers. <i>See</i> system dividers	hiding 1309
divisi 1307	hold lines 1103, 1110
end position 500	intervals 1109
fixing 612-615	moving notes to other strings 1310
formatting 491	note input 222, 237
fullness. <i>See</i> system fullness indicator	notes out of range 455, 1044, 1308, 1310
gaps 587, 588, 1216, 1305	numbers 1308, 1310, 1312
height 587, 588 indents 500, 597, 1288, 1289, 1305	open pitches 153
IDDODEC SUID SU / 1 788 1 780 1 705	parenthesized fret numbers 1103, 1108

tablature (continued)	tapping (continued)
post-bends. See guitar post-bends	popover 335
pre-bends. See guitar pre-bends	staff-relative placement 1123
question marks 455, 1308	tasto solo 385, 387, 739, 938, 949
resetting strings 1310	techniques 1160
rhythms 1309	combinations 756, 760
showing 1309	endpoint configurations 557
size 1312	exclusion groups 754
stems 1309	expression maps 745
strings 151, 153, 219, 222, 1310	guitar 1118
ties 1050, 1341	percussion 764, 769, 1399, 1401
trills 1075	playback 756, 760, 770, 771
tuning 150, 151, 154, 156, 157	templates
tables	brackets 76
actions 750	categories 70
comments 486	deleting 699
conditions 751	ensembles 112, 114, 126, 127, 713
contents. See front matter	flow headings 634
endpoint setup 552	Key Editor 658, 698, 699
exporting 101	new projects 68
fonts 72	pages. See page templates
markers 392	playback 511, 543
MIDI import 86	players 112, 114, 126, 127, 713
percussion maps 764	projects. See project templates
switches 749	spaces. See space templates
text 101	staff grouping 847
tracks 86	stages. See stage templates
tabloid 578	staves 76, 112, 127, 847
tabs	text. See paragraph styles. See also font styles
bar 32	titles 631, 634
closing 46	tempo 1313
groups 47	bpm 1319
hiding 30	changing 692
layouts 42, 44, 46	click settings 262, 518
moving 47	default 443, 1313
opening 44	deleting changes 661
order 47	drawing 689
showing 30	equations. See tempo equations
showing multiple 47	finding 393, 1205
switching 46	fixed tempo 528, 540
view options 44	follow tempo 528, 540
tacets 20, 623	inputting 691
borders 739	marks. See tempo marks
exporting 79	metronome marks 1319
formatting 623	MIDI recording 528
hiding 624, 1258	muting in playback 533
margins 625	pauses 997
moving 625	Play mode 517, 689
paragraph styles 623	playback 286–288, 291, 292, 528, 689, 997
removing players from flows 169	range 1320
showing 624, 1258	recording 528
text 625	tracks. See tempo tracks
thickness 739	tempo changes. <i>See</i> tempo marks
tags. See signposts. See also comments	Tempo editor 517, 689
tails. See stems	adding 654, 658
tambourine. See unpitched percussion	changing tempo 692
tanto. See tempo marks	closing 654, 658
tap tempo 292	copying points 660
tapping 962, 1119	deleting points 661
deleting 1124	height 656
inputting 357	inputting tempo changes 691
moving 501, 1123	moving tempo changes 692
percussion. See grace notes. See also tuplets	• -

Tempo editor (continued)	tempo marks (continued)
selecting points 659	staves 1304
zoom 657	style 1324, 1326
tempo equations 1327	text 421, 1314, 1316, 1317
inputting 287, 290–292	trills 1087
panel 292	types 288, 292, 1314
popover 290	vertical positions 1303, 1304
tempo marks 689, 1313, 1323	Tempo panel 292
abbreviated 1316	tempo track 517, 689
absolute tempo changes 292, 1314	editing. See Tempo editor
alignment 1314	editor. See Tempo editor
appearance 1321	hiding 521, 658, 689
approximate 1321	showing 521, 658, 689
barlines 1315	tempo tracks 95–97, 689
beat units 289, 421, 1319	dialog 96, 97
brackets 1318, 1321	exporting 97
caesuras 997	importing 95, 96
changing 421, 1316, 1319, 1321	Play mode. See tempo track. See also Tempo editor
colors 54	tenor clef. See clefs
components 1317, 1318, 1321, 1322	tenuto. See articulations
continuation lines 1313, 1323–1325	terminal lines 1176
copying 445, 660	terminology
crosshairs 503	British vs. American English 14
dashes 1326	note durations 14
decimal places 287, 291, 1319	text 736, 1328, 1329
deleting 443	abbreviated dynamics 915, 924
equations. See tempo equations	abbreviated tempo text 1316
exporting 101	accidentals 378, 381
fermatas 997	alignment 379, 739, 1333
filters 417	annotations 1176
finding 393, 1205	appearance 379, 737, 739, 742
fonts 1317	background color 379, 739, 742
formatting 1324–1326	backgrounds 1162, 1338
gaps 1326	bar numbers. See bar numbers
gradual tempo changes 292, 1314, 1323, 1325	baseline shift 379
handles 419, 1314	borders 739, 982, 1192, 1335–1337
hiding 287, 1318	character styles 742, 743
hyphens 1324	codes. See tokens
inputting 286, 287, 291, 292	collision avoidance 1334
integers 287, 291	colors 54, 379, 739, 742
length 419, 501, 1314	comments. See comments
lines 1323–1325	composer 74, 631, 979
metronome marks. See metronome marks	copying 57, 445
moving 448, 501, 692, 1322	copyright 74, 631, 980
multiple positions 1303, 1304, 1314	crosshairs 503
muting in playback 533	default settings 378, 743, 1334
order 1322	distance from staff 501
panel 292	dynamics. See dynamics. See also dynamic
parentheses 1318, 1321	modifiers
period 1321	Edit Font Styles dialog 737
placement 1314	editing 381, 1316, 1329
playback 443, 534, 1313, 1320, 1325	editor. See text editor
poco a poco 1323	erased backgrounds 1162, 1194, 1338
popover 288	exporting 101
position 1304, 1314	expressive. See dynamic modifiers
rehearsal marks 1196	filter 417
relative tempo changes 292, 1314, 1321	fingerings 961
repeats 534	flow titles 184
reset tempo 292, 1314	formatting 68, 379, 736, 737, 739, 743, 1333
selecting 411, 413, 414, 416, 417	front matter 74, 631, 978–980
showing 1318	glissando lines 1098
signposts 438, 1318, 1319, 1321	glyphs 378, 381, 639
size 1317	headers 631

text (continued)	text frames 1329
hiding 1223, 1339	exporting 101
horizontal 1192	flow headings 596
horizontal alignment 739, 1333	identifying 1329
inputting 378, 1188	running headers 596
instrument changes. <i>See</i> instrument change labels	tokens 638
instrument names. See instrument names	
	text items 1328, 1329
layout names 176, 982	colors 54, 379, 739
leading 739, 741, 1333	copying 57, 445
lines 1176, 1188–1194	crosshairs 503
lyricist 74, 631, 980	editing 381
lyrics 1012, 1023–1025	exporting 101
markers 96, 391, 392, 1201, 1203	filter 417
missing fonts 72	hiding 1339
moving 448, 501, 1333, 1334	identifying 1329
multiple positions 1303, 1304	inputting 378
·	moving 448
music fonts 734, 736	
music symbols 378, 381, 639	positions 1303, 1304
overlapping 1334	selecting 413, 417
overline 379, 739	showing 1339
padding 739, 1194, 1337	signposts 1339
paragraph styles 739, 741, 1333	staves 1303, 1304
part names. See layout names	vertical positions 1303, 1304
pedal lines 1156–1158	text styles 736
percussion legends 1411	text tokens. <i>See</i> tokens
playing techniques 1160, 1161	theme 51
printing 101	theorbo. See fretted instruments
rehearsal marks 1196, 1199	thick barlines 800, 801
repeat endings 1213	thickness
repeat markers 1217–1219	bar numbers 811
resetting 1333, 1334	beams 826, 838
restorative 1156, 1158	borders 739, 1137, 1192, 1337
running headers 631	brackets 849, 872
saving 101	chord symbols 853, 872
selecting 413, 417	grace note slashes 987
showing 1223, 1339	gradual tempo changes 1326
signposts 438, 1339	line borders 1192
spacing 379, 739, 742, 1333	lines 853
staff labels. See staff labels. See also player group	parentheses 872
labels	pedal lines 1155
staff-relative placement 423	rehearsal marks 1199
statistics 105	slurs 1268, 1282
stretch 379, 739	string shift indicators 971
strikethrough 379	tacets 739
styles 736	text borders 1192, 1337
subscript 379	ties 1344, 1354
superscript 379	three quarters depressed pedal lines 1142, 1143, 1145,
system-attached text 378, 1303, 1304, 1328	1146
tacet. See tacets. See also multi-bar rests	thru
tacets 625	MIDI 212
tempo marks 421, 1313, 1316–1318, 1323	thumbs 962
timecodes 1203	chord diagrams 882, 883, 885
titles 74, 631, 978	fingerings 962
tokens. See tokens	inputting 272
types 1329	popover 270, 272
underline 379, 739	tick
vertical. <i>See</i> player group labels	barlines 800, 801
word wrapping 1219	breath marks. See breath marks
text editor 379, 381	played duration 671–673
comments 483–485	tie chains 1341
lyrics 1024, 1025	accents 790
Write mode 379	articulations 790, 1341
WITE HOUE 3/3	
	bracketed noteheads 1050

tie chains (continued)	ties (continued)
deleting 1350	rotating 1352
glissando lines 1100, 1101	shape 1352
numbering bars. See numbered bar regions	shoulder offset 1356, 1357
selecting 1341	slurs 1262, 1264
slurs 1262	slurs vs. ties 1342
splitting 256, 841, 842, 1351	solid 1343
staccato 790	splitting 256, 257, 841, 1351
stem direction 1057	staccato 790
tablature 1341	staff lines 1354
tenuto 790	stems 1057
tremolos 1379, 1380	style 1343
ties 22, 841, 1341–1343, 1347	system breaks 1347
accents 790	tablature 1341
accidentals 776, 1347	tenuto 790
appearance 1343	thickness 1354
articulations 790, 792, 1341	tie chains. <i>See</i> tie chains
bar numbers 814	time signatures 1341, 1348
beat grouping 841, 842, 844	tremolos 1379, 1380
bracketed noteheads 1050	voices 243, 1345, 1421
breaking 1351	width 1352
cautionary accidentals 776, 1065	TIFF files 579
chains. See tie chains	color 580
chords 1346	exporting 570–572
clef changes 1348	file names 572
collision avoidance 1341, 1354	layout numbers 175
control points 1352	layouts 570, 571
cross-staff 243, 1348	resolution 580
cross-voice 243, 1348	transparent 571
curvature direction 1345, 1346	time
dashed 1343–1345	deleting 439, 440, 793–795
deleting 453, 841, 1350, 1351, 1413	display 540, 543
dotted 1343–1345	inserting 232, 297–299, 439, 440, 530, 997
dynamics 302, 307, 448, 904, 926	language 56
editorial 1343	latency 258, 263, 264
endpoints 1352	markers 1201
Engrave mode 1352	rhythmic position 23
forcing 257, 841	signatures. See time signatures
formatting 1343–1345, 1352, 1354	tokens 642. See also date and time
frame breaks 1347	track. See tempo track. See also Tempo editor
gap size 1345	transport window 540, 543
grace notes 243, 1348	videos 187
guitar bends 1110	time and date. See date and time
hairpins 302, 307, 448, 904	time bars. <i>See</i> repeat endings
half-bar 730, 841, 844	time signatures 1359, 1360
half-dashed 1343	above staff 1366
handles 1352, 1354–1356	additive 1360
height 1354, 1355	aggregate 1360, 1372
inputting 192, 243	alternating 1360
inverting 1346	appearance 1375
laissez vibrer 1349	bar numbers 816
lyrics 243, 257, 382, 1016, 1026, 1027, 1343	barlines 798, 807, 1372
messa di voce 926	beam grouping 23, 730, 822, 842
non-adjacent notes 243, 1348	beat groups 23, 730, 1368
non-standard types 1347	bracketed groups 1365
note grouping 257, 841, 842	brackets 277, 1367, 1370
notehead brackets 1054	cautionary 1362
numbering bars. See numbered bar regions	changing 232, 421, 439–441, 796
parentheses 1050	click 259
pedal lines 367	colors 54
placement 1345	common 277, 280, 1371
playing techniques 362, 364	compound 1360
position 1262, 1352, 1354	custom 1360
P 00.0011 12021 10021 1003	

time signatures (continued)	timecodes (continued)
cut common 277, 280, 1371	text 1203
dashed barlines 1360, 1372	transport window 540, 543
deleting 443	vertical position 1207
denominators 1359, 1367, 1369	times played 1222
design 1375, 1376	changing 536, 1210
filter 417	timpani 128
font styles 1375, 1376	key signatures 110
hiding 440, 1362, 1374, 1375	laissez vibrer ties 1349
inputting 277, 281, 282	panning. <i>See</i> stage templates
Insert mode 232, 439–441	reverb. <i>See</i> space templates
interchangeable 1360, 1375	rolls. See tremolos. See also trills
irregular 1360	title pages 630, 978
large 1365	tokens 638
MIDI recording 259	titles 74, 183, 631, 634, 978
moving 448, 451, 501, 1372, 1373	accidentals 639
multi-bar rests 1258, 1259	adding 68, 978, 1329
multiple positions 1303, 1304	bold 74, 739
non-power of two 1360	changing 74, 184, 1329
note grouping 23, 822, 841, 844, 1240	exporting 101
noteheads 1369	file names 572
numerators 1359, 1367, 1368	first pages 631, 978
open 1360, 1367, 1369	flow headings 596, 634–636
panel 280	flows 183, 184, 634, 978
parentheses 277, 281, 1367, 1370	fonts 631, 634, 739, 978
pick-up bars 279, 283, 285, 1360, 1364	hiding 68, 595, 596
polymeter 281–283, 285, 1359	italics 74, 739
popover 277	movements 634
position 281, 282, 1304, 1367, 1372	page templates 631
rest grouping 822, 841, 844	paragraph styles 631, 634, 739, 978
rhythm slashes 1240	projects 183, 572, 978
selecting 411, 414, 416, 417	running headers 596, 632
separators 1367, 1370	showing 68, 595, 596
showing 1362, 1374, 1375	size 739
signposts 438, 796, 1367, 1369, 1374	templates 634
simple 1360	tokens 638
size 1365, 1367, 1375	to indications. See instrument change labels
spacing gaps 1372	toggle. See hiding. See also activating
staves 1304, 1365, 1367	tokens 638, 1329
styles 1367, 1370	accidentals 639
system objects 1366	clefs 639
ties 1341, 1348	composer 631, 640, 979
types 277, 1360	copyright 631, 640, 980
upbeats. See pick-up bars	date 642
vertical position 1303, 1304, 1365, 1367	exporting 101
Time Signatures (Meter) panel 280	file names 572, 638
timecodes 1206	first pages 631
changing 185, 1204, 1207	flows 183, 634–636, 640, 641, 978
dialog 185	inputting 638
drop frame 1206	language 56
exporting 99	layout name 631, 640
flows 118	lyricist 631, 640, 980
font style 1204	music symbols 639
frequency 1208	page numbers 642
inputting 391	page templates 631, 978
markers 391–393	project information 74, 183, 631, 640
non-drop frame 1206	Roman numerals 641
offset 1207	running headers 632
panel 392	SMuFL 639
staff 1202, 1207	staff labels 639
staff spacing 587, 605	time 642
start values 1207	titles 183, 631, 640
tempo 393	tom-tom. See unpitched percussion

tonality systems 1009 octave divisions 1009 panel 275	tracks <i>(continued)</i> piano roll. <i>See</i> piano roll editor playing techniques. <i>See</i> Playing Techniques editor
scale mapping 471, 478	routing 507, 554
ToneBooster 705, 711	selecting 86
tones	showing 521, 654, 658
intervals. See whole steps. See also pitch	soloing 532
microtones. See microtones. See also quarter tones	system. See system track
playback. See click	tempo. <i>See</i> tempo tracks
tongue clicks. <i>See</i> playing techniques toolbar 29	time. <i>See</i> tempo track. <i>See also</i> Tempo editor
hiding 29	types 515 unlocking 654
Key Editor 652	velocity. See Velocity editor
mixer 702	voices 516, 530, 531
transport options 29, 31	volume 708
workspace options 29, 30	width 522, 657
toolboxes 37	zoom 522, 656, 657
Engrave 490	traditional
Key Editor 652	music fonts 734, 736
Notations 191, 197	rastral size 601
Notes 191, 192	tonality systems 1009
tools 37	transcribing
arranging. See arranging	MIDI import 87, 90
editing. See properties. See also default settings	MIDI recording 258, 259, 263
selecting 37, 39	voices 258, 259
timecodes 1206	Transform tool 693, 696, 697
touched pitch 1062	hiding 698
harmonics 1066	showing 698
Track Inspector 505, 507, 646	transformations 463
track overview 506	inversion 464
automation. See MIDI CC editor	Key Editor 693, 694, 697
chords track 520	MIDI CC 694
dynamics. See Dynamics editor	pitch mapping 469
Key Editor 650	popover 473
markers track 519	repetition 468
MIDI CC. See MIDI CC editor	retrograde 465
MIDI pitch bend. See MIDI Pitch Bend editor. See	rotation 467
also MIDI CC editor	scale mapping 471 selections 698
pitch bends. <i>See</i> MIDI Pitch Bend editor. <i>See also</i> MIDI CC editor	velocity 693, 694, 697
Tempo editor 689	transition lines 1166, 1174
tempo track 517. See also Tempo editor	appearance 1170
tracks 515, 650, 700	duration 1167
adding 658	dynamics 680
automation. See MIDI CC editor	hiding 1170
chords. See chords track	inputting 358, 362, 364
colors 516, 661, 663	MIDI 687
dynamics. See Dynamics editor	playing techniques 1171
height 522, 656	showing 1170, 1172
hiding 521, 654, 658	tempo 689, 691
importing 84	translation lyrics 1010
independent voice playback 530, 531, 554	changing lines to 1029
inputting notes 664	changing lyrics to 1011
inserts 700, 701, 705, 711, 712	paragraph styles 1022
instruments. See instrument tracks	popover 383
Key Editor 650	transparent
locking 654	graphics 571
markers 519	items 54
MIDI. See MIDI CC editor	notes 54, 1041
MIDI import 84	transport 540
muting 532 names 84	activating 527 basic options 29, 31
percussion. See percussion editor	deactivating 527
per cassion, see per cassion callor	acactivating 327

transport (continued)	tremblements. See ornaments
hiding 540	tremolo arm. See vibrato bar
playhead 523	Tremolo plug-in 705, 711
playhead position 540, 543	tremolo strokes 1236, 1377, 1381
repeats 534	changing number 1380, 1381
showing 540	moving 1382
window 540	tremolos 1377
Transpose dialog 456, 457	angles 1378
transposed pitch 174, 454	articulations 769
chord symbols 155, 173, 865, 866	attack 396, 403, 405, 1379
clefs 323, 892, 894	cross-staff 832, 835
exporting 570	deleting 1381
input pitch 210	duration 1383
instrument transpositions 1292	inputting 396–398, 403, 405
layouts 173, 639, 981	measured 1377
MIDI import 87	MIDI import 87, 90
note input 210	MIDI recording 263
part layouts 170, 173, 566, 570	moving strokes 1382
printing 566	multi-note 397, 1377
score layouts 566, 570	number of strokes 1380
showing 173	panel 398, 405
staff labels 1287, 1292	percussion 1398, 1399
status bar 37	placement 1378
tokens 639, 981	playback 530, 531, 769–771, 1383, 1384
viewing 173	popover 396, 397, 403
transposing 454, 457	position 1378, 1382
accidentals 457, 1006, 1007	release 396, 403, 405, 1379
chord symbols 154, 155, 158–160, 162, 163, 173,	single-note 396, 1377
456, 457, 852, 861, 864	speed 1381
clefs 110, 895	strokes. See tremolo strokes
dialog 457	tie chains 1379
expression maps 744, 746, 749, 752	tuplets 1377
figured bass 456, 458	types 396, 397, 1377
flows 456, 457	unmeasured 1377
fretted instruments 150, 151, 153, 154	voices 1383
instruments. See transposing instruments	triads. See chords. See also chord symbols
key signatures 456, 457, 1000, 1006, 1007	triangles
layouts 37, 170, 173, 174, 178, 639, 981	beams 828
MIDI import 87	chord symbols 853
notes 455–459, 469, 471, 475, 478, 668, 669	noteheads 1035, 1038, 1399, 1402
octaves 455	percussion. See unpitched percussion
pitch. See transposed pitch	playback 763
popover 475	triggers
scales 471, 478	MIDI 93, 559
selections 456	trill intervals 1078, 1079, 1084
staff labels 1292	accidentals 1080, 1083
strings 154	appearance 1083
tokens 639, 981	auxiliary notes 1083
transposing instruments 128, 130, 173, 1287	changing 1080, 1081
adding 131	deleting 1082
chord symbols 155, 865, 866	hiding 1079
clefs 110, 892, 895	Hollywood-style 1083
concert pitch 173, 174	indicators 1078
fretted instruments 130, 158	inputting 337
instrument transpositions 1292, 1293	microtonal 1079–1081
key signatures 174, 730, 1000, 1002, 1007	position 1084
layout names 178	resetting 1082
layouts 173, 174	showing 1079
staff labels 1287, 1292, 1293	signposts 438, 1079
transposed pitch 173, 174	trill lines 1076, 1077
tre corde. See una corda pedal. See also pedal lines	hiding 1077
treble clef. See clefs	length 419, 501
trees. See split stems	

trill lines <i>(continued)</i>	tucking index (continued)
showing 1077	fermatas 1165
speed 1076, 1077	lines 1178, 1179
trills 1071, 1075, 1083, 1085, 1377	playing techniques 1165
accidentals 1080, 1083, 1084	string indicators 1165
alignment 1073, 1077	tuning
appearance 1083	capos. See capos
auxiliary notes 1083	changing 110, 151, 153
colors 54	chord diagrams 880, 883–885
crosshairs 503	custom 151, 153, 154, 877, 880
deleting 443	dialog 151
deleting intervals 1082	exporting 154
extension lines. See trill lines	fretted instruments 110, 150, 151, 154
filter 417	guitar 110, 150, 151, 154
generated 1086	importing 154
grace notes 1085	open pitches 153
handles 419	playback 530
hiding marks 1075	strings 153
Hollywood-style 1083	systems. See tonality systems
inputting 333, 337, 338	tuplet brackets 1391
intervals 333, 1078–1081, 1083, 1084	angle 501, 1391
length 419	end position 1393
lines. See trill lines	handles 1391
MIDI import 87, 90	hiding 1391
MIDI recording 263	hooks 1391
moving 448, 451, 501, 1072	horizontal 1393
NotePerformer 1086	length 501, 1391
panel 337, 338	moving 501
pitch 1080, 1081, 1088	showing 1391
placement 1072	tuplet numbers 1386, 1394
playback 770, 771, 1085–1087	appearance 1394
popover 333	hiding 1394
position 1072, 1073	horizontal position 1395
resetting 1082	tuplet ratios. See tuplet numbers
sampled 1086	tuplets 983, 1377, 1386
signposts 438, 1078–1081	accidentals 239
speed 1076, 1085, 1087	appearance 1391, 1394
staff-relative placement 423	articulations 266, 789
start position 1073	barlines 1389
starting pitch 1088	beams 821, 824, 825, 838, 841, 1390
tablature 1075	beat units 252
trimming flows 294, 295, 795	brackets. <i>See</i> tuplet brackets
triple accidentals	colors 54
inputting 239, 276	deleting 1388
respelling 460–463	end position 1393
transposing 457	filter 417
triple barlines 800, 801	formatting 1394
triple-dotted notes 225	handles 1391
triplets 1386	hiding 1391, 1394
inputting 192, 249, 251	hooks 1391
swing playback 537	horizontal brackets 1393
trombone. See instruments	inputting 91, 249, 1387, 1388
troppo. See tempo marks	inverting 1392
true black 580	Key Editor 661
trumpet. See instruments. See also transposing	moving 448, 451, 465, 467, 501, 1395
instruments	nested tuplets 1386, 1387
tuba. See instruments	notes 1388
Tube Compressor 705, 711	numbers. See tuplet numbers
tucking index 504	percussion kits 1404
bar numbers 814	piano roll editor 661
bowing marks 1165	placement 504
changing 900, 1165, 1178 chord symbols 160, 161, 163	popover 249, 251 position 504
CHULU SVITIDUIS 100. 101. 103	มบรเนบป วบ4

tuplets (continued)	types (continued)
quantization 91	repeat endings 395
ratios. See tuplet numbers	repeat markers 396
reversing 465. See also retrograde	resetting 424
rotating 467	rhythm slashes 1237
showing 1394	syllables 1012
signposts 438, 1391, 1394	templates 76
slurs 267	tempo marks 288, 292, 1314
staff-relative placement 1392	text 1329
swing playback 537	ties 1343
transformations 463, 1388	time signatures 277, 1360, 1367, 1370
tremolos 1377	tracks 515
tucking index 504	tremolos 396, 397, 1377
types 251, 1386	tuplets 251, 1386
unscaling 1388	
Turkish music	11
octave divisions 1009	U
turn off. See hiding. See also deactivating	ukulele. See fretted instruments
turns 1071	una corda pedal 1141, 1156
intervals 1071	appearance 1158
jazz. See jazz ornaments	• •
pages. See frame breaks	hiding 1158
tutorials 68	MIDI controller 1158
tutti 1307	start signs 1151
two-up page arrangement 575	text 1156–1158
TXT files	unassigned instruments
lyrics 1015	loading sounds 549
statistics 105, 106	uncompressed MusicXML 82, 83
types	undamped. See playing techniques. See also laissez
appearance 424	vibrer ties
arpeggio signs 335	underlines
articulations 1126	fingerings 958
bar repeats 397	instrument names 180
barlines 799	lyrics 1025
breath marks 330, 993	staff labels 180
caesuras 330, 993	text 379, 737, 739, 742
caret 214	underscores
chord symbols 312, 853	dynamics 920
clefs 322	undo 29, 426
dynamics 304, 903	history 427
enclosures 809	ungrouping
fermatas 329, 992, 998	dynamics 931
fingerings 270, 970	playing techniques 1173 Unicode
glissando lines 335	
grace notes 987	inputting 378 text 378
holds 329, 991	unisons 1307
jazz articulations 334, 1125–1127	altered. See altered unisons
key signatures 274	stems 227
lines 1174, 1176	
lyrics 383, 1010, 1011	voices 227, 1417–1419
notehead sets 1033	units
noteheads 1034, 1037	beats 185, 292, 393, 421, 1319
notes 196	measurement 50
octave lines 323, 897	metronome marks 421, 1319
ornaments 333, 1126	quantization 91
page templates 631	rhythmic grid 212
pauses 329, 991	swing playback 537
pedal lines 360, 1141	system track 414
percussion legends 1409	tempo 292, 393
players 84, 121, 125	time 185, 540
playing technique lines 1168, 1170	tuplets 251
playing techniques 358, 1160	video 185 Universal Indian Drum Notation 1414
rehearsal marks 1198	טווועכו זמו דוומומוז טו מווו ואטנמנוטוז 1414

unlinking 931	upbeats. See pick-up bars
dynamics 933	upper case
Key Editor 654	chord symbols 853
slurs 1276	flow numbers 641
tracks 654	Roman numerals 641
unmeasured tremolos. See tremolos	upper limits. See limits
unpitched percussion 1397	upper notes
adding 110, 112, 131	percussion 233, 1399, 1402
articulations 769, 1399, 1404	trills 1088
drags. See grace notes	used chord diagrams 879–881
drum sets. See drum sets	capos 162, 163
dynamics in kits 1405	fingerings 882
exporting kits 149	user interface 28
flams. See grace notes ghost notes. See bracketed noteheads	colors 51, 52, 54 language 55, 63
grace notes 245	transport options 31
grid kit presentation 147–149, 1297	windows 28
groups 147, 1297	user name
importing kits 150	comments 481, 486
Indian drum notation 1414	
individual instruments 1397	W
instrument order 146	V
Key Editor. See percussion editor	value fields 649
kits. See percussion kits	value line
laissez vibrer ties 1349	dynamics 677, 680
legends 1407, 1408, 1410, 1411	MIDI 684, 687
MIDI 37, 650, 663, 684, 763	tempo 517, 689
MIDI import 84	values
moving notes 452	faders 703, 708
MusicXML files 82	frame rates 185
naming groups 148	gradual tempo changes 1325
notation options 1404	histogram controls 695
notations 1404	latency compensation 264
note input 93, 233, 236, 237, 664, 665	metronome marks 421, 1319–1321, 1325
noteheads 1399, 1402 panning. <i>See</i> stage templates	MIDI CC 687, 693–698
parentheses. See bracketed noteheads	notes. See note durations
part layouts 172, 1407	properties 649
percussion maps 507, 555, 763, 764	relative tempo changes 1321
Play mode. <i>See</i> percussion editor	rhythmic grid 37, 213, 664 timecodes 185, 1207
playback 507, 555, 763, 764, 769, 1398	velocity 674, 676, 677, 693–697
playing techniques 669, 769, 1398, 1399, 1401,	valves
1402, 1405	fingerings 970
presentation types 140, 1397, 1406, 1407	vamping 319
rhythm slashes 140, 1238	variants
rudiments 219, 245, 254, 983, 1377, 1383, 1386	adding 110, 131
scrapes. See playing techniques	changing 132
staff labels 147, 148, 1297	velocity
staff position 669, 1399, 1402	bracketed noteheads 1048
staves 140, 1406, 1407	changing 408, 409, 421, 676, 677, 693–697
stem direction 140, 237, 1413	controls 676, 693–697
stickings 1405	editor. See Velocity editor
techniques. <i>See</i> playing techniques tremolos 769, 1399	expression maps 752
tuplets 1404	Histogram tool 693, 694
voices in kits 1413, 1414	MIDI import 90
unscaling	MIDI recording 263
grace notes 985	MIDI trigger regions 408, 409, 559
tuplets 1388	resetting 677 selecting 698
up arpeggio signs. See arpeggio signs	Transform tool 696, 697
up bow. See playing techniques	Velocity editor 674, 676, 677
up-bow breath marks. See breath marks	adding 658, 674
up-stem voices. <i>See</i> voices	changing velocity 676, 693–697
	, , , , , , , , , , , , , , , , , , , ,

Velocity editor (continued)	vertical position (continued)
closing 658, 674	rhythm slashes 1247
filter 695	slurs 1265, 1270
height 656	stacking order. <i>See</i> stacking order
Histogram controls 694	staves 123–125, 587, 588, 605, 608
resetting velocity 677	string indicators 1165
Transform controls 697	system objects 1304
zoom 657	systems 587, 588, 605
velocity lanes. See Velocity editor	tacets 625
verse numbers 1030	tempo marks 1303, 1304, 1314
exporting 1015	text 423, 1303, 1304, 1334
hiding 1030	ties 1345, 1354
lyric line numbers 1028	time signatures 1303, 1304, 1365, 1367, 1372
	time signatures 1303, 1304, 1303, 1307, 1372 timecodes 1202, 1207
paragraph styles 1022, 1023	tremolos 1378
showing 1030	trills 1072
versions	
files 72	vertical spacing
vertical alignment	bracketed noteheads 1048, 1051
chord symbols 862	chord diagrams 880
crosshairs 503	frame fullness indicator 493
dynamics 906, 930–933	lyrics 1020
items 503	ossia staves 1301
lines 1171	percussion kits 149
playing techniques 1171	staves. <i>See</i> staff spacing
rests 1252, 1253	systems. See system spacing
vertical justification	tacets 625
staves 588, 605	text 739, 741
systems 588, 605	vertical stacking order. See stacking order
vertical lines. See lines. See also arpeggio signs	vibraphone. See instruments. See also grand staff
vertical position 501	instruments
articulations 789, 791	vibrato. See playing techniques
bar numbers 813–815, 1235	vibrato bar 1103, 1108, 1118
bowing marks 1165	chords 1108
breath marks 994	deleting 443, 1124
caesuras 994	dips 353, 1118, 1123
capo chord symbols 160	dives 1108, 1116, 1118
changing 423	duration 419, 1167
chord symbols 160, 853, 859, 860, 862, 867, 878	handles 1114, 1116
comments 486	inputting 346, 348–350, 354, 355
counts 1235, 1245	intervals 1109, 1123
dynamics 904, 916, 917	length 419
fermatas 994, 1165	lines 354, 355, 419, 1118, 1167
figured bass 939, 946	moving 501, 1114, 1116
fingerings 952, 964–966	playback 1108
flipping items 423	pre-dives. See guitar pre-bends
flow headings 596, 598, 599, 634	returns 1108, 1116, 1118
harp pedal diagrams 1139	scoops 1118
instruments 123–125	Vibrato plug-in 705, 711
layouts 175	Video Properties dialog 185
lines 1165, 1177, 1181, 1182, 1184, 1195	videos 68, 185
lyrics 1010, 1016, 1019, 1020, 1028–1030	adding 187
markers 1202	auding 187 audio 189, 700, 701, 703, 707
modifiers 916	channel 700, 701, 703, 707
ornaments 1072	dialog 185
	flows 118
pauses 993	
pedal lines 1147	formats 185
players 123–125	frame rates 189, 190
playing techniques 423, 1164, 1165	hiding 188
poco a poco 916	locating 187
rehearsal marks 1196, 1303, 1304	markers 519, 1201
repeat endings 1213, 1303, 1304	mixer 700, 701, 703, 707
repeat markers 1220, 1221, 1304	panel 392
rests 1249, 1252, 1253	reloading 187

videos (continued)	view options (continued)
removing 189	transport 543
size 188	types 39
start position 187	video window 188
syncing 187	voices 1416, 1417
timecodes 1206, 1207	windows 48
tutorials 68	zoom 41, 431, 432, 522, 657
volume 189	VintageCompressor 705, 711
window 188	violin. See instruments
Viennese accidental duration rule 783	vivace. See tempo marks
view options 39, 581	vocal scores. See layouts
accidentals 778	vocal staves 76, 110, 112, 128, 131
attachment lines 426	barlines 805, 806
background color 52	brackets 847, 1295
bar numbers 811	glissando lines 1100, 1101
bar repeats 1226	groups 163
changing 37, 696	panning. <i>See</i> stage templates
chord diagrams 877–881	reverb. <i>See</i> space templates
chord symbols 160, 161, 163, 859, 860, 862, 864,	staff grouping 847, 1295
878	syllabic beaming 824
colors 51–54	voice colors
comments 481, 487	changing 53
exporting 581	exporting 581
figured bass 948	hiding 425, 1417
flows 507	printing 581
frame break signposts 622	showing 1417
full screen mode 48	voice column index 1418–1421
galley view 39, 49	default settings 730
harp pedaling 1044	ledger lines 1042
hiding 425	note spacing 498
Histogram tool 696	order 1420, 1421
Hub 68	resetting 1421
Key Editor 650, 654, 656–658, 696	rhythm dots 1043, 1420
language 55, 63	voices 227, 781, 1416
layouts 32, 42, 46	accidental stacking order 778, 780
lines 426	adding 227, 229, 453
MIDI trigger regions 560	alignment 1418–1421
mixer 700, 702, 707	articulations 788
moving music 429, 430, 524	bar rests 242, 1252, 1256
music area 33, 40, 49	beaming 1057
notes 534, 1044, 1417	caret 214, 227
notes out of range 53, 1044	cautionary accidentals 784
numbered bar regions 1226	changing 453, 454, 1237
page arrangements 37, 40, 49	chord symbol playback 310, 520, 521
page color 52	chords 247
page numbers 1132	colors 53, 516, 661, 663, 1416, 1417
page view 39, 40, 49	column index 1419
panels 36, 43	copying 670
percussion legends 1407	creating new 227, 229, 453
piano roll 650, 654, 656-658, 661	cues 902
playhead 524, 543	deleting 1422
print preview 425, 561	direction 1246
printing 581	divisi. See divisi. See also condensing
recent projects 68	drum sets 140, 145, 1404, 1413, 1414
rests 1044, 1253	dynamics 302, 307, 677, 913, 936, 937
signposts 438	endpoints 554
slash regions 1243	fermatas 993, 995
system break signposts 619	filters 417, 652, 695
system track 416	flows 554
tabs 32, 42, 44, 46	glissando lines 341, 342
time signature signposts 1374	grace notes 983
timecode 543	hiding 1241
tracks 522, 657	Histogram tool 693, 695

voices (continued)	volume (continued)
identifying 37, 1417	playback 708, 752, 934, 936
inputting 227, 229, 247, 453, 664	resetting 708
Insert mode 232, 439	silence playback template 543, 544
Key Editor 530, 654, 664	swells. See messa di voce
ledger lines 1042	tracks 700, 701, 708
MIDI CC editor 684	velocity 674, 676, 677, 693, 696, 752
MIDI import 87, 90	video audio 189
MIDI recording 258, 259, 261, 263	VST Amp Rack 705, 711
mixer 700, 701, 708	VST and MIDI panel 505, 511
•	·
moving notes 451	VST Bass Amp 705, 711
muting 532	VST instruments 507, 511
notation options 1417	activating 511, 527
note spacing 498	allowing 513
octave lines 326, 327	blocking 513
order 730, 1419–1421	chord symbols 520
overlapping 1418, 1419	click 518
panning 709, 913	deactivating 511, 527
parts. See layouts	editing 511, 515
pasting notes into 670	endpoints 552, 556, 557
percussion kits 140, 145, 1404, 1413, 1414	expression maps 507, 555, 745
piano roll editor 654, 661, 664	instances 511
placement 1418	loading 513, 527, 543, 549
playback 530, 531, 554	names 552
playing techniques 362, 364, 673	numbering 511
position 1418	panel 511
rests 1249, 1251–1253	panning 713
rhythm dots 1043, 1420	percussion maps 507, 555
rhythm slashes 229, 1246	playback 543, 544, 552, 744, 763
scrub playback 527	ports 507, 552
selecting 411–414, 417, 453, 654, 659, 664	reverb 720
showing 1241	saving 549, 557
slash regions 1241	setting up 513, 515, 549, 557
slashes 229, 453, 1236, 1237, 1246	space templates 720
slurs 1264, 1270, 1272	stage templates 713
soloing 532	window 515
spacing. See note spacing	VSTDynamics 705, 711
status bar 37	
stem direction 1055, 1058, 1413, 1416, 1422	W
stems 1420, 1421	VV
swapping contents 454	w/ bar. See vibrato bar
swapping order 1420	WahWah 705, 711
switching between 227	walker noteheads 1037, 1038
ties 243, 1345, 1348	warnings
tracks 507, 516, 530	audio engine 37
tremolos 1383	
velocity 674, 676, 677, 693, 695, 936, 937	deleting players 108, 125
volume 708	different Dorico versions 72
VST instruments 515	exporting 570
voicing	instrument changes 134, 139
chord diagrams 875, 879–881, 883, 885	MIDI input 37
	missing fonts 72
chord symbols 310, 520, 521	printing 566
notes 227, 247	transposition 566, 570
percussion kits 140, 145	watermarks 581
volta lines. See repeat endings	exporting 570
volume	font style 737
bracketed noteheads 1048	printing 566
channel meters 700, 701, 708	WAV files
click 708	exporting 98, 99
dynamics 681, 903, 908, 928, 934, 936	wavy lines. See wiggly lines. See also lines
metronome click 262	, 33,
MIDI 935	
mixer 700, 701, 708	

wedge lines 375, 1174	width (continued)
hiding 1169	H-bars 1257, 1258
inputting 375	hairpins 907, 919, 925
showing 1167, 1169, 1170, 1186	Key Editor 657
wedge noteheads 1035, 1038	keys 202
weight	laissez vibrer ties 1349
fonts 856	ledger lines 1042
time signatures 1375	line borders 1192
Western tonality	lines 597
key signatures 1001	measures 597
octave divisions 1009	messa di voce 925
whammy bar. See vibrato bar	multi-bar rests 1258
whistle tones. See playing techniques. See also	note durations 494, 671. See also note spacing
diamond noteheads	notehead brackets 1052
white	noteheads 1036
areas. See erased backgrounds	notes 657
noteheads 1033, 1034, 1038	pages 584, 585, 597
notes 1100, 1101	percussion editor 657
pages 52, 54	piano roll editor 657
staves 54	system dividers 1303
whole notes 14, 196, 219, 254, 255	systems 500, 597, 1305
beats 295	text borders 1192, 1337
chords 247	ties 1352
glissando lines 1101	time signatures 1375
Insert mode 232	tracks 522, 657
metronome marks 289	windows 39, 48
percussion 233, 665	wiggly lines 1096, 1125, 1174
rests 241, 1249	glissando lines 1096, 1097
splitting notes 256	hiding 1169
tablature 237	inputting 339–344, 375
tremolos 403, 405, 1377	jazz articulations 334, 337, 343, 344, 1125, 1128
tuplets 249, 252	playing techniques 1170
voices 227	showing 1167, 1169, 1186
whole step trills 1078, 1085	trills 1076, 1077
appearance 1083	wildcards. See tokens
hiding 1075, 1079	wind band. See bands. See also project templates
inputting 333, 338	wind instruments. See woodwind instruments
position 1084	windows
	full screen 48
showing 1075, 1079	
whole steps 775	MIDI instruments 507
bend intervals 1100, 1101, 1109, 1123	mixer 701, 702
glissando lines 1100, 1101	moving tabs 47
pitch bends 683	multiple 44, 47, 48
string pitches 151	opening 48
tonality systems 1009	playback 48, 524
transposing instruments 130, 1007	project 28
trills. See whole step trills	splitting 47
whole tone	tabs 47
chord symbols 316	transport 540
scales 471, 478	video 188
whole-half diminished. See scales. See also intervals	VST instruments 507, 511, 515
width	workspaces 42
accidentals 779	wizard. See hub
barlines 799	wood blocks 140, 1397
bars 494, 496, 597, 796, 1254, 1305	adding 122, 131
beams 826, 838	click 262, 518
braces 849	woodwind instruments 128
brackets 849, 851	adding 110, 112, 122, 126, 131
columns 72	brackets 847, 1295
elision slurs 1016, 1031	chord symbols 859
empty bars 796, 1254	glissando lines 1100, 1101
flared hairpins 923	groups 163
graphics 856	panning. See stage templates
grapines 000	pariting, see stage templates

	00.05
woodwind instruments (continued)	zones 28, 36
player order 108, 123	Engrave mode 489, 646
playing techniques 361	hiding 43
reverb. See space templates	lower 646
transposition 110, 130	Play mode 505, 650, 700
word spacing 379, 739, 742	Print mode 561–563
instrument names 180	Setup mode 107, 108, 115, 118
lyrics 1022, 1023, 1025	showing 43
staff labels 180	Write mode 191, 196, 200–202, 204, 205, 646, 650,
words. See lyrics. See also text	700
workflow	zoom 37
comments 481	bar repeats 1226
worksheets	changing 431, 432
colors 54, 1037	chord symbols 864
extracts. See flows	key commands 432
note name noteheads 1037	Key Editor 650, 656, 657
text alignment 1333	lyrics 1024
workspaces 19	MIDI trigger regions 560
key commands 25, 62	numbered bar regions 1226
options 29, 30	options 37, 41, 431
preferences 57	percussion editor 656–658
setting up 42, 55	piano roll editor 656–658
wrapping text	slash regions 1239, 1243
repeat markers 1219	tracks 522, 656, 657
Write mode 19, 191	
caret 217	
inputting notations 266	
inputting notes 219	
inputting vs. editing 206	
navigation. See navigation	
notation options 730	
panels 36, 191, 196, 200, 646	
playhead 524	
popovers 22	
selecting 410–414, 416, 417, 428	
signposts 438	
spacing 607	
switching 42, 191	
system track 414	
text editor 379	
toolboxes 37, 191, 192, 197	
Transpose dialog 457	
written tempo 287, 291, 528, 1313, 1319	
V	
X	
X-noteheads 1035, 1038	
dead notes 1122	
percussion 233, 665, 1399, 1401, 1402	
resetting 1039 xylophone. <i>See</i> instruments. <i>See also</i> transposing	
instruments	
ווזכנו עוווכוונט	
-	
Z	
7010	
zero bar numbers 1364	
chord diagrams 875, 885	
fingerings 960	
string indicators 374, 974	
zig-zag accidentals 778	
lines. See lines	