**Operation** Manual





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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.

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# Introduction

This is the **Operation Manual** for Steinberg's Nuendo Live, a quick and easy-to-use solution for live-recording engineers. Here you will find detailed information about all the features and functions in the application.

# **Platform-Independent Documentation**

The 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 Windows.
- Some functions that are available on the **File** menu on Windows can be found in the program name menu on macOS.

# **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 "events". To find instructions for performing particular actions, we recommend including a relevant verb in your search, such as "recording".

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.

# Тір

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 Settings dialog, click Settings on the toolbar.

If bold text is separated by a greater-than symbol, this indicates a sequence of different menus to open.

#### EXAMPLE

To open the **Key Commands** dialog, select **File** > **Key Commands**.

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

```
EXAMPLE
example_file.txt
```

# **Key Commands**

Many of the default key commands, also known as keyboard shortcuts, use modifier keys, some of which are specific to each operating system.

Whenever key commands with modifier keys are described in this manual, the Windows modifier key is indicated first, followed by the macOS modifier key and the key.

EXAMPLE

Ctrl/Cmd - Z means: press Ctrl on Windows or Cmd on macOS, then press Z.

# How You Can Reach Us

On the **Help** menu, you find items linking to additional information.

The menu contains links to various Steinberg web pages. Selecting a menu item automatically launches your 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, etc. This requires that you have a web browser installed on your computer, and a working Internet connection.

# **Setting Up Nuendo Live**

Before you can record and play back a performance, you must set up your system by establishing a connection between Nuendo Live and other components, such as your audio interface, and by choosing a playback output mode.

#### IMPORTANT

Make sure that all equipment is turned off before making any connections.

# Setting Up Nuendo Live for Recording

Before you can start recording, you must connect Nuendo Live to your audio interface by selecting its ASIO driver in the **Settings** dialog.

#### PREREQUISITE

You have set up the physical connections between the components of your system. For more information, see the documentation of your hardware.

#### PROCEDURE

- 1. Start Nuendo Live.
- 2. In the Projects dialog, click Settings.
- 3. In the Audio System section of the Settings dialog, select an ASIO driver.
- **4.** Optional: In the **Audio Ports** section, deactivate **Use** for any input ports that you do not want to use.

When you create a new project, one track is added to the track list for each active input port.

#### NOTE

If you use digital connections, we recommend that you define the mixing console as the word clock master within your setup. When Nuendo Live receives word clock signals from the master device, it displays the corresponding hardware sample rate.

#### AFTER COMPLETING THIS TASK

You can start recording.

#### IMPORTANT

To avoid performance issues and to keep the computer from going into sleep mode during long recordings, deactivate any power saving options on your computer before starting a recording. We also recommend to deactivate the screen saver.

RELATED LINKS Projects Dialog on page 13 Settings Dialog on page 8 Creating a New Empty Project on page 15 Recording on page 30

# Setting Up Nuendo Live for Playback

You can define the playback of your recording via the **Output Mode** section of the **Settings** dialog.

PROCEDURE

- 1. On the toolbar, click **Settings •**.
- 2. In the **Output Mode** section of the **Settings** dialog, choose one of the following modes:
  - Multi Track Mode.

In this mode, the recorded audio tracks are played back via their corresponding output ports. This allows you to make a soundcheck without the artists present, for example.

• Stereo Mode.

In this mode, all tracks are mixed down to two output ports.

NOTE

During playback, you can control the mixdown process using the **Stereo Output Level** slider that is displayed on the info line, as well as the **Volume in Stereo Mix** slider and the **Pan in Stereo Mix** dial that are displayed in the track control area of each track.

- 3. Optional: Click **Control Panel** to make further settings for your ASIO driver.
- **4.** Optional: In the **Audio Ports** section, deactivate **Use** for any output ports that you do not want to use.

RELATED LINKS Settings Dialog on page 8 Info Line on page 22 Defining a Cycle Range for Looped Playback on page 27 Excluding Ranges from Playback on page 27

# **Settings Dialog**

In the **Settings** dialog, you can establish the connections between Nuendo Live and the audio device of your computer, and select an output mode for your recording. If a project is open, you can also make project-specific settings.

To open the **Settings** dialog, do one of the following:

- On the toolbar, click **Settings** 🔄
- Open the File menu, and select Settings.
- Press F2.
- In the **Projects** dialog, click **Settings**.

Project		Audio System			Output Mode	
Project Start Time	2 18:00:00:00	ASIO Driver		Yamaha AIC128-D ▼	<ul> <li>Multi Track Mode</li> </ul>	
Project Length	06:00:00:00	Control Panel		Reset	O Stereo Mode	
Sample Rate	48.000 kHz 🔻	ASIO State:		ASIO running		
		Input Latency:		3.333 ms		
		Output Latency:		3.333 ms		
Record File Type	Broadcast Wave File 🔻	HW Sample Rate:		48.000 kHz		
Bit Depth	24 bit 🔻	Pre-Record Time		60 seconds 🔶		
Project Frame Rate	50 fps 🔻	Activate Steinb	erg Audio	Power Scheme		
Restore Defa	ult Setup					
Audio Ports						
# Input Ports	Use # Outp	ut Ports	Use			
1 AIC128-D Input 1	X 1 AIC12	8-D Output 1	×			<u> </u>
2 AIC128-D Input 2	2 AIC12	8-D Output 2	×			
3 AIC128-D Input 3	X 3 AIC12	8-D Output 3	×			
4 AIC128-D Input 4	¥ 4 AIC12	8-D Output 4	×			
5 AIC128-D Input 5	X 5 AIC12	8-D Output 5	×			
6 AIC128-D Input 6	K 6 AIC12	8-D Output 6	×			
7 AIC128-D Input 7	X 7 AIC12	8-D Output 7	×			
8 AIC128-D Input 8	× 8 AIC12	8-D Output 8	×			
9 AlC128-D Input 9	9 AIC12	8-D Output 9	×			
						OK

# Project

In this section, you can make project-specific settings.

NOTE

The **Project** section is only displayed in the **Settings** dialog if a project is open.

## **Project Start Time**

Shows the start time of the project. The value that you specify here is displayed as the start value of the ruler. The format is displayed in hours, minutes, seconds, frames: HH:MM:SS:FF.

# **Project Length**

Shows the length of the timeline of the project. The format is displayed in hours, minutes, seconds, frames: HH:MM:SS:FF.

# NOTE

In case your recording exceeds this length, the project length is automatically extended. No recorded data is lost.

#### **Sample Rate**

Allows you to specify the sample rate at which Nuendo Live records and plays back audio.

## NOTE

The sample rate must correspond to the hardware sample rate.

## **Record File Type**

Allows you to specify the file type for your Nuendo Live recordings.

## NOTE

For recordings larger than 4 GB, the EBU RIFF 64 standard is used. If a FAT 32 hard disk is used, audio files are split automatically.

The following file types are available:

- **Broadcast Wave File** is the most commonly used format. It can store metadata, such as the timecode position or the name of the artist, without loss in quality.
- **Wave File** allows you to use the recorded files in applications that do not support Broadcast Wave files.

#### NOTE

If **Wave File** is selected, you cannot record files that exceed 4 hours at 48 kHz.

# **Bit Depth**

Allows you to specify the bit depth of the audio files that you record in Nuendo Live.

- **16 bit** allows for smaller file sizes. When recording audio with very low levels, this can have an impact on the quality.
- **24 bit** is the most commonly used resolution.
- **32 bit float** offers the highest resolution for post production. You can use this setting if you want to process the recorded files in a Nuendo system.

#### **Project Frame Rate**

Allows you to select the frame rate for the project.

To synchronize your recordings to video during production, select a compatible frame rate.

#### **Restore Default Setup**

Restores the default setup and ensures that for each activated input port, an audio track is available and assigned to that port. If necessary, new tracks are created, or surplus tracks are removed.

# **Audio System**

In this section, you can select the ASIO driver for your recording and make settings for it.

#### **ASIO Driver**

Allows you to select an ASIO driver.

#### **Control Panel**

Opens the control panel for the selected ASIO driver. The available options depend on your audio hardware.

#### Reset

Resets the ASIO driver and re-establishes the communication between the audio card and Nuendo Live.

## NOTE

We recommend to use this option if you encounter problems related to your audio system.

#### **ASIO State**

If the ASIO driver is not working properly, an error message is displayed here.

#### **Input Latency**

Shows the input latency of your audio system.

#### **Output Latency**

Shows the output latency of your audio system.

#### **HW Sample Rate**

Shows the sample rate of the hardware.

#### **Pre-Record Time**

Defines the size of the pre-record buffer, which all incoming audio is automatically recorded to, after you record-enable a track.

#### **Activate Steinberg Audio Power Scheme**

Deactivates all power save modes that have an impact on real-time processing.

NOTE

This only works for very low latencies, and it increases the power consumption of your computer.

# **Output Mode**

In this section, you can select an output mode for your recording.

# Multi Track Mode

If this option is activated, each audio track is sent to a separate output on your audio card.

#### **Stereo Mode**

If this option is activated, all audio tracks are output as a stereo downmix. You can set the stereo output level on the info line.

## NOTE

When opening a project in the full version of Nuendo, any level and pan settings made in **Stereo Mode** are assigned to Aux Send 1.

# **Audio Ports**

In this section, you can specify the input ports for recording and the output ports for playback.

#### **Input Ports**

Allows you to define the input ports for recording.

- The # column shows the port number.
- The **Input Ports** column shows the port name.
- The Use column allows you to activate/deactivate the corresponding input port.

## NOTE

When you create a new project, one track is created for each active input port.

#### **Output Ports**

Allows you to define output ports for playback.

- The # column shows the port number.
- The Output Ports column shows the port name.

• The Use column allows you to activate/deactivate the corresponding output port.

RELATED LINKS Projects Dialog on page 13 Pre-Record Buffer on page 36 Info Line on page 22 Changing the Track Routing on page 44

# Switching the Language of the User Interface

You can change the language of the user interface via the **File** menu.

PROCEDURE

- 1. On the File menu, select another language from the Language submenu.
- 2. Restart Nuendo Live for the change to take effect.

# **Key Commands**

You can control many of the functions in Nuendo Live via key commands. The available commands are listed in the **Key Commands** dialog.

• To open the Key Commands dialog, select File > Key Commands.

NOTE

You cannot add or change key commands.

# **Project Handling**

Your Nuendo Live recordings are saved as projects.

You can reopen saved projects at a later stage and continue recording or edit the project. Alternatively, you can use saved projects as templates for new projects.

You can make project-specific settings, such as sample rate or bit depth, in the Settings dialog.

RELATED LINKS Project Files on page 13 Projects Dialog on page 13 Project Templates on page 15 Settings Dialog on page 8

# **Project Files**

Project files contain the data that is created during a recording.

Projects are displayed in the **Project** window, the main window in Nuendo Live.

- The file name extension for Nuendo Live project files is .nlpr.
- Only one project can be open at a time.
- Nuendo Live project files can be opened in Nuendo 5.5.4 or higher.

NOTE

You cannot open project files created with Nuendo (.npr) or Cubase (.cpr) in Nuendo Live.

RELATED LINKS Project Window on page 17

# **Projects Dialog**

The **Projects** dialog is displayed when you open Nuendo Live or close a project. It allows you to open an existing project, to create a new project, or to create a new project using an existing project as template.

# New

This tab allows you to create new projects.

Projects		
	Create Empty	
	Use a Project as Template	
New	Seaside Day 2	<b>n</b>
	Seaside Day 1	
-		
Open		L
		L
	Include Audio Events	Other Projects
Settings		
Quit		ОК

## **Create empty**

Creates a new empty project.

## Use a Project as Template

Allows you to create a new project with the same settings as the project you select from the list below or by clicking **Other Projects**.

If **Include Audio Events** is activated, all audio events of the source project are used in your new project. The audio events of the source project are referenced. The source project remains unchanged.

# Open

This tab allows you to open existing projects.

Projects	
New	Seaside Day 2
	Seaside Day 1
Open	
Cattions	Other Projects
Settings Quit	ОК

## **Recent Projects**

Allows you to select a recently used project.

# **Other Projects**

Allows you to select a project from your file system.

# **General controls**

## Settings

Opens the Settings dialog.

# Quit

Closes Nuendo Live.

RELATED LINKS Project Files on page 13 Creating a New Empty Project on page 15 Project Templates on page 15 Settings Dialog on page 8

# **Creating a New Empty Project**

You can create new empty projects via the **Projects** dialog.

#### PREREQUISITE

You have started Nuendo Live and set up the parameters in the **Settings** dialog according to the requirements of your project.

#### PROCEDURE

- 1. In the Projects dialog, select New, and click Create Empty.
- 2. In the file dialog, choose the folder where you want to save the new project, and click **Select** Folder.

#### RESULT

A project file and the required record folders are created inside the project folder. The folder name is used as the project name. The project is opened in Nuendo Live. For each active input port, one track is created.

AFTER COMPLETING THIS TASK

You can change the file path of the record folders, even to a location outside the project folder. This can be useful, for example, if your current project location is running out of disk space.

RELATED LINKS Settings Dialog on page 8 Changing the Target Location of Your Recording on page 35 Creating a Project by Using Another Project as a Template on page 16

# **Project Templates**

You can use existing Nuendo Live projects as templates for new projects.

Any Nuendo Live project can be used as a template. If you use a project as a template, the new project uses all the settings, for example, track names and track colors, of its source project. You can decide whether to create an empty project or to use the audio files of the source project as well. In the latter case, the audio files of the source project are referenced in your new project. The source project and its audio files remain unchanged.

# TIP

If you regularly use particular projects as templates, we recommend saving copies of these projects in a dedicated folder on your computer.

RELATED LINKS Creating a Project by Using Another Project as a Template on page 16

# Creating a Project by Using Another Project as a Template

You can use existing Nuendo Live projects as templates for new projects.

PROCEDURE

- 1. In the **Projects** dialog, select **New** in the left column.
- 2. Optional: Activate **Include Audio Events** if you want to use the audio events of the source project in your new project.
- 3. Do one of the following:
  - Select a project from the list of recently used projects and click OK.
  - Click **Other Projects** and in the **Open Template** file dialog, locate and select a Nuendo Live project file, and click **Open**.
- 4. In the **Set Project Folder** file dialog, specify the folder where you want to save your new project, and click **Select Folder**.

#### RESULT

A new, untitled project is created. The new project is based on the selected source project and includes the corresponding tracks and settings. If you activated **Include Audio Events**, the audio events of the source project are referenced at their original time positions.

RELATED LINKS Project Templates on page 15 Projects Dialog on page 13

# **Project-Related Information**

Nuendo Live offers two ways of saving project-related information.

- You can save metadata, such as production, artist, engineer, and director, via the **Record** panel. To open the panel, click **Record Panel** on the toolbar.
- You can use the **Notepad** to enter and save further information about your project. To open the **Notepad**, select **Project** > **Notepad** on the menu bar.

RELATED LINKS Record Panel on page 33 Toolbar on page 18

# **Project Window**

The **Project** window provides an overview of the project. It allows you to navigate to specific positions, to monitor the level of your input channels, and to perform editing operations.

The **Project** window features a toolbar and an info line, and allows you to switch from the **Track View** to the **Meter View**, and vice versa, by selecting the corresponding tabs. When you open or create a new project, the **Track View** tab is shown by default.

# NOTE

Alternatively, you can switch between the **Track View** and the **Meter View** tabs by pressing **Alt** - **V**.



Project window with Track View selected

## 1 Toolbar

Provides access to the main dialogs, menus, editing tools and options, and transport controls.

# 2 Info Line

Displays project-related information.

## 3 Track View

This tab shows the track list and the event display. A meter bridge allows you to monitor the levels of the input channels.

## 4 Meter View

This tab shows the record panel and the meters for all tracks of your project, allowing you to monitor the levels of the input channels.

RELATED LINKS Toolbar on page 18 Info Line on page 22 Track View on page 23 Meter View on page 28

# Toolbar

The toolbar provides access to the main dialogs, menus, editing tools and options, and transport controls.

• To show/hide tools, open the toolbar context menu by right-clicking in an empty area of the toolbar, and activate the tools that you want to display. To show all tools, select **Show All**.

NOTE

The number of elements that are shown also depends on the size of the **Project** window and the screen resolution.

The following options are available:

# **Project Settings**

Settings



Opens the Settings dialog.

# Left Divider

# Left Divider

Tools that are placed to the left of the divider are always shown.

# **Tool Buttons**

**Object Selection** 



Selects events.

# **Range Selection**



Selects ranges.

# **Event Colors**

Select Color for Selected Tracks or Events

ፇ▾

Opens the **Colorize** panel, which allows you to colorize the selected tracks or events.

# Auto-Scroll

# Auto-Scroll



Keeps the project cursor visible during playback.

# Select Auto-Scroll Settings

▼

Allows you to activate **Page Scroll** or **Stationary Cursor** and to activate **Suspend Auto-Scroll When Editing**.

# **Record Panel**

# **Record Panel**

Record Panel

Opens the **Record** panel in a separate window.

# Markers

## Jump to Marker 1 - 4/Locate Marker

1 2 3 4 -

Allows you to set and locate marker positions 1 to 4. **Locate Marker** allows you to move the project cursor to further marker positions.

# Locators

# Go to Left Locator Position



Allows you to go to the left locator position.

# **Left Locator Position**

0:09:01.424

Shows the left locator position.

# **Go to Right Locator Position**

Allows you to go to the right locator position.

# **Right Locator Position**

0:37:02.691

Shows the right locator position.

# **Transport Controls**

# Go to Previous Marker/Zero

⊳

Moves the project cursor to the previous marker/zero position on the timeline.

## Go to Next Marker/Project End

Ы

Moves the project cursor to the next marker/project end.

# Rewind

Moves backward.

# Fast Forward

⊪⊳

Moves forward.

# Activate Cycle

۵

Activates/Deactivates cycle mode.

Stop

# 

Stops playback.

Start

⊳

Starts playback.

## **Transport Record**



Activates/Deactivates record mode.

# **Time Display**

#### **Select Time Format**

Allows you to select a time format.

# Time Display

**b** 0:00:00.000

Shows the position of the project cursor in the selected time format.

# MTC

# Use MTC

MTC

Activates/Decativates the recording of MIDI timecode information.

# Timecode State

Offline

Shows the MIDI timecode state.

# **Incoming Timecode**

0:00:00.000 🔻

Shows the MIDI timecode state. Click the triangle to the left to select a timecode source.

# **Audio Performance Meter**

# **Audio Performance Meter**

The upper bar displays the current real-time peak load. The lower bar shows the hard disk transfer load of the disk engine.

For a more detailed display of real-time peak and ASIO-Guard load, click to open the **Audio Performance** panel.

Shows the current **Average Performance Load** and **Disk Cache Load**. Double-click the display to open it in a separate window.

# **Right Divider**

# **Right Divider**

Tools that are placed to the right of the divider are always shown.

RELATED LINKS Project Window on page 17 Settings Dialog on page 8 Selecting Events on page 45 Coloring Tracks and Events on page 44 Auto-Scroll Settings Menu on page 26 Record Panel on page 33 Moving the Project Cursor to Markers on page 42 Recording with MIDI Timecode Information on page 37 Audio Performance Panel on page 21

# Left/Right Toolbar Divider

The left and right toolbar dividers allow you to lock the position of specific tools on the left or on the right side of the toolbar, so that they are always shown.

All other items are shown in the center of the toolbar. When you reduce the width of the **Project** window, these toolbar items are hidden successively. When you increase the width, they are shown again.

RELATED LINKS Project Window on page 17 Toolbar on page 18

# **Audio Performance Panel**

The **Audio Performance** panel shows the audio processing load and the hard disk transfer rate. This allows you to ensure that you do not run into performance problems when working with a great number of tracks or small buffer sizes.

To open the **Audio Performance** panel, do one of the following:

- Select Project > Audio Performance on the menu bar.
- Double-click the **Audio Performance Meter** display on the toolbar.

Audio Perfo	rmance		x
Real Time			
Peak			
Disk Cache			

#### **Real Time**

Shows the average load of all audio real-time processes.

#### Peak

Shows the processing load in the real-time path of the audio engine. The higher this value, the higher the risk that dropouts occur.

## **Processing Overload**

The overload indicator indicates dropouts. Dropouts occur if the processing load exceeds 100% or if the audio engine is restarted due to the internal detection of excessive processing delay. For example, this can occur if the preprocessing buffer runs empty as a result of the real-time load exceeding the limits.

TIP

If the overload indicator lights up, we recommend to increase the buffer size or decrease the number of audio channels that you record or play back simultaneously.

#### Disk Cache

Shows the hard disk transfer load.

# **Disk Cache Overload**

The overload indicator to the right of the disk indicator lights up if the hard disk does not supply data fast enough.

# **Info Line**

The info line displays project-related information. You can change some of the parameters in the **Settings** dialog.

#### Max. Record Time

Max. Record Time 7 hours 15 mins

Shows the time that is left for recording, depending on the project settings and the available hard disk space.

#### **Record Format**

Record Format 48 kHz - 24 bit

Shows the sample rate and the bit depth of the audio files that you record in Nuendo Live. Click in the field to modify these values via the **Settings** dialog.

## **Pre-Record Seconds**

Pre-Record Seconds 10

Shows the size of the pre-record buffer in seconds, which all incoming audio is automatically recorded to, after you record-enable a track. Click in the field to modify this value via the **Settings** dialog.

#### **Record Folder**

D:\Projects\Nuendo Live 3\Audio

Shows the path to the folder in which your recordings are saved. Click in the field to modify the target location of your recording.

#### **Project Frame Rate**

**Record Folder** 

Project Frame Rate 59.94 fps

Shows the project frame rate. Click in the field to modify this value via the **Settings** dialog.

# Output Mode

Output Mode	Multi Track
Multi Track Mode	
Output Mode	Stereo
Stereo Mode	

In **Stereo Mode**, a slider allows you to set the stereo downmix output level. Click in the field to modify the output mode via the **Settings** dialog.

RELATED LINKS Settings Dialog on page 8

# **Track View**

Selecting the **Track View** tab shows the track list and the event display. The **Meter Bridge** allows you to monitor the levels of your channels.



# **Track list**

The track list shows all tracks of the project and provides controls for each track.

You can show/hide the marker track above the audio tracks.

# **Global controls**

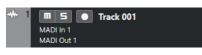
144 🔳 5 20 🔵

At the top of the track list, you can find the global controls. The numeral on the left shows the number of tracks in the project. **Mute** and **Solo** s allow you to unmute all tracks or to deactivate all solo states. The numeral on the right, next to the **Record Enable All Tracks** button , represents the number of record-enabled tracks.

## **Track controls**

The controls on a track allow you to mute, solo, and record-enable this particular track.

If you have selected **Multi Track Mode** in the **Settings** dialog, the names of the input and output ports that are used by the track are displayed.



If you have selected **Stereo Mode** in the **Settings** dialog, you can set the volume and the pan position for the track in the stereo mix.



# **Event display**

The event display to the right of the track list shows the audio events. If the marker track is displayed, the markers are also shown. A ruler, zoom controls, and the project cursor help you to navigate within your project.

20 1:40 2:00 2:20 2:40	3:20 3:40 4:00
	n an ande helen hele alle alle hele - o ben blede nån skal skal som det skal som det skal som ble beskal som

# Ruler

The ruler above the display shows the timeline. The two triangular markers on the ruler are the locators. They define the cycle area.

## Locators

1:40

The left and right locators are a pair of markers that you can use to set up cycle boundaries for playing back a section of the project in a loop.

## Waveform zoom slider

To vertically zoom in on the contents of events, use the waveform zoom slider in the top right corner of the event display.

This is useful when viewing quiet audio passages.

## NOTE

To obtain an approximate reading of the level of the audio events by viewing the waveforms, make sure this slider is all the way down. Otherwise, zoomed waveforms may be mistaken for clipped audio.

# Project cursor

The vertical line is the project cursor. It indicates the playback or recording position. When playback or recording is stopped, it defines the position where editing is performed.

## NOTE

During recording, the project cursor cannot be moved. In stop mode, you can set the cursor by clicking on the timeline. Double-clicking starts/stops playback.

#### **Zoom controls**



The horizontal and vertical zoom sliders in the lower right corner of the event display allow you to zoom within the main display.

Clicking the triangle above the horizontal zoom slider opens a pop-up menu from which you can select a track height preset.

Clicking the triangle to the left of the vertical zoom slider opens a pop-up menu from which you can select a zoom preset.

# **Meter Bridge**

This section shows the meters for all tracks of your project, allowing you to monitor the levels of the input channels.



# Show/Hide Meter Bridge

▼

Shows/hides the meter bridge.

## Show Previous Page/Show Next Page

Channel: 1 - 62 (144) 🔶

Allows you to scroll through the meter pages.

NOTE

Alternatively, you can scroll through the meter pages by pressing Alt - P.

#### Reset

Resets all peak hold values.

# Meter display

Allows you to monitor the levels of your channels.

RELATED LINKS Showing/Hiding the Marker Track on page 40 Settings Dialog on page 8 Editing Audio Events on page 45 Resetting Meters on page 29

# Setting the Project Cursor

You can set the project cursor by clicking at a position, or you can predefine a position.

## PROCEDURE

- Do one of the following:
  - Click in the **Project** window event display.
  - Click Go to Previous Marker/Zero or Go to Next Marker/Project End on the toolbar.
  - Click Go to Left Locator Position or Go to Right Locator Position on the toolbar.
  - Click in the lower part of the ruler.
  - Use a key command.

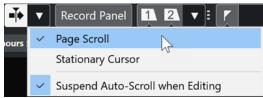
RELATED LINKS Toolbar on page 18 Track View on page 23 Moving the Project Cursor to Markers on page 42 Key Commands on page 12

# **Auto-Scroll Settings Menu**

Auto-Scroll allows you to keep the project cursor visible in the window during playback.

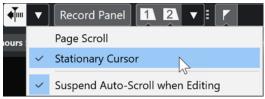
If you activate **Auto-Scroll** on the toolbar of the **Project** window or in one of the editors, the following modes are available in the **Select Auto-Scroll Settings** pop-up menu:

## Page Scroll



The project cursor moves from the left side to the right side of the window. When the project cursor reaches the right side of the window, the ruler and the project cursor jump to the left side of the window and start over again. This behavior can be compared to turning a page of a book.

## **Stationary Cursor**



The project cursor is kept in the middle of the window, and the ruler scrolls continuously to the left.

RELATED LINKS Toolbar on page 18 Suspend Auto-Scroll When Editing on page 27

# Suspend Auto-Scroll When Editing

If you do not want the **Project** window display to change when editing during playback, activate **Suspend Auto-Scroll when Editing**.

**Suspend Auto-Scroll when Editing** is available as an option in the **Select Auto-Scroll Settings** pop-up menu to the right of the **Auto-Scroll** button.

If this option is activated, auto-scrolling is suspended as soon as you click anywhere in the event display during playback, until playback stops or until you click **Auto-Scroll** again.

As a visual feedback, the **Auto-Scroll** button changes its color.

RELATED LINKS Toolbar on page 18

# **Defining a Cycle Range for Looped Playback**

You can play back a range of your recording in a loop.

#### PROCEDURE

- Move the mouse pointer over the top section of the ruler. The mouse pointer changes to a pencil.
- **2.** Click at the position where you want the loop to start, and drag to the right to define the cycle range.

#### RESULT

If **Activate Cycle** is activated on the toolbar, the selected range is played back in a loop.

# **Excluding Ranges from Playback**

You can use the locators to exclude a range of your recording from playback.

## PROCEDURE

- Move the mouse pointer over the top section of the ruler. The mouse pointer changes to a pencil.
- 2. Click and drag to the left to define the range that you want to exclude.

## RESULT

If **Activate Cycle** is activated on the toolbar, the selected range is skipped during playback.

# **Meter View**

Selecting the **Meter View** tab shows the meters for all tracks of your project, allowing you to monitor the levels of the input channels. The panel on the left combines all parameters and controls related to recording.



# **Record panel**

Provides the same parameters and controls as the **Record** panel that opens in a separate window.

# **Meter display**

Shows the meters for all tracks of your project. Depending on the meter size, numerical peak values and level scales are shown.

# NOTE

The size of the meters is determined by the window size and the number of meters that are shown per page.

If a track is record-enabled, the track number at the bottom of the corresponding meter is highlighted in red.



If a peak overload is detected, the peak value at the top of the corresponding meter is highlighted in bright red.



# **Meters per Page**

Sets the number of meters that are shown per page.

# Show Previous Page/Show Next Page

Allows you to scroll through the meter pages.

#### NOTE

You can also scroll through the meter pages by pressing Alt - P.

# Reset

Resets all peak hold values.

RELATED LINKS Record Panel on page 33 Resetting Meters on page 29

# **Resetting Meters**

You can reset the peak values for all meters either in the **Track View** or in the **Meter View**.

#### PROCEDURE

- Do one of the following:
  - Click Reset.
  - Right-click a meter.
  - Press Alt-S.

RELATED LINKS Track View on page 23 Meter View on page 28

# Recording

In Nuendo Live, you can instantly start the recording on all tracks. If needed, you can also make detailed settings, such as specifying the file format, the record location, and the pre-record buffer length, excluding tracks from recording, or saving metadata and timecode information in the files.

## IMPORTANT

To avoid performance issues and to keep the computer from going into sleep mode during long recordings, deactivate any power saving options on your computer before starting a recording. We also recommend to deactivate the screen saver.

RELATED LINKS Recording in a Few Simple Steps on page 30 Performing a More Complex Recording on page 31 Easy Recording on page 30 Recording with the Record Panel on page 31 MIDI Timecode on page 37

# **Recording in a Few Simple Steps**

It only takes a few simple steps for you to start recording in Nuendo Live.

PROCEDURE

- 1. Start Nuendo Live.
- 2. Create a new project.
- 3. Open the Record panel, and click Record.

As a result, all tracks are automatically record-enabled. Recording starts on all tracks.

4. To stop recording, click **Record** again.

RELATED LINKS Creating a New Empty Project on page 15 Record Panel on page 33

# **Easy Recording**

Nuendo Live allows you to start recording immediately by clicking **Easy Record** or using key commands. This can be helpful in live situations where the artists start performing without waiting the recording preparations to be completed.

#### PROCEDURE

- **1.** Do one of the following:
  - On the **Record** panel or in the record section of the **Meter View** tab in the **Project** window, click **Easy Record**.

# • Press Ctrl/Cmd-Return or Ctrl/Cmd-Num-\*.

As a result, all tracks are automatically record-enabled, and recording starts. **Lock Recording** is activated, which means that all functions and buttons are locked to prevent unintended operations by key commands or mouse clicks.

2. To stop recording, deactivate Lock Recording, and click Record.

RELATED LINKS Record Panel on page 33 Key Commands on page 12

# Performing a More Complex Recording

Nuendo Live offers various options for individual settings to customize your audio recordings. For example, you can specify metadata, such as **Artist** or **Engineer**, to be saved automatically in conjunction with the recorded files, you can exclude particular tracks from the recording, and you can define the file name and target location for your recording.

#### PROCEDURE

- 1. Start Nuendo Live.
- 2. Create a new project.
- **3.** Open the **Settings** dialog, and make your changes for the project and the required audio configuration.

NOTE

For each activated input port in the **Audio Ports** section, a track is created in your project.

- **4.** Optional: If you do not want to record on all tracks, record-enable individual tracks by clicking their **Record Enable** button in the track list.
- **5.** Open the **Record** panel, and set the parameters according to the requirements of your project.
- 6. To start recording, click Record.
- 7. To stop recording, click **Record** again.

RELATED LINKS Settings Dialog on page 8 Record Panel on page 33

# **Recording with the Record Panel**

On the **Record** panel, you can set the relevant parameters and start recording.

#### PROCEDURE

- 1. To open the **Record** panel, click **Record Panel** on the toolbar.
- 2. Select the tracks for recording:
  - To select all tracks, click Arm All Tracks on the Record panel.
  - To select individual tracks, use the corresponding track control on the **Track View** tab.

**3.** Optional: On the **Record** panel, click **Locate End**.

This moves the project cursor to the end of the last recording.

4. Optional: Fill out the metadata section.

# NOTE

The names of the recorded files and the folders in which they are saved are based on these settings. You can change the metadata during a recording session. The folder and file names are changed when you pause the recording.

5. Click Record.

Recording starts, and audio events are created in the **Project** window.

6. Optional: Click Lock Recording.

All functions and buttons are locked to prevent unintended operations via key commands or mouse clicks.

Before you can stop recording, you must unlock the interface. To unlock, click **Lock Recording** again.

7. To stop recording, click **Record**.

RELATED LINKS Record Panel on page 33 Key Commands on page 12

# **Record Panel**

Date / Time					
Production	Concert In The Pa	rk 🗌 File			
Artist	Mountain of Ston	es 📄 File	Folder		
Engineer	Charles Montagne	e			
Director	Marcel Berg				
Record Folder	D:\Concert In Th	e Park\Audio			
Arm All Tracks	Locate End	Record	Easy Record		
Project Time		Record Time Max			
2 1	9:15:23:02		20 h 59 m		
Current Recording	0.00.11	Total Recorded	0.10.01		
	0:00:11		0:40:21		
Add Marker Remove Marker					
> I Position	Description				
	Start Concert		n		
	05:12 Start Rhythm & Bytes \$1:30 End Rhythm & Bytes				
> 4 2 18:05:02:02 Start Where The Guitars Roam					
			>		

The **Record** panel provides all parameters and controls related to recording.

# **Metadata Section**

The metadata information in the section at the top is stored in Broadcast Wave files.

NOTE

• You can change the metadata during a recording session, even with **Lock Recording** activated. The folder and file names are changed when you pause the recording.

## Date/Time

Shows the current date and time.

# Production

Allows you to enter the name of the production.

To automatically add the name to the file name, activate **File** to the right of the **Production** field.

## Artist

Allows you to enter the name of the artist.

To automatically add the name to the file name, activate **File** to the right of the **Artist** field. Activate **Folder** to save the recording in a subfolder of the project folder, named after the artist.

#### Engineer

Allows you to enter the name of the sound engineer of the project.

#### Director

Allows you to enter the name of the director of the project.

# **Record Section**

# **Record Folder**

Displays the path to the folder in which your recordings are saved. Click in the field to modify the target location of your recording.

## **Arm All Tracks**

Enables/Disables recording for all audio tracks that are assigned to an audio input.

#### Locate End

Positions the project cursor at the end of the last recording.

## Record

Starts/Stops recording.

## **Easy Record**

Starts recording on all tracks and activates Lock Recording.

#### Lock Recording

Locks/Unlocks the user interface. This button is only available during recording.

If this button is activated, functions and buttons are locked to prevent unintended operations via key commands or mouse clicks. Before you can stop recording, you must unlock the user interface.

# **Time Displays Section**

#### **Project Time**

Shows the current position of the project cursor.

# **Record Time Max**

Shows the time that is left for recording, depending on the project settings and the available hard disk space.

#### NOTE

This value is calculated for the disk currently used for recording. The calculation is based on the total number of tracks in the project, regardless of whether they are record-enabled or not.

# **Current Recording**

Shows the length of the current recording.

## **Total Recorded**

Shows the total length of the recorded audio in the current project. Only the time of the actual recordings is taken into account, not the pauses between recordings.

# **Marker Section**

#### Add Marker

Adds a marker at the project cursor position.

#### **Remove Marker**

Removes the selected marker.

#### **Marker List**

The markers are listed according to their time positions.

- In the first column, a greater-than symbol indicates which marker is active.
- The **ID** column shows the marker ID.
- The **Position** column shows the marker position. You can change this value to move the marker.
- In the **Description** column, you can enter a name or a description for the marker.

RELATED LINKS Settings Dialog on page 8 Project-Related Information on page 16 Recording with the Record Panel on page 31 Changing the Target Location of Your Recording on page 35 Easy Recording on page 30 Markers on page 40

# **Changing the Target Location of Your Recording**

You can change the location of the record folder at any time. This is useful if the current target location is running out of disk space, for example.

#### PROCEDURE

- 1. On the **Record** panel, click in the **Record Folder** path field.
- 2. In the file dialog, do one of the following:
  - Select a folder.
  - Create a new folder.
- 3. Click OK.

#### RESULT

If you start recording, the new record location is used. If **Create Subfolder for Artist** is activated on the **Record** panel, the subfolder is automatically created inside the new record folder.

#### NOTE

- The audio files of a project are numbered consecutively, even if you change the target location.
- If the active record folder is not available; for example, because the project is opened on a different system, the target location is automatically set to the project folder.

RELATED LINKS Consecutive File Numbering on page 36 Record Panel on page 33

# **Consecutive File Numbering**

The audio files of a project are numbered consecutively, even if you change the record location. This is useful to transfer files from different folders to one single folder at a later stage.

Recording takes of a project are numbered globally. Tracks that are not record-enabled are numbered in the background. As a result, if these tracks are record-enabled for a later take, the global take number is applied.

When new audio files are created during recording, the following naming scheme is used:

```
<track number> - <track name>_<global take number>
```

## EXAMPLE

In a new project, you record an audio track called **bass** on track **1**. As a result, a new file, 01 - bass\_01.wav, is created in your target folder.

When you change the target location to another empty folder and record the next take, the first file in the new folder is automatically named 01 - bass\_02.wav.

#### EXAMPLE

In a new project, you record an audio track called **guitar** on track **1**, and an audio track called **bass** on track **2**. As a result, two new files, 01 - guitar\_01.wav and 02 - bass\_01.wav, are created in your target folder.

If you exclude track **2** from recording for the second take, a file called O1 - guitar\_O2.wav is created.

Record-enabling track **2** again for the third take results in the creation of the files 01 - guitar\_03.wav and 02 - bass\_03.wav.

RELATED LINKS Changing the Target Location of Your Recording on page 35 Renaming Tracks on page 43

# **Pre-Record Buffer**

When you record-enable a track, all incoming audio is automatically recorded to a buffer. This allows you to recover the beginning of a performance, in case you have started recording too late.

For all record-enabled tracks, you can record and recover up to 60 seconds of audio.

You can set the size of the pre-record buffer via the **Pre-Record Time** parameter in the **Audio System** section of the **Settings** dialog.

• To recover the pre-recorded audio, drag the event start border to the left.

NOTE

- The pre-record function takes up RAM for every input. At high sample rates (such as 96 kHz, 192 kHz), this can exceed the memory available on your computer. As a general rule, a pre-record time of 1 minute takes up 8 MB per track at 48 kHz, and 16 MB at 96 kHz.
- When recording more than 64 tracks, high pre-record settings can slow down the performance of the user interface.

RELATED LINKS Settings Dialog on page 8 Editing Audio Events on page 45

# **MIDI Timecode**

Productions that contain video usually contain timecode information. Nuendo Live allows you to save MIDI timecode (MTC) in your recordings, to facilitate aligning the audio timeline with the video timeline during postproduction.

For using MIDI timecode information in Nuendo Live, the following applies:

- Incoming MIDI timecode is automatically recognized and displayed on the toolbar.
- The timecode information is written into the timestamp of Broadcast Wave Format (BWF) files.
- The transport functions are not locked by incoming timecode information. This means that you can always freely navigate through the timeline and start recording from any position.
- Wrong timecode settings or corrupt incoming timecode information do not prevent Nuendo Live from recording.
- You can use Steinberg Nuendo SyncStation to generate MIDI timecode; for example, from longitudinal timecode (LTC).
- MIDI Machine Control (MMC) via timecode or VST System Link is not supported.

RELATED LINKS Toolbar on page 18 Recording with MIDI Timecode Information on page 37

## **Recording with MIDI Timecode Information**

Nuendo Live can receive and record MIDI timecode (MTC). The timecode is written into the timestamp of Broadcast Wave Format (BWF) files.

### PREREQUISITE

In the **Project** section of the **Settings** dialog, you have selected **Broadcast Wave File** as the **Record File Type**.

### PROCEDURE

- 1. Click the MTC button on the toolbar to activate MIDI timecode information.
- **2.** Click the timecode display to the right of the **MTC** button, and select the input source for the MIDI timecode.
- 3. Start recording.

### RESULT

BWF files are recorded with MIDI timecode information.

RELATED LINKS MIDI Timecode on page 37 Settings Dialog on page 8 Toolbar on page 18

# **Exporting Your Recording**

Nuendo Live allows you to export your recordings as an audio mixdown or as an AAF file.

RELATED LINKS Exporting an Audio Mixdown on page 38 Exporting to AAF on page 38

## **Exporting an Audio Mixdown**

You can create a stereo mix of your recording and export it as a single file.

PREREQUISITE

You have selected Stereo Mode in the Settings dialog.

### PROCEDURE

- 1. Balance the mix using the Volume in Stereo Mix slider and the Pan in Stereo Mix dial in the track control area.
- 2. Set the master level using the global Stereo Output Level slider on the info line.
- **3.** Optional: To export only a specific range of your project, set the left and right locators to encompass this range.
- 4. Select File > Audio Mixdown.
- 5. Specify whether to save the recording as an .mp3 or a .wav file.
- 6. Choose whether to export the entire project or only the cycle range.
- **7.** Click **OK**.

### RESULT

The project or project range is exported to the project folder as a single file. The mixdown file is assigned the name as the project.

RELATED LINKS Settings Dialog on page 8 Defining a Cycle Range for Looped Playback on page 27

## **Exporting to AAF**

To edit your recordings in DAW software other than Nuendo, you can export the project as an AAF file.

### PREREQUISITE

In the **Project** section of the **Settings** dialog, you have selected **Broadcast Wave File** as the **Record File Type**.

### PROCEDURE

• Select File > Export AAF File.

### RESULT

The project is exported to the project folder as a single AAF file.

### IMPORTANT

The AAF file only contains references to the audio files that are used in the project. To edit your project after exporting, the DAW must have access to the original audio files.

RELATED LINKS Settings Dialog on page 8

# Markers

Markers identify specific positions within your project. You can add markers to determine the start and end of a passage in a longer recording or mark a position for editing, for example.

You can add and edit markers using the **Record** panel or the marker track.

RELATED LINKS Record Panel on page 33 Showing/Hiding the Marker Track on page 40

# Showing/Hiding the Marker Track

You can choose to show or hide the marker track in the **Track View**. Its visibility status does not have any impact on the marker functions. Existing markers can be used, even if you cannot see them in the **Project** window.

### PROCEDURE

- Do one of the following:
  - From the menu bar, select **Project** > **Show Marker Track/Hide Marker Track**.
  - Press K.

### RESULT

The marker track is shown/hidden in the track list above the audio tracks.

RELATED LINKS Track View on page 23 Toolbar on page 18

## **Adding Markers**

You can add markers using the **Record** panel or the marker track.

Markers are inserted at the cursor position. You can set markers while recording or after recording.

PROCEDURE

- Do one of the following:
  - On the **Record** panel, click **Add Marker**.

This automatically opens the **Description** field for editing, allowing you to enter a name for the marker.

• On the marker track, click Add Marker 1.

### RESULT

A marker is inserted at the cursor position.

RELATED LINKS Recording with the Record Panel on page 31 Showing/Hiding the Marker Track on page 40 Naming Markers on page 41

# **Naming Markers**

You can name and rename markers using the **Record** panel.

PROCEDURE

- 1. On the **Record** panel, select the marker that you want to name or rename.
- 2. Click in the **Description** field, and enter a new name for the marker.

RELATED LINKS Record Panel on page 33

# **Moving Markers**

You can move markers using the **Record** panel or the marker track.

PROCEDURE

- To move a marker, do one of the following:
  - On the **Record** panel, click in the corresponding **Position** field, and enter a new value.
  - On the marker track, drag the marker to another position.

RELATED LINKS Record Panel on page 33 Showing/Hiding the Marker Track on page 40

# **Deleting Markers**

You can delete markers using the **Record** panel or the marker track.

PROCEDURE

- Do one of the following:
  - On of the **Record** panel, select a marker, and click **Remove Marker**.
  - On the marker track, select a marker, and press **Delete**.

RELATED LINKS Record Panel on page 33 Showing/Hiding the Marker Track on page 40

# Moving the Project Cursor to Markers

Nuendo Live offers several methods to move the project cursor to a marker position.

### PROCEDURE

- Do one of the following:
  - On the marker track, click Locate, and select a marker from the list.
  - Double-click on a marker on the marker track.
  - On the toolbar, click **Locate Marker**, and select a marker from the list.

NOTE

If the list of markers is very long, you can use the text search to filter the list.

- On the **Record** panel, click in the leftmost column for a marker.
- To move to the next marker, click **Go to Next Marker/Project End** on the toolbar.
- To move to the previous marker, click **Go to Previous Marker/Zero** on the toolbar.

RELATED LINKS Showing/Hiding the Marker Track on page 40 Record Panel on page 33 Toolbar on page 18

# **Track Handling**

Tracks allow you to record and edit audio. They are listed from top to bottom in the track list and extend horizontally across the **Track View** tab.

* .	MADI In 1	- jinna jaa i jaagansa jedanasaga panaise jingaalaa insaan jaajaanaanaa (j. ))))))
*	MADI In 2	shime)ma i hindadina kodishadaspanini - a- maashas maadingadamaadidi iiiiiiiiladi ii- a
* :	MADI IN 3	
* *	MADI In 4	
*	MADIIII S	- i tinii (10 - shitatii 10 - soo a a a a a a a a a a a a a a a a a a
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*	MADLIN 7	arinn freihe eine ann an feile eine ann an feile ann an an feile ann an an feile ann an an an feile ann an feil
*	TOM 12 M	

Tracks in the track list

RELATED LINKS Track View on page 23 Selecting Tracks on page 43 Renaming Tracks on page 43 Coloring Tracks and Events on page 44 Adding Tracks on page 44 Changing the Track Routing on page 44

# **Selecting Tracks**

At least one track is always selected in the **Project** window. You can use several methods to select tracks.

### PROCEDURE

- Do one of the following:
  - To select one track, click on it in the track list or click the corresponding meter.
  - To select multiple tracks, hold down **Ctrl/Cmd**, and click on them.
  - To select multiple contiguous tracks, click on the first one, then hold down **Shift**, and click on the last track that you want to select.
  - To select the track above/below the currently selected track, press **Up Arrow** / **Down Arrow** .
  - To extend the selection upwards/downwards, hold down **Shift**, and use the arrow keys.

## **Renaming Tracks**

You can rename tracks according to the instruments that you record, for example. This helps you to keep an overview of your project.

### PROCEDURE

1. Double-click the track name, and type in a new name.

**2.** Optional: Press **Tab** on your computer keyboard to select the next track name, and continue naming the tracks in your project.

### NOTE

The names of recorded events are based on the track names. However, the names of existing events and files on a track do not change when you change the track name.

# **Coloring Tracks and Events**

Colors make it easier to identify tracks and events that belong together.

### PROCEDURE

- 1. In the Track View, do one of the following:
  - To color a track, select the track, and make sure that no event is selected.
  - To color an event, select the event.
- 2. Click Select Color for Selected Tracks or Events on the toolbar, and select a color.

#### RESULT

Tracks and events are displayed in the selected color. Meters show the color of the corresponding track.

RELATED LINKS Track View on page 23

## **Adding Tracks**

In a single step, you can add a single track or multiple tracks to your Nuendo Live project.

PROCEDURE

- 1. Select Project > Add Audio Tracks.
- 2. Specify the number of audio tracks that you want to add.
- 3. Click OK.

## **Changing the Track Routing**

In Nuendo Live, tracks are routed to the available inputs from top to bottom. You can change the routing by dragging tracks to another position in the track list. This can become necessary if an instrument is connected to another input on the console, for example.

# **Editing Audio Events**

Nuendo Live provides editing options and tools that allow you to make your project more manageable. This makes it easier to perform subsequent editing in a DAW of your choice.

Before moving your project to a different DAW for further editing, we recommend to clean up your recording.

RELATED LINKS Selecting Events on page 45 Moving Events and Range Selections on page 47 Duplicating Events and Range Selections on page 47 Splitting Events on page 46 Trimming the Event Start and End on page 46 Coloring Tracks and Events on page 44

# **Global Editing**

You can choose whether to apply your editing operations to one track or to all tracks.

By default, editing is applied to the selected event, the selected range, or an event you select with a tool. Selecting **Edit > Global Editing (All Tracks)** enables you to perform editing on all tracks at the same time.

## **Selecting Events**

With the **Object Selection** tool activated on the toolbar, you can select audio events for editing from the event display.

RELATED LINKS Toolbar on page 18

## **Selecting All Events Under the Cursor**

You can select all events that are present at a specific time position. This makes it easy to apply the same editing to all events that belong together.

PREREQUISITE

On the toolbar, you have activated **Object Selection .** 

PROCEDURE

- 1. Place the project cursor at the position where you want to select the events.
- 2. Select Edit > Select Under Cursor.

### RESULT

All audio events and markers that are touched by the cursor are selected.

RELATED LINKS Toolbar on page 18

# **Splitting Events**

You can split either a single audio event or all audio events at once.

- To split an audio event, press **Alt**, position the mouse in the event, and click.
- To split all audio events that are present at a specific time position, place the project cursor at this position, and select **Edit** > **Split at Cursor**.

# **Trimming the Event Start and End**

You can drag event borders to hide sections of a recording or to recover audio from the prerecord buffer, for example.

PROCEDURE

1. Position the mouse on the lower right or left corner of an event.

A double arrow appears.



2. Click and drag.

The maximum dragging distance depends on the length of the recording. An event cannot be extended beyond the start or end of the audio recording.

### NOTE

When you release the mouse button, a fade of 10 ms is added to create smoother transitions.

RELATED LINKS Pre-Record Buffer on page 36

# **Selecting Ranges**

You can select ranges in your project for editing. A range can span multiple tracks.

PREREQUISITE

On the toolbar, you have activated Range Selection **I**.

PROCEDURE

• To select a range, click and drag in the event display, until the selection encompasses the desired range.

### AFTER COMPLETING THIS TASK

- You can drag the borders of a selected range to expand or to reduce it, or to include more or fewer tracks.
- You can move a selected range to another position by dragging.

### NOTE

If the range includes sections of events, these events are split at the range selection borders.

RELATED LINKS Toolbar on page 18 Moving Events and Range Selections on page 47 Duplicating Events and Range Selections on page 47

# **Moving Events and Range Selections**

You can move events and range selections by dragging.

PROCEDURE

- **1.** Select one or multiple audio events or a range.
- 2. Drag the event or range to the desired position.

# **Duplicating Events and Range Selections**

You can duplicate events or ranges to use the same recordings in several places.

#### PROCEDURE

- 1. Select one or multiple audio events or a range.
- 2. Do one of the following:
  - Select Edit > Duplicate.

This creates a duplicate to the right of the original event or range.

• Hold down **Alt**, and drag the event or range to the position where you want to insert it.

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