Table of Contents

4 Introduction
4 Platform-Independent Documentation
4 Conventions
5 How You Can Reach Us
6 Setting Up Nuendo Live
6 Setting Up Nuendo Live for Recording
7 Setting Up Nuendo Live for Playback
7 Audio Settings
10 Switching the Program Language
10 Key Commands
11 Project Handling
11 Project Files
12 Projects Dialog
12 Creating a Project
13 Project Settings
14 Project-Related Information
15 Project Window
15 Toolbar
16 Info Line
17 Track View
20 Meter View
22 Recording
22 Recording in a Few Simple Steps
22 Easy Recording
23 Performing a More Complex Recording
23 Recording with the Record Panel
25 Record Panel
27 Changing the Record Location
28 Consecutive File Numbering
28 Pre-Record Buffer
29 MIDI Timecode
29 Defining a Cycle Range for Looped Playback
30 Excluding Ranges from Playback
30 Exporting Your Recording
32 Markers
32 Showing the Marker Track
32 Adding Markers
33 Naming Markers
33 Moving Markers
33 Deleting Markers
34 Moving to Markers
35 Track Handling
35 Selecting Tracks
35 Renaming Tracks
36 Coloring Tracks and Events
36 Adding Tracks
36 Changing the Track Routing

37 Editing Audio Events
37 Global Editing
37 Selecting Events
38 Splitting Events
38 Trimming the Event Start and End
38 Selecting Ranges
39 Moving Events and Range Selections
39 Duplicating Events and Range Selections
40 Index
Introduction

Nuendo Live is a quick and easy-to-use solution for live-recording engineers.

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 on the program name menu on macOS.

Conventions

In our documentation, we use typographical and markup elements to structure information.

Typographical Elements

The following typographical elements mark the following purposes.

- **PREREQUISITE**
  Requires you to complete an action or to fulfill a condition before starting a procedure.

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

- **IMPORTANT**
  Informs you about issues that might affect the system, the connected hardware, or that might bring a risk of data loss.

- **NOTE**
  Informs you about issues that you should consider.

- **EXAMPLE**
  Provides you with an example.

- **RESULT**
  Shows 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, etc.

EXAMPLE
To record with the Record panel, click RECORD.

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

EXAMPLE
Select Project > Show Marker Track.

Key Commands

Many of the default key commands, also known as keyboard shortcuts, use modifier keys, some of which are different depending on the operating system.

When key commands with modifier keys are described in this manual, they are shown with the Windows modifier key first, in the following way:

• Windows modifier key/macOS modifier key-Z

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.
To be able to record and play back a performance, you must first establish all physical connections between Nuendo Live and the other components of your system, set up the audio interface, and select the playback output mode.

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

### Setting Up Nuendo Live for Recording

**PREREQUISITE**
You have set up the physical connections between the components of your system. See the documentation of your hardware for more information.

**PROCEDURE**

1. Start Nuendo Live.
2. On the toolbar, click **Settings**.
3. In the **Audio System** section of the **Settings** dialog, select the ASIO driver that you want to use.
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 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. It is also recommended to deactivate the screen saver.

**RELATED LINKS**
- [Audio System](#) on page 8
- [Creating a Project](#) on page 12
- [Recording](#) on page 22
Setting Up Nuendo Live for Playback

The options in the Output Mode section of the Settings dialog determine how your recording is played back.

PROCEDURE
1. On the toolbar, click Settings.
2. In the Output Mode section of the Settings dialog, do one of the following:
   - Select 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 having the artists present, for example.
   - Select 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 Out Level that is displayed at the global track control, as well as the sliders Volume in Stereo Mix and Pan in Stereo Mix that are displayed at the track control 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
Output Mode on page 9
Defining a Cycle Range for Looped Playback on page 29
Excluding Ranges from Playback on page 30

Audio Settings

In the Settings dialog, you establish the connections between Nuendo Live and the audio device of your computer, and select an output mode for your recording.

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 Audio System section of the Settings dialog, you can select the ASIO driver for your recording and make settings for it.

ASIO Driver
Allows you to select the ASIO driver that you want to use.

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. Use this function to solve problems with 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
When you record-enable a track, all incoming audio is automatically recorded to a pre-record buffer. This parameter defines the size of the buffer.

RELATED LINKS
Pre-Record Buffer on page 28

Output Mode
In the Output Mode section of the Settings dialog, 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.

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 the Audio Ports section of the Settings dialog, you can specify the input ports for recording and the output ports for playback.

Input Ports
Allows you to define which input ports are used 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 for recording.

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

Output Ports
Allows you to define which output ports are used 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 for playback.

RELATED LINKS
Changing the Track Routing on page 36
Switching the Program Language

You can switch the program language via the **File** menu.

**PROCEDURE**

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

Key Commands

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

**NOTE**

You cannot add or change key commands.

- To open the **Key Commands** dialog, select **File > Key Commands**.
The recordings that you make with Nuendo Live are saved as projects.

RELATED LINKS
Project Files on page 11
Projects Dialog on page 12

Project Files

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

A project is opened in the Project window, which is the main window in Nuendo Live. For project files, the following applies:

- The file name extension is .n1pr.
- Only one project can be open at a time.
- Project files from Nuendo Live can be opened in Nuendo 5.5.4 or higher.

RELATED LINKS
Project Window on page 15
Projects Dialog

The Projects dialog is displayed when you open Nuendo Live. It allows you to open an existing project or to create a new project.

Open Selection
Opens the project that is selected in the list on the left. Select New Project to open a new empty project.

Open Other
Opens a file dialog where you can navigate to a project.

Settings
Opens the Settings dialog.

Quit
Closes the program.

RELATED LINKS
Project Files on page 11
Creating a Project on page 12
Audio Settings on page 7

Creating a Project

PROCEDURE
1. Start Nuendo Live and set up the parameters in the Settings dialog according to the requirements of your project.
2. In the Projects dialog, select New Project and click Open Selection.
3. In the file dialog, select the folder where you want to save the new project and click OK.
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

Audio Settings on page 7
Changing the Record Location on page 27
Project Settings on page 13

Project Settings

You can make project-specific settings in the Settings dialog. The Project section is only displayed in the Settings dialog if a project is open.

To open the Settings dialog, click Settings on the toolbar or press F2.

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

When 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 of the recording.

NOTE

The sample rate must correspond to the hardware sample rate.

Record File Type

Allows you to select the file type for your recordings.

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 timecode position or artist, without loss in quality.
- Select **Wave File** if you want to use the recorded files in a system that does not support Broadcast Wave files. Note that in this format, you cannot record files that exceed 4 hours at 48 kHz.
- **Wave 64 File** supports recordings larger than 4 GB. This format is not widely supported. You can use it if you want to use the recording in an older Nuendo system.

**Record Bit Resolution**

Allows you to select the bit resolution for your recordings.

- **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 best quality for postproduction. 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.

If you want to synchronize your recordings to video during production, select a compatible frame rate. If Nuendo Live receives timecode information during recording, this value is set automatically.

**Restore Default Setup**

Restores the default setup and makes sure 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.

**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 toolbar.

**RELATED LINKS**

- Audio System on page 8
- Audio Ports on page 9
- Record Panel on page 25
- Toolbar on page 15
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 toggle between two tabs, Track View and Meter View. When you open or create a new project, the Track View tab is shown per default.

**NOTE**
You can toggle between the Track View and the Meter View tabs by pressing Alt-V.

**RELATED LINKS**
- Toolbar on page 15
- Info Line on page 16
- Track View on page 17
- Meter View on page 20
- Editing Audio Events on page 37

**Toolbar**

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

**Settings**

Opens the Settings dialog.

**Menu bar**

The menus on the toolbar contain various project commands and functions.

**Record Panel**

Opens the Record panel in a separate window.

**Locate Marker**

Allows you to move the project cursor to a marker position.

**Locators**

The buttons on the left allow you to move the project cursor to the left/right locator position.
The fields on the right show the locator positions. You can modify these values to change the locator positions.

**Transport buttons**

The transport buttons allow you to move the project cursor to marker positions, to play back a section of the project in a loop, or to start and stop playback or recording.

**Time display**

Shows the position of the project cursor in the selected time format. To select another time format, click the arrow icon on the right.

**Timecode display**

Shows the timecode state and the incoming MIDI timecode, and allows you to activate/deactivate the recording of timecode information and to select a timecode source.

**VST Performance display**

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

**RELATED LINKS**

- [Audio Settings](#)
- [Record Panel](#)
- [Moving to Markers](#)
- [Recording with MIDI Timecode Information](#)

**Info Line**

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

**RELATED LINKS**

- [Audio Settings](#)
- [Project Settings](#)
Track View

The Track View tab shows the track list and the event display. Its meter bridge allows you to monitor the levels of your channels.

Object Selection/Range Selection

You can use these tools to select either one or several events or a time range in the event display.

Select Colors

Allows you to select different colors for the tracks or events in your projects.

Auto-Scroll

Allows you to keep the project cursor visible during playback.

Activate the button on the right to suspend Auto-Scroll when you are editing your project.

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

At the top of the track list, you can find the global controls. The digit on the left shows the number of tracks in the project. Mute and Solo allow you to unmute all tracks or deactivate all solo states. The digit on the right, next to the global record-enable button, shows the number of record-enabled tracks.

Track controls

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

In Multi Track Mode, the names of the input and output ports that are used by the track are displayed.
In **Stereo Mode**, 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.

### 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

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

This is useful when viewing quiet audio passages.

**NOTE**

To get an approximate reading on 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 white vertical line is the project cursor. It indicates the playback or recording position. When playback or recording are 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 of the event display allow you to zoom within the main display. When you click the triangle above the vertical zoom slider ▲ the zoom pop-up menu opens, from which you can select a zoom preset.

Meter section
Show/Hide Meter Bridge
Allows you to show/hide the meter bridge on the Track View tab.

Show Previous Page/Show Next Page
Allows you to scroll through the meter pages.

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

Meter bridge
Allows you to monitor the levels of your channels.

Reset
Resets all peak hold values.

RELATED LINKS
Showing the Marker Track on page 32
Output Mode on page 9
Editing Audio Events on page 37
Resetting Meters on page 21
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 recording-related parameters and controls.

![Meter View Image]

**Record panel**

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

**Meter section**

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 25
Resetting Meters on page 21

Resetting Meters
You can reset the peak values for all meters on the Track View and the Meter View tab.

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

RELATED LINKS
Track View on page 17
Meter View on page 20
Nuendo Live allows you to start recording on all tracks instantly. If needed, you can also make detailed settings such as specifying file format, record location, and 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. It is also recommended to deactivate the screen saver.

**RELATED LINKS**

- Recording in a Few Simple Steps on page 22
- Performing a More Complex Recording on page 23
- Easy Recording on page 22
- Recording with the Record Panel on page 23
- MIDI Timecode on page 29

## Recording in a Few Simple Steps

To get ready and start recording, very few steps are necessary.

**PROCEDURE**

1. Start Nuendo Live.
2. Create a new project.
3. Open the **Record** panel and click **RECORD**.
   
   All tracks are record-enabled automatically and recording starts on all the tracks.
4. To stop recording, click **RECORD** again.

**RELATED LINKS**

- Creating a Project on page 12
- Record Panel on page 25

## Easy Recording

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

**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-*. The following happens:

- All tracks are record-enabled.
- 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 25
- Key Commands on page 10

## Performing a More Complex Recording

You can make detailed settings before starting the recording. For example, you can specify metadata such as **Artist** or **Engineer** to be saved automatically in the recorded files, you can exclude particular tracks from the recording, and specify file name and record location.

### PROCEDURE

1. Start Nuendo Live.
2. Create a new project.
3. Open the Settings dialog and make the settings for your 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 the tracks that you want to record on by clicking their Record Enable button in the track list.
5. Open the Record panel and set up the parameters according to the requirements of your project.
6. To start recording, click RECORD.
7. To stop recording, click RECORD again.

### RELATED LINKS
- Project Settings on page 13
- Audio Settings on page 7
- Record Panel on page 25

## Recording with the Record Panel

On the Record panel, you can make recording-related settings 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 for recording, click Arm All Tracks on the Record panel.
• To select single tracks for recording, 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 recorded files and the folders in which they are saved are named 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 by 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 25
Key Commands on page 10
Record Panel

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

![Record Panel](image)

**Metadata Section**

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

**NOTE**

- You can change the metadata during a recording session, even if **Lock Recording** is 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.

If you want the name to be added to the file name automatically, activate **Include Production in File Name** to the right of the **Production** field.

**Artist**

Allows you to enter the name of the artist.

If you want the name to be added to the file name automatically, activate **Include Artist in File Name** to the right of the **Artist** field. Activate **Create Subfolder for Artist** 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 name of the folder in which your recordings are saved. Click **Select Record Folder** to modify the record location.

**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 by 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 description for the marker.

RELATED LINKS
Project Settings on page 13
Project-Related Information on page 14
Recording with the Record Panel on page 23
Changing the Record Location on page 27
Easy Recording on page 22
Markers on page 32

Changing the Record Location

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

PROCEDURE

1. On the Record panel, click Select Record Folder.
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 record location.
- If the active record folder is not available, for example, because the project is opened on a different system, the record location is automatically set to the project folder.

RELATED LINKS
Consecutive File Numbering on page 28
Record Panel on page 25
Consecutive File Numbering

The audio files of a project are numbered consecutively, even if you change the record location. This is useful if you want 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. This means, 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

Create a new project and make a recording on track 1, named bass. In your active record folder, the file 01 - bass_01.wav is created. Then change the record 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

Create a new project and record a first take on track 1, named guitar, and track 2, named bass. In your active record folder, the files 01 - guitar_01.wav and 02 - bass_01.wav are created. For the second take, exclude track 2 from recording. The file 01 - guitar_02.wav is created. For the third take record-enable track 2 again. As a result, the files 01 - guitar_03.wav and 02 - bass_03.wav are created.

RELATED LINKS
Changing the Record Location on page 27
Renaming Tracks on page 35

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 if you have started recording too late.

For all record-enabled tracks, up to 60 seconds of audio can be recorded and recovered.

You can set the size of the pre-record buffer with 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 (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 result in a lower performance of the user interface.

RELATED LINKS
Audio System on page 8
Editing Audio Events on page 37


**MIDI Timecode**

Productions that contain video usually also contain timecode information. Nuendo Live allows you to save MIDI timecode (MTC) in your recordings to make it easy to match up the timelines of video and audio 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 at any position.
- Wrong timecode settings or corrupt incoming timecode information do never 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 15
- Recording with MIDI Timecode Information on page 29

**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 settings, Broadcast Wave File is selected as Record File Type.

**PROCEDURE**

1. Click the MTC button on the toolbar to activate MIDI timecode information.
2. Click the timecode display on 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 29
- Project Settings on page 13
- Toolbar on page 15

**Defining a Cycle Range for Looped Playback**

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

**PROCEDURE**

1. 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
The selected range is played back in a loop if **Transport Cycle On/Off** is activated on the toolbar.

### Excluding Ranges from Playback

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

**PROCEDURE**

1. Move the mouse pointer over the top section of the ruler.
2. Click and drag to the left to define the range that you want to exclude.

RESULT
The selected range is skipped during playback if **Transport Cycle On/Off** is activated on the toolbar.

### 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 30
- Exporting to AAF on page 31

### 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** and **Pan in Stereo Mix** parameters on the tracks.
2. Set the master level using the global **Stereo Out Level** control above the track list.
3. Optional: If you want 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 you want to save the recording as a .wav or .mp3 file.
6. Specify whether you want to export the entire project or only the cycle range.
7. Click **OK**.

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

**RELATED LINKS**
- Output Mode on page 9
Exporting to AAF

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

**PREREQUISITE**
In the **Project** settings, **Broadcast Wave File** is selected as **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. If you want to edit your project after the export, the DAW must have access to the original audio files.

**RELATED LINKS**
- **Project Settings** on page 13
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 25
Showing the Marker Track on page 32

Showing the Marker Track

The marker track can be shown or hidden. This 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:
  ● On the menu bar, select Project > Show Marker Track/Hide Marker Track.
  ● Press K.

RESULT
This opens the marker track above the audio tracks on the Track View tab.

RELATED LINKS
Toolbar on page 15
Track View on page 17

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 on-the-fly while recording or after recording.

PROCEDURE
● Do one of the following:
  ● In the marker section of 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.

32
RESULT
A marker is inserted at the cursor position.

RELATED LINKS
Recording with the Record Panel on page 23
Showing the Marker Track on page 32
Naming Markers on page 33

Namings Markers

You can name and rename markers using the Record panel.

PROCEDURE
1. In the marker section of 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 25

Moving Markers

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

PROCEDURE
● To move a marker, do one of the following:
  ● In the marker section of 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 25
Showing the Marker Track on page 32

Deleting Markers

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

PROCEDURE
● Do one of the following:
  ● In the marker section 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 25
Showing the Marker Track on page 32
Moving 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 Markers and select a marker from the list.

  **NOTE**

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

- In the marker section of the Record panel, click in the leftmost column for a marker.
- To move to the next marker, click the Go to Next Marker transport button on the toolbar.
- To move to the previous marker, click the Go to Previous Marker/Zero transport button on the toolbar.

RELATED LINKS

* Showing the Marker Track on page 32
* Record Panel on page 25
* Toolbar on page 15
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.

RELATED LINKS
Track View on page 17
Selecting Tracks on page 35
Renaming Tracks on page 35
Coloring Tracks and Events on page 36
Adding Tracks on page 36
Changing the Track Routing on page 36

Selecting Tracks

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, then hold down Shift and click on the last track that you want to select.
  - To select the track above/below the current 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 want to 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
Recorded events are named according to the track name. The names of existing events and files on a track do not change when you change the track name.
Coloring Tracks and Events

Colors can help you to identify tracks and events that belong together.

PROCEDURE
1. On the Track View tab, 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 Colors above the track list and select a color.

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

Adding Tracks

You can add tracks to the project manually.

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

The tracks are always 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.
Before moving your project to a different DAW for further editing, consider cleaning up your recording.

Nuendo Live provides editing options and tools that allow you to make your project more manageable. You can then perform detailed editing in your preferred DAW.

RELATED LINKS
Selecting Events on page 37
Moving Events and Range Selections on page 39
Duplicating Events and Range Selections on page 39
Splitting Events on page 38
Trimming the Event Start and End on page 38
Coloring Tracks and Events on page 36

Global Editing

You can decide whether you want to apply your editing operations to one track or to all tracks. Normally, editing is applied to the selected event, the selected range, or the event on which you click with a tool. If you select Edit > Global Editing (All Tracks), the editing is performed on all tracks.

Selecting Events

If the Object Selection tool is activated on the Track View tab, you can select audio events on the event display for editing.

RELATED LINKS
Track View on page 17

Selecting All Events Under the Cursor

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

PREREQUISITE
On the Track View tab, Object Selection is activated.

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
Track View on page 17

Splitting Events
You can split one audio event or all audio events.

- To split an audio event, press Alt, position the mouse over the split position in the event, and click.
- To split all audio events at the same time position, place the project cursor at this position, and select Edit > Split at Cursor.

Trimming the Event Start and End
You can drag the event borders to hide sections of a recording or to recover audio from the pre-record buffer, for example.

PROCEDURE
1. Position the mouse on the lower right or left corner of an event so that a double arrow is shown.
2. Click and drag. How much you can drag 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 28

Selecting Ranges
You can select ranges in your project for editing. The range can span multiple tracks.

PREREQUISITE
On the Track View tab, Range Selection is activated.

PROCEDURE
- To select a range, click and drag in the event display until the selection encompasses the range that you want to select.
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 position where you want to insert it.

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.
Index

A
AAF 31
ASIO driver 8
Audio events
  Coloring 36
  Copying 39
  Duplicating 39
  Editing 37
  Global editing 37
  Moving 39
  Selecting 37
  Selecting all events at cursor position 37
  Splitting 38
  Trimming 38
Audio Mixdown 30
Audio ports
  Activating 9
  Inputs 9
  Outputs 9
Audio System 8

C
Cycle range 29

E
Easy Record 22
Exporting
  AAF 31
  Audio Mixdown 30
Exporting audio 30

G
Global settings
  Audio ports 9
  Audio System 8
  Language 10
  Output Mode 9

K
Key commands 10

L
Language 10

M
Marker Track 32
Markers 32
  Adding 32
  Deleting 33
  Locating 34
  Marker Track 32
  Moving 33
  Naming 33
Metadata 25
  Notepad 14
  Record panel 25
Meter View 20
Meters 20
MIDI timecode 29
MTC 29
Multi Track Mode 9

N
Notepad 14

O
Output Mode 9

P
Playback
  Cycle mode 29
  Excluding ranges 30
  Setting up 7
Pre-Record buffer 8
Pre-Record Time 8
Project window 15
  Info line 16
  Meter View 20
  Toolbar 15
  Track View 17
Projects 11
  Creating new 12
  Metadata 14
  Opening 12
  Setting up 13
Index

R
Ranges
  Copying 39
  Creating 38
  Duplicating 39
  Moving 38, 39
  Selecting 38
  Trimming 38
Record panel 25
Recording 22
  Changing the record location 27
  Easy Record 22
  File numbering 28
  MIDI timecode 29
  MTC 29
  Record folder 25
  Record folders 27
  Record panel 25
  Setting up 6

S
Settings
  Audio connections 7
  Projects 13
Stereo Mode 9
System
  Setting up 6

T
Timecode 29
Track View 17
Tracks
  Adding 36
  Coloring 36
  Global editing 37
  Renaming 35
  Routing 36
  Selecting 35