Operation Manual

# DORICO ELEMENTS 3

Personal Music Notation System

steinberg

The Steinberg Documentation Team: Cristina Bachmann, Heiko Bischoff, Lillie Harris, Christina Kaboth, Insa Mingers, Matthias Obrecht, Sabine Pfeifer, Benjamin Schütte, Marita Sladek

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

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



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# Table of Contents

# New features

## New Features in Version 3.1.0

### Highlights

#### Dynamics lane

- Each instrument track in Play mode now also has a dynamics lane, which presents the profiles of dynamics over time in a graphical way and allows you to view and edit them. See Dynamics lanes.

#### Bracketed noteheads

- You can now show brackets around any notehead, where before this was limited to unpitched percussion instruments. Both round and square brackets are available. See Bracketed noteheads.

#### Lines

- Dorico Elements now supports vertical, horizontal, and angled lines between notes, with different styles and appearances available. They offer many notational possibilities, as lines can convey a variety of meanings, but do not affect playback. See Lines.

### More New Features

#### Voice indication in the status bar

- The voice of a single selected note is now displayed in the status bar, making it easier to keep track of voices. See Status bar.

#### XML export

- Dorico Elements's MusicXML export has been improved. Accidentals, articulations, chord symbols, instrument transpositions, jazz articulations and rehearsal marks are all now included when exporting projects to MusicXML. See Exporting MusicXML files.

#### Local chord symbols

- You can now input chord symbols that only apply to a single instrument, allowing you to show different chord symbols for different players at the same rhythmic positions. See Inputting chord symbols.

#### Bracket grouping settings for different layouts

- The existing ensemble types for bracket grouping have been moved from **Engraving Options** to **Layout Options**, allowing you to change the bracket grouping approach in each layout independently. See Changing bracket grouping according to ensemble type.

#### Harmonics playback

- Both natural and artificial harmonics now play back at the appropriate pitch. If your playback device includes dedicated sounds for harmonics, these are now also used automatically. See Harmonics.

#### Guitar bend runs

- Sequences of consecutive guitar bends are now notated as bend runs on tablature. See Guitar bends.

#### Timecode position options

- You can now show the timecode at the start of each system without showing a separate timecode staff. The timecode can appear above or below the staff. See Changing the vertical position of timecodes.

### Last but Not Least

#### Auto-save file names

- Dorico Elements now automatically adds "[AutoSave]" to the end of auto-save project file names so that you can identify them, for example, if you need to recover a project from the bin on your computer. See Auto-save.

#### Avoid double/triple accidentals when transposing

- You can now avoid double and triple accidentals when transposing selections in tonality systems that are compatible with 12-EDO. See Transpose dialog.

#### Copying automation

- You can now copy automation points, including copying them to other automation lanes. See Copying and pasting automation points.

#### Instrument names in the Endpoint Setup dialog

- The **Assigned Instruments** column in the **Endpoint Setup** dialog now displays the instrument name set for each instrument in the **Edit Instrument Names** dialog. See Endpoint Setup dialog.

#### Square brackets for accidentals

- You can now show square brackets on individual accidentals, in addition to the existing support for round parentheses. See Hiding/Showing or parenthesizing accidentals.
- This is also available for harmonic accidentals. See Hiding/Showing or parenthesizing harmonic accidentals.

#### Short (top) barline

- Dorico Elements now includes a short (top) barline that is similar to the existing short barline but spans the top two spaces in a five-line staff. See Barlines.

## New Features in Version 3.0.10

#### Tablature input

- You can now use a numeric keypad to input the fret numbers of notes on tablature. See Inputting notes on tablature.

#### Harp pedaling filter

- There is now a filter that you can use to select or deselect harp pedal diagrams within a larger selection. See Filters.

## New Features in Version 3.0.0

### Highlights

#### Inputting onto multiple staves

- You can now extend the caret to multiple staves and input notes and notations onto all of them at once, including dynamics and playing techniques. When using a MIDI keyboard, this also allows you to explode chords across those staves as you input them. See Inputting notes and notations onto multiple staves.

### Comments

- This version introduces the ability to add comments as annotations as a way of adding notes or instructions without affecting the music. See Comments.

### Playback templates

- It is now possible to create custom playback templates and edit existing ones. You can include factory default playback templates and endpoint configurations and list them in your order of preference in a single custom playback template. See Edit Playback Template dialog.

### Chord diagrams

- You can now show chord diagrams alongside chord symbols in Dorico Elements. You can show the suitable chord diagrams for guitars with a variety of tunings and any other fretted instrument in the library and create your own chord diagram shapes. See Chord diagrams.

### Fingerings for guitars and fretted instruments

- Dorico Elements now offers comprehensive support for the complex fingerings required for music for guitars and fretted instruments, including automatically positioning right-hand and left-hand fingerings correctly. See Fingerings for fretted instruments.

### String indicators

- Dorico Elements now supports string indicators both inside and outside the staff. When inside the staff, they automatically erase their backgrounds. They also automatically accommodate left-hand fingerings for the same notes. See String indicators.

### Harmonics

- Dorico Elements now supports various conventions for the notation of harmonics on stringed and fretted instruments, including both natural and artificial harmonics. Dorico Elements can also calculate the correct pitch to be notated for the second through sixth partials. See Harmonics.

### Guitar bends

- Dorico Elements now supports the notation of guitar bends, including guitar pre-bends, holds, and releases. These techniques can be shown on both notation staves and tablature. See Guitar bends.

### Harp pedaling

- Dorico Elements now offers features designed to help write idiomatically for the harp, including harp pedal diagrams that you can show as a diagram or using note names, a tool to calculate the pedal positions required to play a passage of music, and highlights for notes that are unplayable with the current pedal positions. See Harp pedaling.

### Playing technique continuation lines

- You can now show continuation lines for playing techniques and differentiate between lines that show simply their duration and lines that indicate a gradual transition between playing techniques. See Playing technique continuation lines.

### Tablature

- Dorico Elements now provides tablature for guitar and other fretted instruments, including supporting a number of specific idiomatic notations for guitar, custom string tunings, different conventions for representing rhythms on tablature, and so on. Music can be shown on a regular notation staff and on tablature at the same time or separately, and they are linked, meaning edits to one staff automatically affect the other. See Tablature.

## More New Features

### Project Info dialog

- This new version updates the **Project Info** dialog significantly. It can now stay open whilst you work, has a list of flows so you can select and change information for multiple flows at once, and also allows you to add and delete flows from within the dialog in addition to

using the **Flows** panel in Setup mode. It also has a new default key command for quicker access. See Project Info dialog.

### Custom endpoint configurations

- Related to custom playback templates, you can now save any overrides you have made to endpoint configurations, such as changing the expression maps or instruments assigned to particular endpoints, as custom endpoint configurations. You can then reuse these in other projects and include them in custom playback templates. See Custom endpoint configurations.

### Bar numbers at multiple positions

- You can now show bar numbers at multiple vertical positions in the same system. This is often used in large orchestral scores so that conductors never have to look too far to see the bar number. See Showing bar numbers above specific staves.

### Chord symbol regions

- It is now possible to show chord symbols only alongside slash regions or in new chord symbol regions. This makes it easier to specify specific sections where it is helpful or necessary to show chord symbols for players who do not need them elsewhere. See Chord symbol regions.

### Clefs according to layout transposition

- You can now choose to show individual clefs only in either transposed or concert pitch layouts. This is useful when, for example, some instruments require clef changes in the score but not in their part. Clefs hidden in this way do not affect note spacing. See Hiding/Showing clefs according to layout transpositions.

### Curved arpeggio signs

- Dorico Elements now offers a curved arpeggio sign, which some composers use to indicate gentle or partial arpeggiation. See Types of arpeggio signs.

### Glissando playback

- Glissando lines now affect playback. For harps, the pitches included in glissando lines automatically change according to the current harp pedaling setting. See Glissando lines in playback.

## Last but Not Least

### MIDI activity indicator

- Dorico Elements now displays a green light briefly in the status bar when it is receiving MIDI input from a connected device. See Status bar.

### Missing Fonts dialog

- This new dialog informs you if a project you are opening contains a font you do not have installed on your computer and allows you to select replacement fonts. See Missing Fonts dialog.

### Swing playback for 16th notes

- Dorico Elements now allows you to use 16th notes as the unit for swing playback. See Swing playback.

# Introduction

Thank you very much for purchasing Dorico Elements.

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

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

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

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

Most sincerely yours,

Your Steinberg Dorico Team

## Platform-independent documentation

This documentation applies to the operating systems Windows and macOS.

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

Some points to consider:

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

## Usage of musical terms

This documentation uses American terminology for musical items.

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

| American Name | British Name |
|---|---|
| Double whole note | Breve |
| Whole note | Semibreve |
| Half note | Minim |

| American Name | British Name |
| --- | --- |
| Quarter note | Crotchet |
| Eighth note | Quaver |
| Sixteenth note | Semiquaver |
| Thirty-second note | Demisemiquaver |
| Sixty-fourth note | Hemidemisemiquaver |
| Hundred twenty-eighth note | Semihemidemisemiquaver |
| Two hundred fifty-sixth note | Demisemihemidemisemiquaver |
| Staff | Stave |
| Bar/Measure | Bar |

NOTE

This documentation only uses “bar”.

# 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.

**Tip**
: Adds further information or useful suggestions.

**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

Elements of the user interface are highlighted throughout the documentation.

Names of menus, options, functions, dialogs, windows, and so on, are highlighted in bold.

EXAMPLE

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

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

EXAMPLE

Choose **Setup** > **Layout Options**.

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

EXAMPLE

`example_file.txt`

# Key commands

Key commands are sets of keys that perform defined tasks when pressed together. They are also known as “keyboard shortcuts”. Many of the default key commands 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 indicated with the Windows modifier key 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**.

## Key commands in Dorico Elements

The default key commands in Dorico Elements depend on your keyboard layout.

If you move the mouse over a tool or a function, the information in brackets shows the key command that is used to activate or deactivate a tool or a function.

You can also do one of the following:

- Choose **Help** > **Key Commands** to open the **Dorico Key Commands** window, which provides an overview of all available key commands.
- Search for key commands of specific functions or menu items in the **Preferences** dialog. In this dialog, you can also assign new key commands or change default key commands.

RELATED LINKS

Interactive Dorico Elements key commands map on page 61
Searching for the key commands of functions on page 62

Preferences dialog on page 58
Key Commands page in the Preferences dialog on page 59
Assigning key commands on page 62

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

This requires that you have a web browser installed on your computer and a working Internet connection.

# First steps

This chapter helps you to get started with Dorico Elements.

When you start Dorico Elements for the first time, we recommend that you open one of the templates first to have a look at the user interface and the functions that Dorico Elements provides before you start your own projects. You are welcome to skip this part and explore the program for yourself.

The following sections inform you about the following topics:

- Overview of the most important workspaces
- Setting up a new project
- Writing your music and adding notation items to your score
- Laying out and formatting pages
- Playing back what you created
- Printing and exporting

## Getting around

The following sections give you an overview of the user interface and introduce you to how Dorico Elements is structured.

## Opening a template

Before you start your own project, we recommend that you familiarize yourself with the user interface of Dorico Elements. To prepare for this, open one of the templates that are provided with the program.

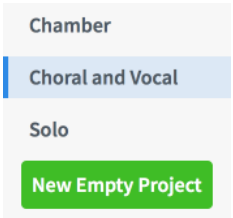
PREREQUISITE

You have started Dorico Elements. The **Hub** is open.

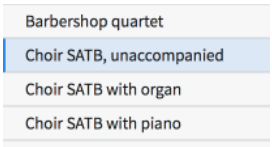
---

PROCEDURE

1. In the **Hub**, select one of the listed template groups. For example, select the **Choral and Vocal** templates.




2. Select one of the listed templates.




3. Click **New from Template**.

---

RESULT

The template opens. The players in the template are added to the project and their staves appear in the music area.

RELATED LINKS

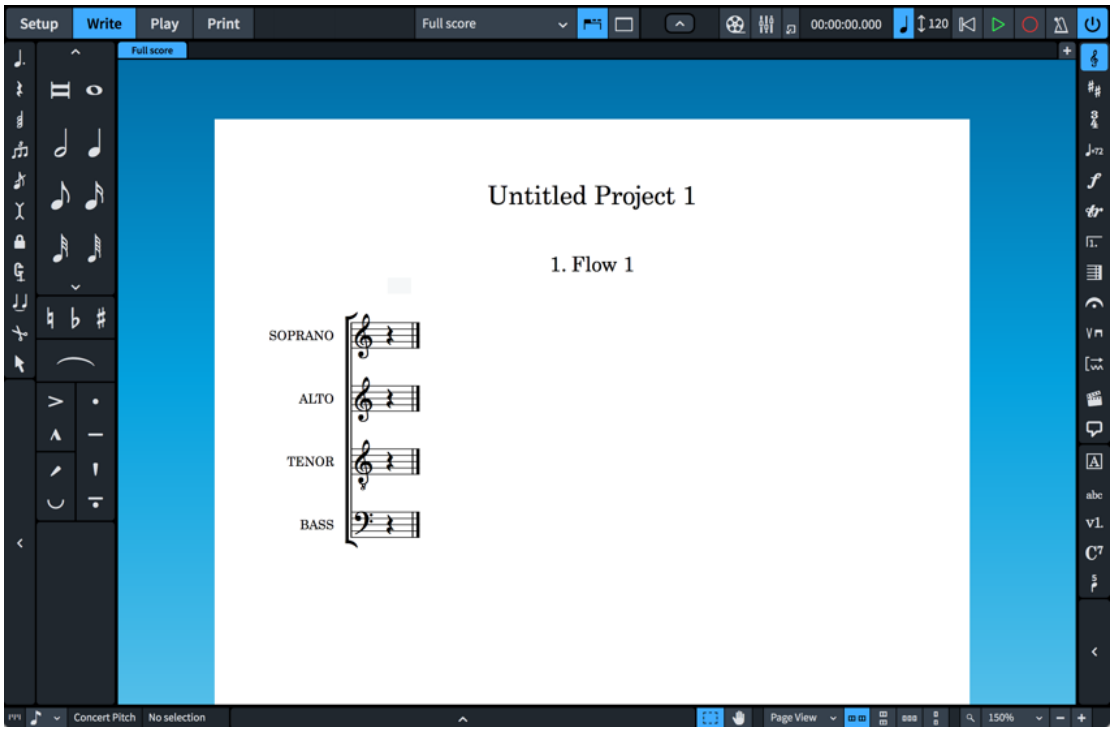
Hub on page 65

# Quick tour of the user interface

The user interface of Dorico Elements consists of different modes that represent different phases in the workflow of preparing a score.

The user interface has a structure that is the same in each of the application's modes. There is always a large area for editing your music in the center of the project window. In every mode, there are collapsible panels on the left, right, and bottom of the project window, depending on which mode you are using. The contents of these panels change according to the selected mode.

When you open the template, the first view shows the project window in Write mode:

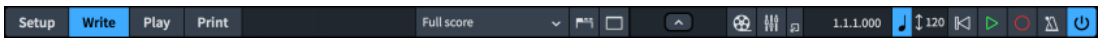



The project window when you open a template

The project window contains the following areas:

## Toolbar

The toolbar is located at the top of the project window.




Toolbar

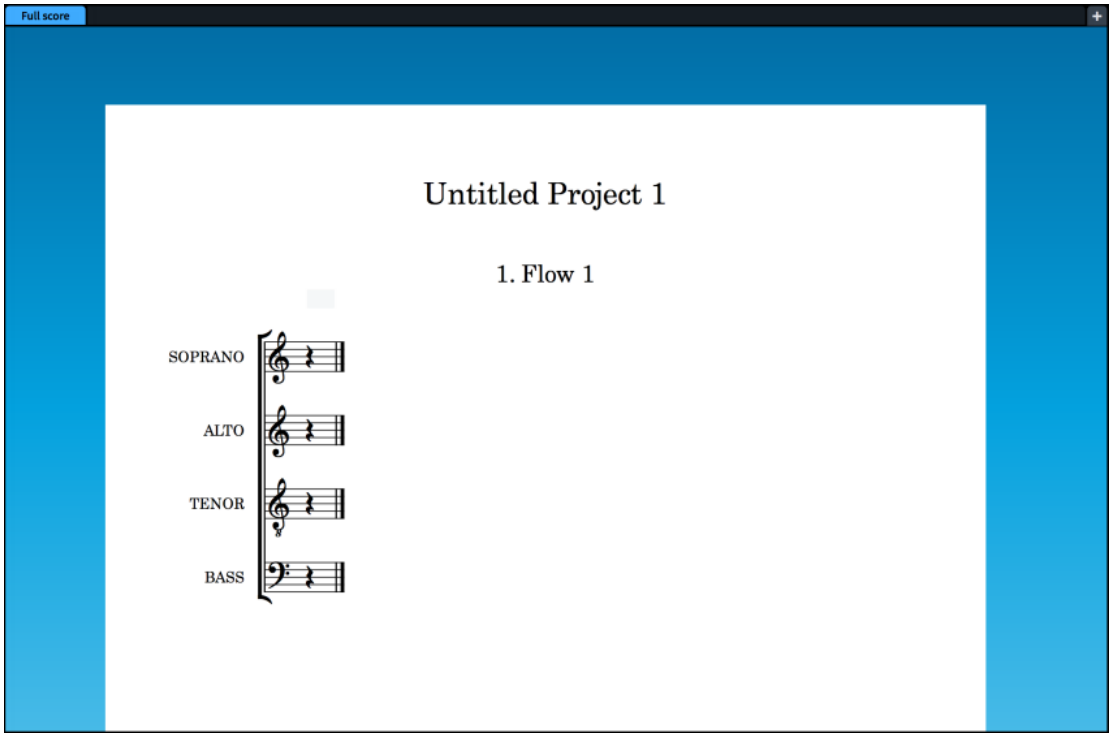
On the left side of the toolbar, the modes are displayed. By changing the mode, you change the workspace and the available panels. The current mode is highlighted in a different color. In the middle of the toolbar, layout options allow you to switch between the different layouts in your project and to show/hide panels and tabs.

On the right side of the toolbar, you can open a **Mixer** and use basic transport controls that, among other functions, allow you to play back and record your music.

**Show Mixer** button

## Music area

The music area is the main part of the project window in Setup mode and Write mode where you set up, input, edit and format your music. In Play mode, this area is called event display, in which every note is displayed as an event. In Print mode, this area is called print preview area, which shows a preview of what is going to be printed or exported as a graphic.




The music area in Write mode after starting a new project from a choral template

The music area displays the scores or the instrumental parts that you create. Above the music area you can activate several layouts in tabs and switch between them. Layouts in Dorico Elements allow you to show different presentations of your music. If you have a full score with different instrumental parts, such as a violin part and a bassoon part, you can switch between that full score layout and the layouts of each part. To save space on the screen or to focus on a specific layout, you can hide the tabs.

## Toolboxes

Toolboxes are the columns on the left and right edges of the project window. They contain different tools and options according to the current mode, but in general they allow you to input and modify notes and notation items. The Notations toolbox also determines which options are shown in the Notations panel.

Notes toolbox in Write mode

Notations toolbox in Write mode

## Panels

Dorico Elements provides panels with various functions in all modes. When you open the template, there is a panel on the left of the music area. This is the Notes panel in Write mode. It contains all the durations, accidentals, slurs, and articulations that are most commonly used when inputting notes.

Notes panel in Write mode

### Status Bar

At the bottom of the project window, a status bar allows you to select different views and page arrangements for the music area. It contains different options in different modes.


Status bar

RELATED LINKS
User interface on page 38
Mixer on page 421
Transport window on page 423

## Functions of the modes

Each mode represents a different phase in the workflow of preparing scores and parts, so contain different toolboxes, panels, and functionality from each other.

### Setup mode

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

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

You can switch to Setup mode in any of the following ways:

- Press **Ctrl/Cmd-1**.
- Click **Setup** in the toolbar.
- Choose **Window** > **Setup**.

### Write mode

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

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

You can switch to Write mode in any of the following ways:

- Press **Ctrl/Cmd-2**.
- Click **Write** in the toolbar.
- Choose **Window** > **Write**.

### Play mode

In Play mode, you can change how your music sounds in playback, including by changing the playback template and assigning VST instruments, inputting automation, adjusting the mix, and changing the sounding duration of notes in playback without affecting their notated duration.

You can switch to Play mode in any of the following ways:

- Press **Ctrl/Cmd-4**.
- Click **Play** in the toolbar.
- Choose **Window** > **Play**.

### Print mode

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

You can switch to Print mode in any of the following ways:

- Press **Ctrl/Cmd-5**.
- Click **Print** in the toolbar.
- Choose **Window** > **Print**.

RELATED LINKS
Setup mode on page 90
Write mode on page 148
Engrave mode on page 328
Print mode on page 458
Play mode on page 366

## Hiding/Showing panels

You can hide/show individual or multiple panels. This is useful if you want to see more of the music area, for example.

PROCEDURE

- Hide individual panels or all panels in the following ways:
  - To hide/show the left panel:
    Press **Ctrl/Cmd-7**.
    Click the disclosure arrow on the left edge of the main window.

Choose **Window** > **Show Left Panel**.

- To hide/show the right panel:
  Press **Ctrl/Cmd-9**.
  Click the disclosure arrow on the right edge of the main window.
  Choose **Window** > **Show Right Panel**.
- To hide/show the bottom panel:
  Press **Ctrl/Cmd-8**.
  Click the disclosure arrow at the bottom of the main window.
  Choose **Window** > **Show Bottom Panel**.
- To hide/show all panels:
  Press **Ctrl/Cmd-0**.
  Click **Hide/Restore Panels**.
  
  Choose **Window** > **Hide/Restore Panels**.

RESULT

The corresponding panels are hidden/shown. Panels are hidden when no tick is shown beside the corresponding panel in the menu, and shown when a tick is shown in the menu.

If you hide all active panels, the **Hide/Restore Panels** button in the toolbar changes its look and indicates which panels were active but are now hidden.

EXAMPLE

Appearance when panels are shown

Appearance when all panels were previously shown but are now all hidden

# Working with tabs and windows

Dorico Elements enables you to set up your workspace according to your working style.

Dorico Elements allows you to open multiple tabs to display multiple layouts in the same project within the same window. You can also open the same project in several windows.

RELATED LINKS

Workspace setup on page 51

## Opening a new tab

You can open a new tab to display a different view or layout within the same project window.

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

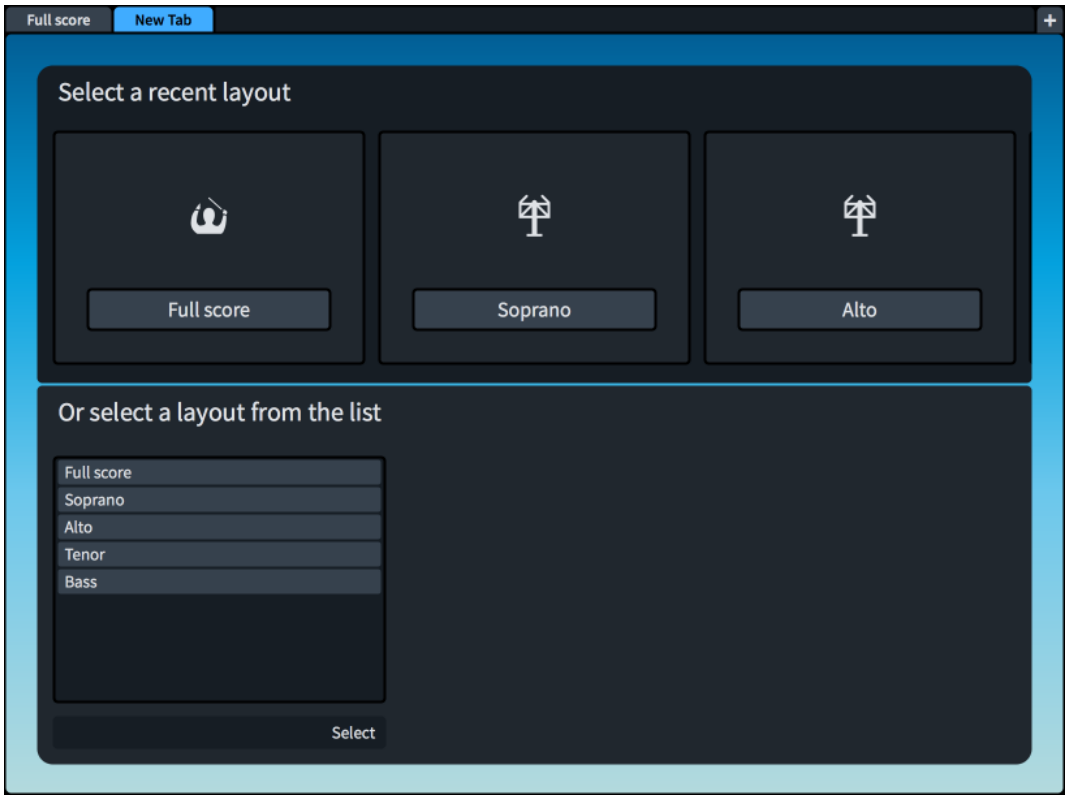
You can find tabs in the tab bar, located at the top of the music area, below the toolbar. If you do not see any tabs, click **Show Tabs** in the toolbar.

PROCEDURE

- To open a new tab, do one of the following:
  - Press **Ctrl/Cmd-T**.
  - At the right end of the tab bar, click **New Tab**.
    
  - Choose **Window** > **New Tab**.

RESULT

A new tab opens that shows several icons at the top and a list of layouts at the bottom.




Options available in the music area when you open a new tab

AFTER COMPLETING THIS TASK

You can click one of the icons or select a layout from the list at the bottom. Alternatively, you can select a layout from the layout selector in the toolbar. The layout that you choose opens in the active tab.

RELATED LINKS

Tab bar on page 42
Toolbar on page 39

## Opening a new window

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

PROCEDURE

- Open a new project window in any of the following ways:

- Press **Ctrl/Cmd-Shift-T**.
- Choose **Window** > **New Window**.

RESULT

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

RELATED LINKS

Opening multiple project windows on page 55

# Starting a new project

After getting a first impression of the Dorico Elements user interface, you can get started with inputting your own music. In this section, you learn how to set up a new project.

PREREQUISITE

NOTE

All inputs that are made and the images that are used to accompany the steps in this chapter are intended merely to be helpful examples. Therefore, there is no need to make the same entries in order to get the depicted results.

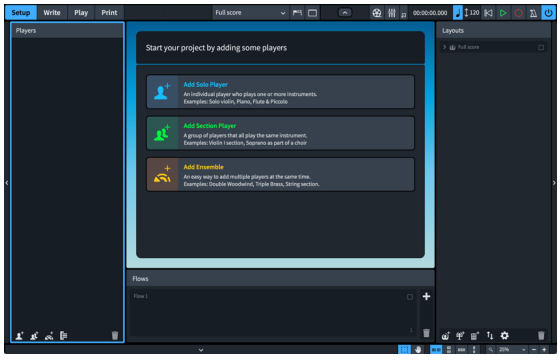
Close the template without saving to reopen the **Hub**.

PROCEDURE

- Start a new project in any of the following ways:
  - Press **Ctrl/Cmd-N**.
  - Click **New Empty Project**.

RESULT

A new project window opens.




By default, new projects start in Setup mode. This allows you to specify players and assign instruments straight away. The area in the middle, known as the project start area, allows you to start your project with different types of players. Once you have added at least one player, this area becomes the music area.

On the right, the **Layouts** panel shows a **Full score** layout card. This layout is automatically created in every new project.

At the bottom of the window is the **Flows** panel, where you can specify separate spans of music for your project.

AFTER COMPLETING THIS TASK

Start your project by adding a player and assigning an instrument to them. You are free to assign any kind of instrument. The following examples use a single piano player.

RELATED LINKS

Windows on page 38

## Adding a solo player

In this section, you learn how to add a player and assign an instrument.

PREREQUISITE

You have started a new project. You are in Setup mode.

PROCEDURE

1. Click **Add Solo Player** to open the instrument picker.

2. Enter **piano** into the instrument picker search box.
3. Click **Add**.

RESULT

You have added your first player. In the music area, the required piano staves including their respective clefs are displayed.

AFTER COMPLETING THIS TASK

Save your project. You can do this at any time.

Optionally, you can now edit the project title or add more players.

The following sections help you to create flows and layouts. If you want to start composing, you can skip those sections.

RELATED LINKS

Writing music on page 26

## Creating a flow

Flows are separate spans of music within your project, for example, movements or songs. In this section, you learn how to create a flow.

PREREQUISITE

You have added at least one player. You are in Setup mode.

PROCEDURE

- In Setup mode, click **Add Flow** in the Flows panel at the bottom of the window.

RESULT

A new flow is added to your project each time you click **Add Flow**. All existing players are assigned to new flows, and new flows are automatically assigned to all existing full score and part layouts.

AFTER COMPLETING THIS TASK

You can double-click the flow card to rename the flow.

You can also remove players from the flow by deactivating their checkboxes in the **Players** panel, and remove the flow from layouts by deactivating their checkboxes in the **Layouts** panel.

RELATED LINKS

Flows on page 128
Renaming flows on page 140

## Creating a layout

Layouts define how music for one or more players in one or more flows is presented, including page size, margins, staff size, and so on. In this section, you learn how to create a new layout.

PREREQUISITE

You have added at least one player and one flow. You are in Setup mode.

Several layouts are often used in ensembles with multiple players, where each player may require a layout of the individual instrumental part. Dorico Elements automatically creates a full score layout that contains all players and all flows as well as individual part layouts that each contain one player and all flows. If you require a different combination of players and flows, for example, a part containing the music for two players, you can create your own layouts, as follows:

PROCEDURE

- In the **Layouts** panel, click **Add Instrumental Part Layout**.

RESULT

An empty part is created on the **Layouts** panel.

AFTER COMPLETING THIS TASK

You can double-click the empty part card to rename it.

You can also assign flows to the layout by activating their checkboxes in the **Flows** panel, and assign players to the layout by activating their checkboxes in the **Players** panel.

# Writing music

Once you have set up your project, you can start writing music.

In Write mode, you can input notes and insert other notations into your score.

TIP

Throughout Dorico Elements, most tasks can be accomplished using only your computer's keyboard. You do not need to use the mouse or touchpad. Learning key commands allows you to use Dorico Elements most efficiently. The fastest way to input music is using a MIDI keyboard. If you do not have a MIDI keyboard, you can use your computer's keyboard. Of course, you can still use the mouse or touchpad if you want.

In the following sections, you learn how to input notes and notation items.

# Inputting your first notes

In this section, you learn how to input notes. You can start inputting notes without having to first add a time signature or key signature.

PREREQUISITE

- You have set up your MIDI keyboard.

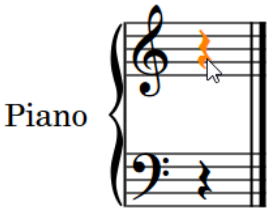
  NOTE

  If you have not set up a MIDI keyboard yet, you can start inputting notes with the computer keyboard.

- You have added a piano player in Setup mode.
- You are in Write mode.

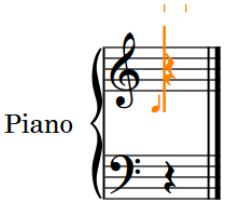
PROCEDURE

1. Select the rest that was automatically inserted next to the clef when you added a solo player.




2. Start note input in any of the following ways:
   - Press **Shift-N** or **Return**.
   - Double-click the rest.

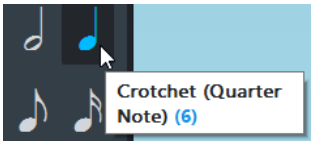
   The caret is activated and appears on the staff.




3. In the Notes panel, click a duration.

   NOTE

   By default, Dorico Elements selects a quarter note (crotchet) for you.




4. Start playing notes on the MIDI keyboard, or press **A**, **B**, **C**, **D**, **E**, **F**, **G** on the computer keyboard to input the corresponding pitches.

   If you want higher or lower pitch for the note that Dorico Elements inputs for you, you can force a different register.

   - To input a note above the previously input note, press **Shift-Alt/Opt** as well as the letter for the note, for example, **Shift-Alt/Opt-A**.

- To input a note below the previously input note, press **Ctrl-Alt (Windows) or Ctrl (macOS)** as well as the letter for the note, for example, **Ctrl-Alt-A (Windows) or Ctrl-A (macOS)**.

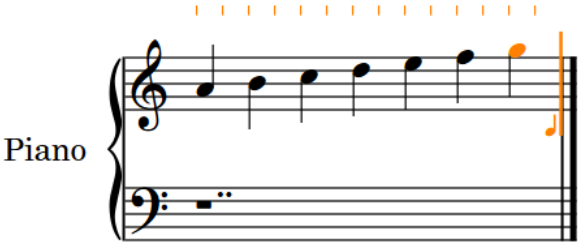
NOTE

You must press **Ctrl** on Mac, not **Cmd**.

RESULT

The pitches you enter or play in are input as notes.

EXAMPLE




Input notes with the caret still active after the final note

RELATED LINKS

Write mode on page 148
Register selection during note input on page 166

## Adding a time signature

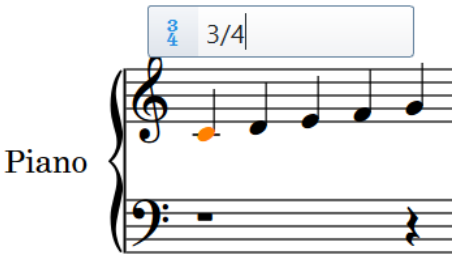
In this section, you learn how to add a time signature at the beginning of the staff. You can add a time signature before or after inputting a melody.

PREREQUISITE

Press **Esc** to deactivate the caret.

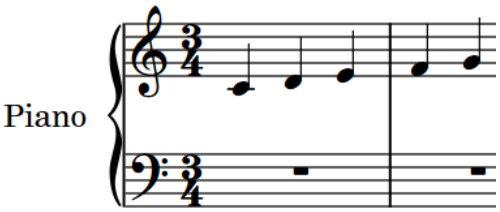
PROCEDURE

1. Select the first note on the staff.
2. Press **Shift-M**.
   The time signatures popover opens above the staff.
3. Enter a typical time signature into the popover, such as **3/4**.




4. Press **Return** to close the popover.

RESULT




The time signature is automatically input to the left of the note, and the required bar lines are automatically inserted at the correct positions. If you want to insert a key signature, proceed to the next section.

## Adding a key signature

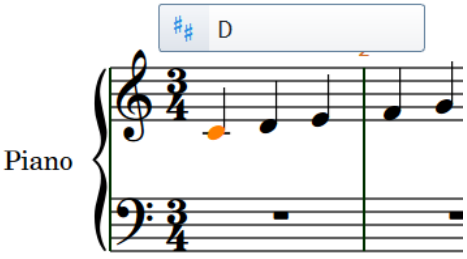
In this section, you learn how to add a key signature. You can add a key signature at any rhythmic position on the staff.

When you start a new project from scratch, by default, there is no key signature shown. Depending on the kind of music you are writing, the key signature might be taken to mean C major or an open key with no specific tonal center.

You can change the key anywhere on the staff. To add a different key signature at the beginning of the staff, for example, D major, proceed as follows:

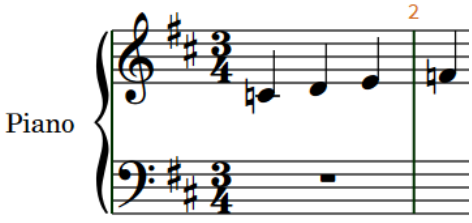
PROCEDURE

1. Select the first note on the staff.
2. Press **Shift-K**.
   This opens the key signatures popover on top of the staff.
3. Enter a key signature into the popover. If you want to enter D major, enter an uppercase **D**.
   For D minor, enter a lowercase **d**.




4. Press **Return**.

RESULT




The key signature is inserted between the clef and the time signature. Dorico Elements automatically adds accidentals where necessary.

# Inputting your first chord

In this section, you learn how to input a chord with the computer keyboard, using chord mode. If you want to use a MIDI keyboard instead, you can input the chord with your keyboard, and you do not need to use chord mode. Dorico Elements automatically inputs the correct notes.

PREREQUISITE

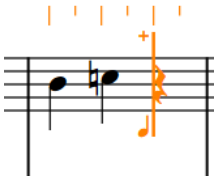
Select the last note or rest on the staff, and press **Return**. This shows the caret.

PROCEDURE

1. Start chord input in any of the following ways:
   - Press **Q**.
   - In the Notes toolbox, click **Chords**.

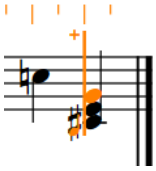
   The caret shows a plus sign at the top.

2. Optional: In the Notes panel, select a duration.
3. Input the notes that you want in your chord by pressing keys from **A** to **G**, one after the other. For example, for a C major chord, press **C**, **E**, and **G**.

   By default, Dorico Elements adds each new note above the previous note. You can select the register of notes manually.

   The example shows a possible result.

4. Press **Space** to advance the caret to the next note position and continue with the next chord.

   Dorico Elements expects further chord input until you deactivate it.
5. Optional: To stop chord input, press **Q** or click **Chords** again in the Notes toolbox.

RELATED LINKS

Register selection during note input on page 166

# Dorico concepts

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

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

## Design philosophy and higher-level concepts

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

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

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

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

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

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

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

Dorico's design philosophy provides several benefits. Chief among them is its ability to produce different score layouts that share the same musical content. For example, in the same project you can create a conductor's score with as many instruments as possible condensed onto a smaller number of staves, a full score with each player's music on separate staves, a custom score layout containing just the piano and vocal staves for choral rehearsals, and an instrumental part for each player that only contains the music belonging to them.

# Projects in Dorico

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

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

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

Dorico projects are saved as `.dorico` files.

RELATED LINKS
Flows in Dorico on page 33
Layouts in Dorico on page 36

# Modes in Dorico

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

Dorico Elements contains the following modes:

**Setup**

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

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

**Write**

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

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

**Play**

In Play mode, you can change how your music sounds in playback. You can do this by changing the playback template and assigning VST instruments, inputting automation, adjusting the mix, and changing the sounding duration of notes in playback without affecting their notated duration.

**Print**

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

RELATED LINKS
Functions of the modes on page 20

# Flows in Dorico

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

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

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

RELATED LINKS
Flows on page 128
Tacets on page 347

# Players in Dorico

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

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

  NOTE

  Section players cannot double instruments, but they can play divisi. This means that they can be divided into smaller units, which is commonly required for strings.

By using the concept of players, Dorico Elements makes it much easier to handle, for example, instrument changes, divisi, and condensing music for multiple players onto a smaller number of staves.

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

RELATED LINKS
Players on page 103
Player groups on page 125
Divisi on page 808
Brackets according to ensemble type on page 528

# Instruments in Dorico

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

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

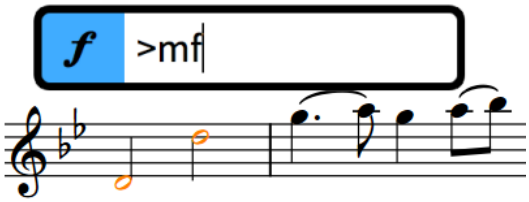
Each instrument automatically gets its own staff, but when instrument changes are allowed, the music for multiple instruments held by the same solo player can appear on the same staff as long as no notes overlap.

Dorico Elements has a database of information about the properties of each instrument. These include the playable range, common and uncommon playing techniques, notational conventions, transposition properties, tunings, clef, number of staves, type of staff, and so on. Having these properties predetermined makes it easier and quicker to set up projects correctly. For example, selecting the horn instrument with the appropriate transposition and clef setting for its part layout means you do not have to input a layout-specific clef. Similarly, there is a timpani instrument that automatically hides all key signatures.

RELATED LINKS
Instruments on page 108
Instrument changes on page 109
Transposing instruments on page 111

# Popovers

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




The dynamics popover with an example entry

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

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

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

You can always identify popovers by looking at the icon on their left-hand side. These are the same icons used in the Notations toolbox on the right of the window, which hide/show the Notations panel (which is another way you can input notations if you prefer to use the mouse).

You can only use popovers in Write mode, as that is the only mode where you can input notes and items together and change the pitch of notes.

RELATED LINKS
Caret on page 159
Note input on page 159
Notations input on page 201

## Notes and rests in Dorico

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

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

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

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

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

TIP

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

You can force the duration of individual notes and rests, for example, if you want to specify subdivisions within a tie chain that are different than the prevailing meter.

RELATED LINKS
Notes on page 631
Ties on page 831
Implicit vs. explicit rests on page 773
Note and rest grouping on page 524
Beam grouping according to meters on page 510
Caret on page 159
Inputting notes on page 164
Forcing the duration of notes/rests on page 169
Inputting ties on page 183

# Rhythmic position

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

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

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

Similarly, you can easily push notes to later rhythmic positions or pull them in to earlier ones using Insert mode, without the risk of them being incorrectly notated. It also means you can think of items existing in the music independently of notes, because items exist at a particular rhythmic position, rather than being attached to notes.

In Dorico, the rhythmic position of notes and items is separate from their graphical position on the page. The benefit of this is that you can input items at the position in the music where they must apply and then move them graphically without causing them to apply to different notes or inadvertently split multi-bar rests. For example, if you want strings to play *pizzicato* from the start of a bar, but because of tight vertical spacing you want to move the *pizz.* indication slightly to the side. Attachment lines link items to the rhythmic positions to which they apply, so it is always clear where they belong.

RELATED LINKS
Note and rest grouping on page 524
Beam groups on page 510
Time signatures on page 841
Inputting notes in Insert mode on page 175
Notes on page 631
Caret on page 159
Rhythmic grid on page 158

# Layouts in Dorico

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

A typical project for an ensemble contains several layouts. For example, a work for string quartet in three movements contains four solo players – two violins, one viola, and one cello – and three flows, one for each movement. Such a project might require five layouts:

- Four layouts each containing the music from all three flows for one of the solo players, that is, the individual instrumental parts
- One layout containing the music from all three flows and all four players, that is, the full score

Each layout provides independent control over practically every aspect of the visual appearance of the music, including independent staff size, note spacing, and system formatting. Each layout can also have independent page formatting settings, such as page size, margins, running headers, and footers.

The default formatting of pages in layouts is determined by master pages.

RELATED LINKS
Layouts on page 130
Page formatting on page 330

## Master pages in Dorico

Master pages function like templates in Dorico Elements, allowing the same page formatting to be applied to multiple different pages in different layouts.

Master pages contain arrangements of frames. Frames are boxes in which you can display text, music, and graphics. The default master pages contain text frames at the tops of pages, to display the page number and running header information, and a large music frame that takes up most of the page.

All pages in your score and parts inherit their layout formats from master pages. However, in Dorico Elements, you cannot edit master pages or create new ones; this is only available in Dorico Pro.

NOTE

Changing individual pages in layouts is considered a master page override in Dorico Elements. This includes, for example, editing the title or running header in Write mode. Pages with master page overrides are not automatically deleted, even if they are now empty because the layout became shorter.

If you want to change the information shown at the tops of pages, that is, the title and running header text that you cannot select, we recommend that you do so in the **Project Info** dialog to avoid master page overrides. The big title at the top of the first page is the project title, and the running header on subsequent pages uses the flow title for the top flow on that page.

RELATED LINKS
Master pages on page 329
Frames on page 328
Project Info dialog on page 98

# User interface

The user interface of Dorico Elements is designed to be as unobtrusive as possible while keeping all of the important tools at your fingertips.

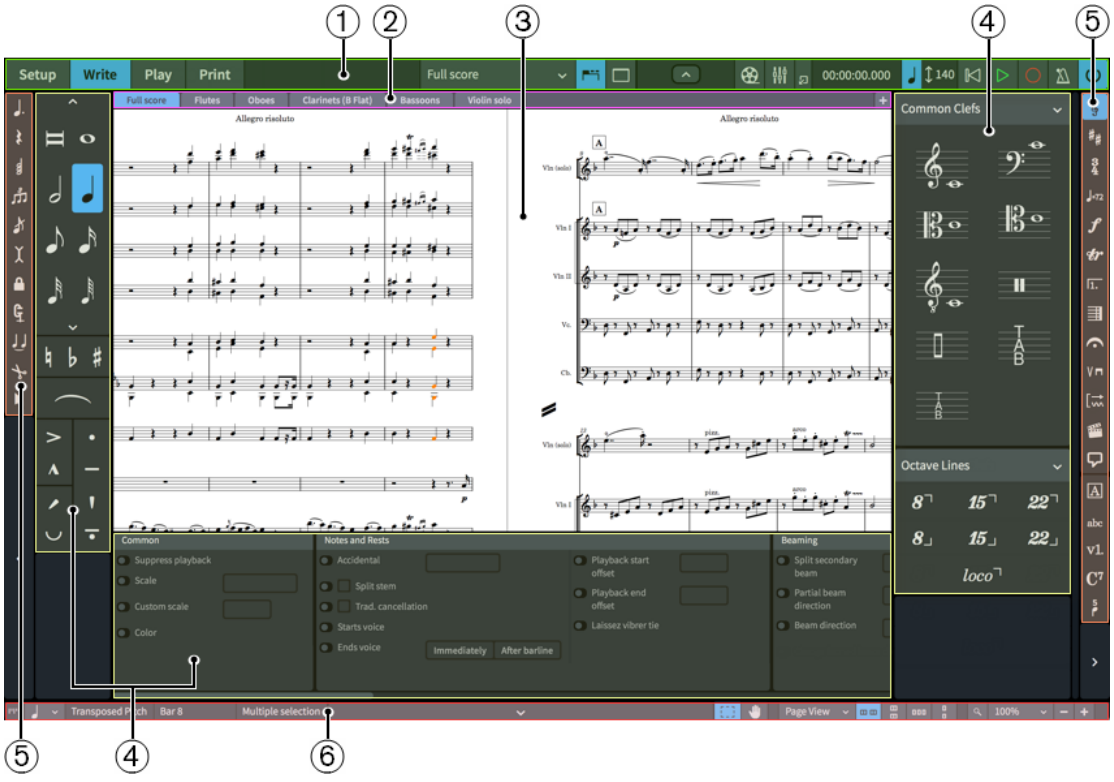
You can explore the interface without doing any damage to your project. You can always undo any inadvertent edits or close your project without saving it.

## Windows

Dorico Elements provides a project window and floating windows.

### Project window

You can open multiple project windows for the same or for different projects. The project window consists of several areas.




Project window

**1 Toolbar**

Allows you to access the modes, the workspace options, the **Mixer**, the **Video** window, and the main transport options.

**2 Tab bar**

In Setup mode and Write mode, the tab bar shows the tabs that are currently open. If you split the music area and open several tabs, tab groups are shown.

**3 Project start area/Music area/Event display/Print preview area**

When you set up a new empty project, this area in Setup mode and Write mode shows the project start area that allows you to add your first players. Once you have added a player or an ensemble, this area becomes the music area that shows the score or parts of the score that you set up, write, edit, and format. In Play mode, this area contains an event display that shows the effects of manipulating the playback of your score. In Print mode, the print preview area shows a preview of how your project is going to be printed onto paper or exported into a graphics file format.

4 **Panel**

Provides notes and notations that you need to create and edit your music. Different panels contain different items and functions according to the mode.

5 **Toolbox**

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

6 **Status bar**

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

### Floating windows

Dorico Elements allows you to open floating windows, such as the **Mixer** and the **Transport** windows. These can be hidden and shown independently of the mode that is selected in the main window. The following options hide/show floating windows:

**Show Mixer**

Hides/Shows the **Mixer** window.

**Show Transport Bar**

Hides/Shows the **Transport** window.

**Show Video**

Hides/Shows the **Video** window.

RELATED LINKS
Opening multiple project windows on page 55

## Toolbar

The toolbar allows you to access the modes and workspace options as well as the **Mixer** and main transport options. It is available in all modes and regardless of the tool that you are using.

- You can hide/show the toolbar by clicking the disclosure arrow above the toolbar or by pressing **Ctrl/Cmd-6**.


The toolbar contains the following items:

1 **Modes**

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

2 **Workspace options**

Provide options that allow you to select different layouts to open in the music area and to change the working environment.

3 **Show Video**

Hides/Shows the **Video** window.

4 **Show Mixer**

Hides/Shows the **Mixer** window.

5 **Mini transport**

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

6 **Activate Project**

Shows which project is activated for playback when you have multiple projects open.

## Workspace options

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

**Layout selector**


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

**Show Tabs**

Shows/Hides the tab bar above the music area.

Appearance when the tab bar is hidden

Appearance when the tab bar is shown

**Hide/Restore Panels**

Shows/Hides all open panels.

Appearance when panels are shown

Appearance when all panels were previously shown but are now all hidden

## Mini transport

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

**Show Transport Bar**

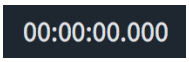
Opens the **Transport** window.

**Time display**

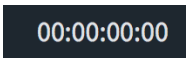
Shows the position of the playhead in one of the following formats:

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


Time display showing bars and beats




Time display showing elapsed time



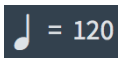

Time display showing the timecode

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

**Fixed Tempo Mode**

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

You can change the tempo mode by clicking the beat unit. You can change the metronome mark value used in fixed tempo mode by clicking and dragging upwards/downwards on the number.




How **Fixed Tempo Mode** appears when fixed tempo mode is active


How **Fixed Tempo Mode** appears when follow tempo is active

**Rewind to Beginning of Flow**

Moves the playhead back to the beginning of the flow.

**Play**

Starts/Stops playback from the previous playhead position.

**Play** when playback is stopped

**Play** during playback

**Record**

Starts/Stops MIDI recording.

**Click**

Plays/Mutes the metronome click during playback and recording.

**Activate Project**

Shows which project is activated for playback when you have multiple projects open.

TIP

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

RELATED LINKS
Transport window on page 423
Playing back music on page 412
Moving the playhead on page 410
Changing the tempo mode on page 416
Changing the content shown in the transport display on page 424

# Tab bar

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

TIP

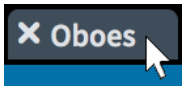
If you cannot see the tab bar, click **Show Tabs** in the toolbar. If **Show Tabs** is activated, the tab bar is always displayed, even if only a single tab is open.


The tab bar contains the following:

**1 Tabs**

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

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

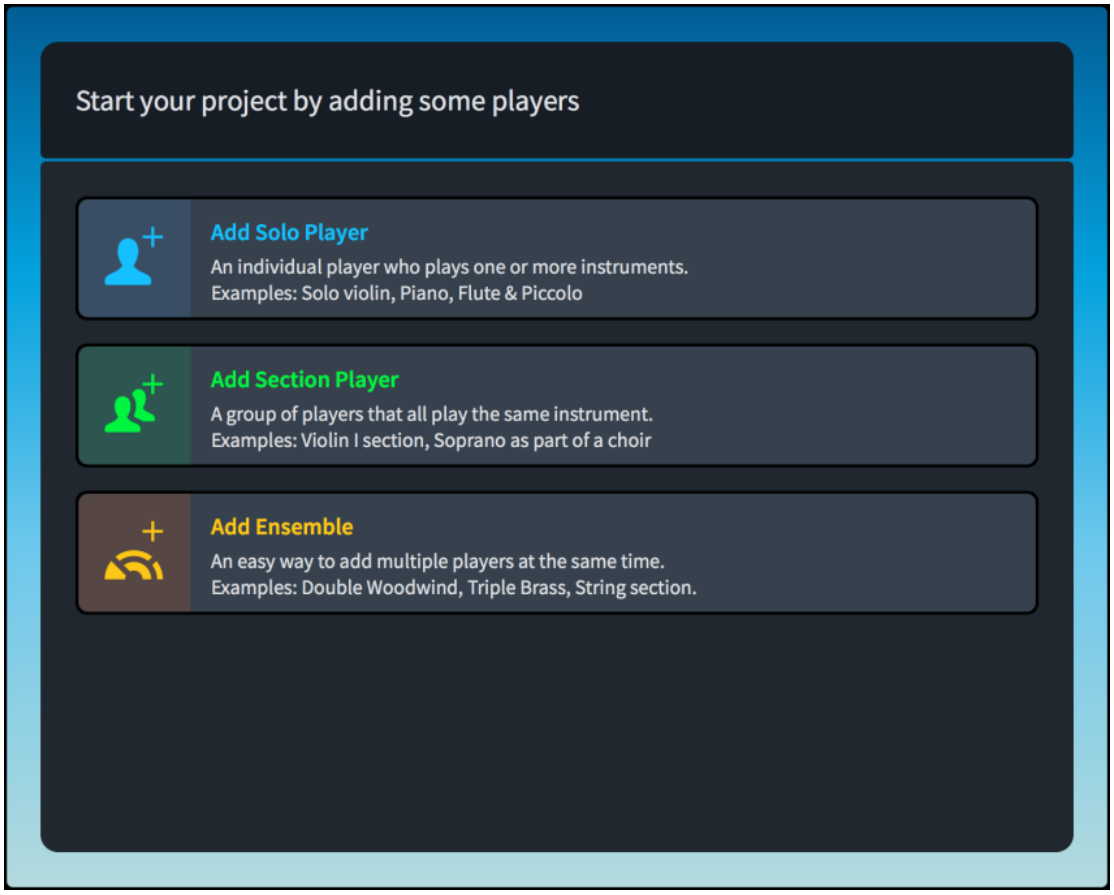



**2 New Tab**

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

# Project start area

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




Project start area

The project start area shows cards that allow you to add your first players. To add players, click one of the cards:

**Add Solo Player**

Adds an individual player to whom you can assign one or more instruments.

**Add Section Player**

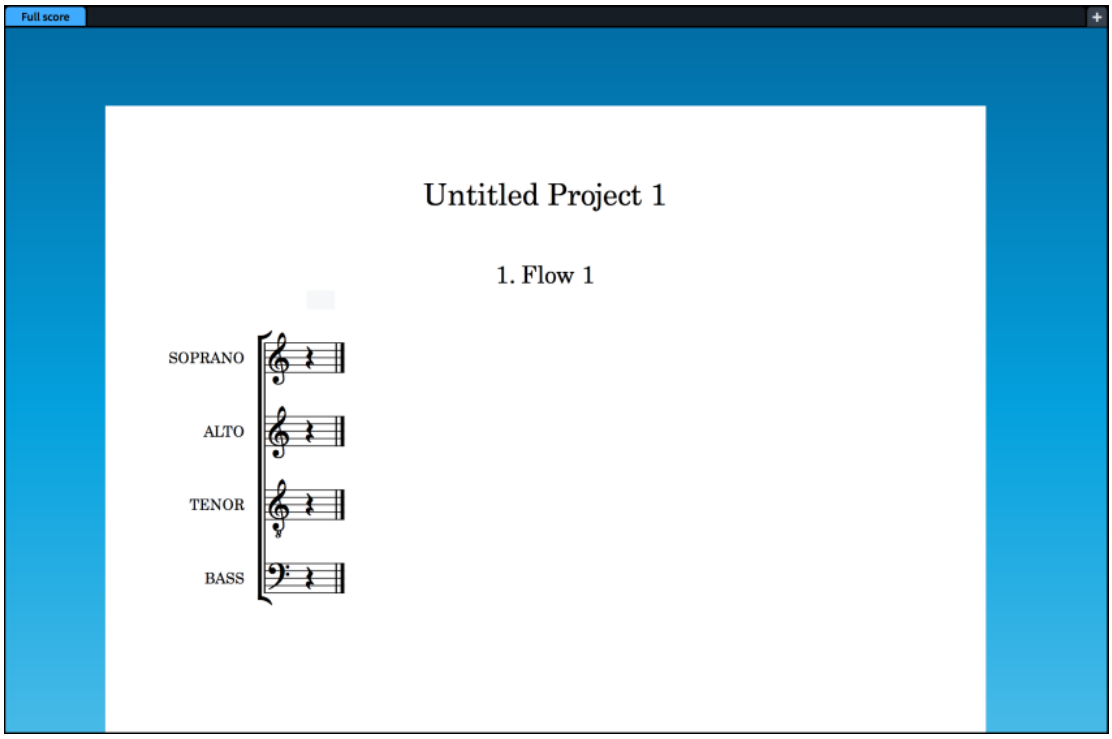
Adds a player that represents multiple players who all play the same instrument.

**Add Ensemble**

Adds multiple players who play different instruments. The ensembles that you can add represent standard combinations of musicians.

# Music area

In Setup mode and Write mode, the music area shows the editable score.




Music area showing a sample of a score

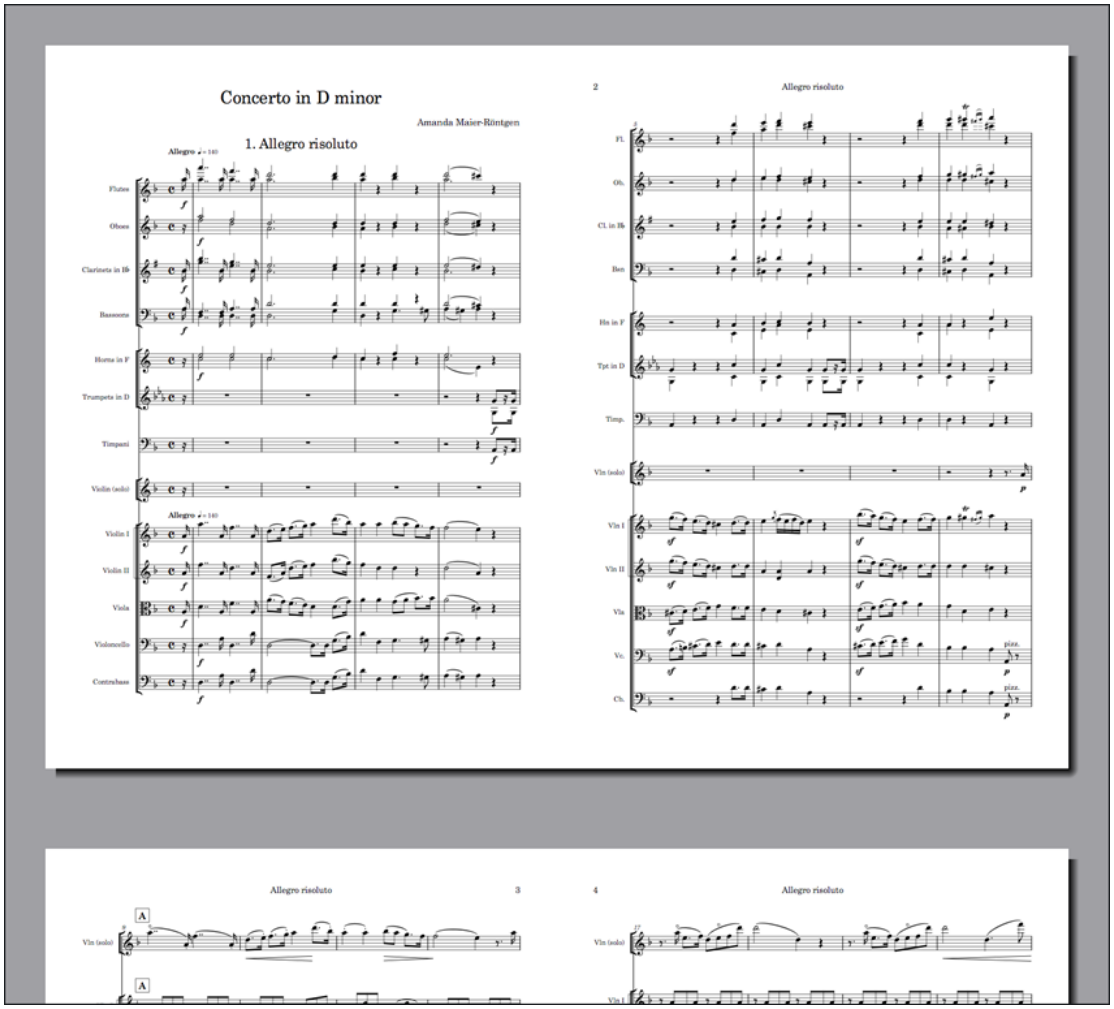
The music area can be displayed in several views. The music area tab bar allows you to open several layouts from your project and switch between them. The scroll bars to the right and to the bottom of the music area allow you to scroll within the layout.

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

RELATED LINKS
Hiding/Showing panels on page 21

# Print preview area

The print preview area in Print mode shows a preview of what is going to be printed or exported as a graphic.




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

In the print preview area, you can scroll through the pages that are shown, but you cannot edit your layouts. If you want to make changes, you must switch to Setup or Write mode.

TIP

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

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

RELATED LINKS

Project window in Print mode on page 458
Key Commands page in the Preferences dialog on page 59

# Panels

The panels in the project window provide the notes, notations, and functions that you need to set up, write, edit, and format your music.


Panels in Write mode

**1** Left panel. In Write mode, this is the Notes panel.

**2** Right panel. In Write mode, this is the Notations panel.

**3** Bottom panel. In Write mode, this is the Properties panel.

The panels have different names and functions in each mode in Dorico Elements.

### Modes and their panels

| Mode | Left Panel | Right Panel | Bottom Panel |
|---|---|---|---|
| Setup | Players | Layouts | Flows |
| Write | Notes | Notations | Properties |
| Play | n/a | VST and MIDI Instruments | n/a |
| Print | Layouts | Print Options | n/a |

Some panels are displayed by default. You can hide/show each panel individually or all of them at the same time.

RELATED LINKS
Modes in Dorico on page 32
Hiding/Showing panels on page 21
Project window in Setup mode on page 90
Project window in Write mode on page 148
Project window in Play mode on page 366
Project window in Print mode on page 458

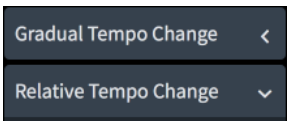
## Disclosure arrows

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

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

Disclosure arrow for the bottom panel


Disclosure arrows for both the player card and the instrument within it




Disclosure arrows for sections in the Tempo panel

RELATED LINKS
Hiding/Showing panels on page 21
Players panel on page 91
Instruments on page 108

## Toolboxes

Toolboxes are available in Write mode and Play mode. They contain different tools and options according to the current mode, but in general they allow you to input and modify notes and notation items. The Notations toolbox also determines which options are shown in the Notations panel.

The following toolboxes are available in the different modes:

**Write mode**

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

**Play mode**

- Play toolbox on the left of the window

RELATED LINKS
Notes toolbox on page 149
Notations toolbox on page 153
Play toolbox on page 367

# Status bar

The status bar at the bottom of the project window allows you to choose a different view and page arrangement in the music area.

NOTE

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


Status bar in Write mode

1 **Rhythmic Grid selector**

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

2 **Status display**

Displays information about the current layout and selection, divided in up to three sections, which are, from left to right:

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

3 **Disclosure arrow**

Allows you to show/hide the bottom panel in Setup mode and Write mode.

4 **Selection tools**

Allow you to switch between using the **Marquee Tool** and the **Hand Tool** in Write mode.

5 **View type selector**

Allows you to select one of the provided view types for the music area in Setup and Write mode.

6 **Page arrangement options**

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

7 **Zoom options**

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

8 **MIDI activity indicator/Audio engine connection warning**

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

- A brief green light indicates that Dorico Elements is receiving MIDI input from a connected device. If the green light is persistent, a connected MIDI device is sending lots of data, which can cause problems.

- A warning icon indicates that Dorico Elements is unable to send MIDI events to the audio engine, for example, if no device is chosen or the sample rate is wrong. You can click the warning icon to open the **Device Setup** dialog, where you can fix the problem in most cases.

RELATED LINKS
Rhythmic grid on page 158
View types on page 49
Page arrangements for page view on page 50
Zoom options on page 50
MIDI recording on page 195
Playing back music on page 412

## Selection tools

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

**Marquee Tool**

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

**Hand Tool**

Allows you to move the view within the music area.

TIP

- To use the other tool briefly without selecting it, you can press **Shift** in addition to using the mouse.
- You can change the default selection tool for all future projects on the **Note Input and Editing** page in **Preferences**.

RELATED LINKS
Selecting multiple items using marquee selections on page 302
Dragging pages in the music area on page 313
Preferences dialog on page 58

## View types

In Dorico Elements there are different ways to view your layouts. Dorico Elements saves your chosen view type for each layout, so you only need to set it once.

The following view types are available:

**Galley View**

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

This view type is most useful during the process of inputting the music as it allows you to focus on the musical content of your project. Because it shows all staves, galley view is particularly useful when inputting notes for solo players holding multiple instruments.

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

NOTE

Note spacing in galley view is unjustified, meaning it neither expands nor contracts to fit the width of a page or a music frame. However, changes made to note spacing in galley view also apply to page view.

Additionally, there is no automatic vertical collision avoidance in galley view, so notes and items might overlap.

**Page View**

Displays your layout paginated exactly as it appears when you print or export it.

This view type is useful if you want to view spreads or single pages. Spreads allow you to work out page turns, because the performer only needs to turn the page at the end of the right-hand page of a pair. Viewing single pages can be helpful if you want to print the layout as a series of single pages. This might be necessary if you are using, for example, a fan-fold or concertina approach, in which case the distinction between left- and right-hand pages is insignificant.

TIP

You can change the default view type used for all future projects on the **General** page in **Preferences**.

RELATED LINKS
Preferences dialog on page 58
Switching to galley/page view on page 56
Page formatting on page 330
Players on page 103
Instruments on page 108

## Page arrangements for page view

You can change the way pages are arranged for display in the music area.

**Spreads Horizontally**

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

**Spreads Vertically**

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

**Single Pages Horizontally**

Displays individual pages laid out from left to right.

**Single Pages Vertically**

Displays individual pages laid out from top to bottom.

RELATED LINKS
Switching to galley/page view on page 56

## Zoom options

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

**Custom Zoom**

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

**Set Zoom**

Allows you to select one of the preset zoom scaling factors. You can set a permanent zoom factor for all future projects on the **General** page in **Preferences**.

**Zoom Out**

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

**Zoom In**

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

RELATED LINKS
Preferences dialog on page 58
Zooming in/out of the music area on page 314

# Workspace setup

Dorico Elements enables you to set up your workspace according to your working style.

Dorico Elements allows you to open multiple tabs to display multiple layouts in the same project within the same window. You can also open the same project in several windows.

RELATED LINKS
Hiding/Showing panels on page 21
Navigation on page 311

## Switching between layouts

If you have created several layouts in your project, you can switch between which is displayed in the music area in every mode. In Setup mode and Write mode, this changes the layout displayed in the current tab only.

NOTE

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

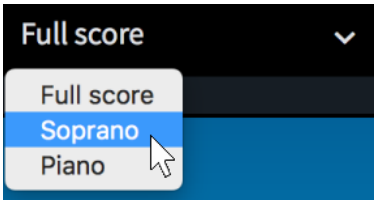
PROCEDURE

- Switch to another layout in any of the following ways:
  - Press **Shift-Alt/Opt-]** to switch to the next layout.
  - Press **Shift-Alt/Opt-[** to switch to the previous layout.
  - Select an item on a staff or in the piano roll of the player whose layout you want to open and press **W**.

    NOTE

    Implicit rests are not items.

  - Select a layout from the layout selector in the toolbar.



RESULT

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

RELATED LINKS

Layouts on page 130
Implicit vs. explicit rests on page 773

## Opening new tabs

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

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

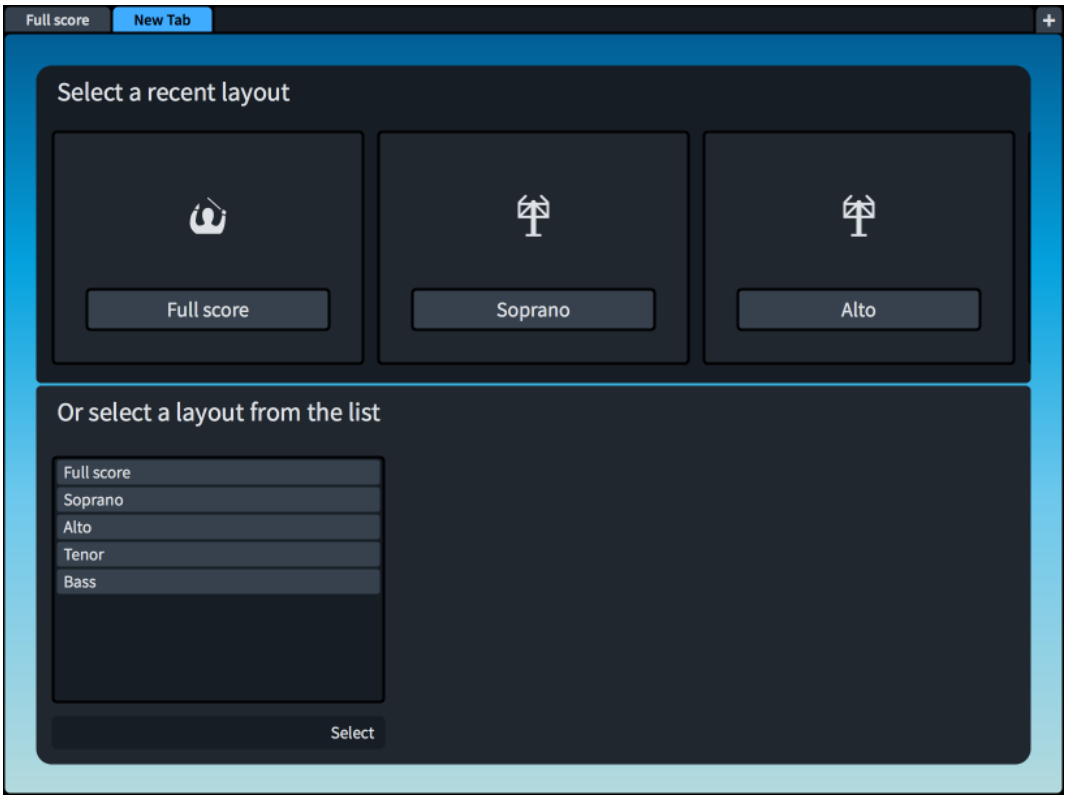
You can find tabs in the tab bar, located at the top of the music area, below the toolbar. If you do not see any tabs, click **Show Tabs** in the toolbar.

PROCEDURE

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

     
   - Choose **Window** > **New Tab**.

   A new tab opens that shows recent layouts at the top and a list of other layouts in the project at the bottom.




2. Select a layout to open in the new tab in any of the following ways:
   - Click one of the icons.
   - Select a layout from the list at the bottom.
   - Select a layout from the layout selector in the toolbar.

RESULT

The layout that you choose opens in the active tab.

TIP

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

RELATED LINKS

Tab bar on page 42
Toolbar on page 39

## Closing tabs

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

PROCEDURE

- Close tabs in any of the following ways:
  - Select the tab you want to close and press **Ctrl/Cmd-W**.
  - Hover over the tab you want to close and click **x**.
  - Right-click the single tab you want to close and choose **Close Tab** from the context menu.

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

NOTE

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

RESULT

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

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

## Switching between tabs

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

PROCEDURE

- Switch tabs in any of the following ways:
  - Press **Ctrl-Tab** to cycle through all open tabs.
  - Press **Ctrl/Cmd**-**Shift**-**Tab** to cycle through all open tabs in reverse order.
  - Click the tab to which you want to switch.

## Changing the order of tabs

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

PROCEDURE

- Click and drag a tab to the new position.
  The other tabs move to show where the dragged tab will be positioned.

## Showing multiple tabs in the same project window

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

Splitting your project window divides your currently open tabs into two groups. You can move tabs between the groups at any time, for example, to compare different layouts or to compare two views of the same layout.

PROCEDURE

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

RESULT

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

## Moving tabs to another tab group

You can move tabs to other tab groups.

PREREQUISITE

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

PROCEDURE

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

RELATED LINKS

Opening new tabs on page 52

## Moving tabs to other windows

You can move tabs to another open window of the same project to show the corresponding layouts in a new window.

NOTE

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

PROCEDURE

- Do one of the following:
  - To create a new window of the same project with the tab inserted, click and drag a tab horizontally to the right/left, away from the tab bar and release it.
  - To insert the tab into the tab bar of another window of the same project, click and drag a tab onto the tab bar.
  - Select a tab, right-click it, and choose **Move Tab To New Window** from the context menu.
  - Select a tab and choose **Window** > **Move Tab To New Window**.

## Opening multiple project windows

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

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

PROCEDURE

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

- Choose **Window** > **New Window**.

RESULT

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

RELATED LINKS

Playhead on page 410

## Changing to full screen mode

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

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

Within Dorico Elements, you can also hide/show the panels on the right, left, and at the bottom of the window.

PROCEDURE

- Choose **View** > **Full Screen**.

AFTER COMPLETING THIS TASK

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

RELATED LINKS

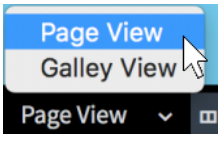
Hiding/Showing panels on page 21
Zooming in/out of the music area on page 314

## Switching to galley/page view

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

PROCEDURE

1. Switch to galley or page view in any of the following ways:
   - Press **Ctrl/Cmd-Alt/Opt-2** to switch to galley view.
   - Press **Ctrl/Cmd-Alt/Opt-1** to switch to page view.
   - In the status bar, select **Galley View** or **Page View** from the view selector.

2. Optional: If you selected **Page View**, choose one of the available page arrangements in the status bar.

**Spreads Horizontally**

**Spreads Vertically**

**Single Pages Horizontally**

**Single Pages Vertically**

RESULT

The view type in the music area is changed. In page view, only staves containing notes or items are shown by default. For players holding multiple empty instruments, only the top instrument is shown in full scores.

In galley view, all staves in the project are shown. However, note spacing is unjustified and there is no automatic vertical collision avoidance, so notes and items might overlap.

TIP

- You can change the default gaps between staves in galley view on the **Vertical Spacing** page in **Setup** > **Layout Options**.
- You can change the default view type used for all projects in the **View** section of the **General** page in **Preferences**.

RELATED LINKS

View types on page 49
Page arrangements for page view on page 50
Changing the staff spacing in galley view on page 365
Zooming in/out of the music area on page 314

# Changing the window color theme

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

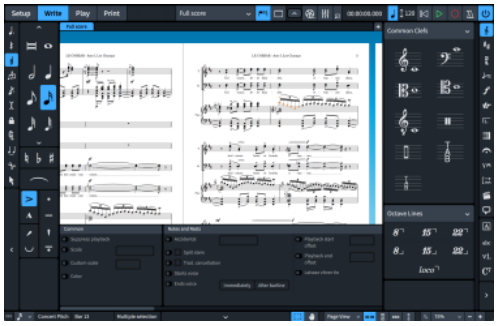
PROCEDURE

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

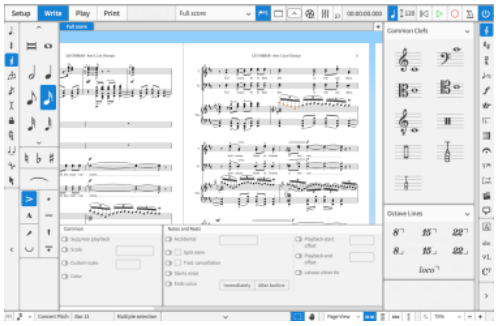
RESULT

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

EXAMPLE



Dark theme



Light theme

## Changing your preferred unit of measurement

You can change your default preferred unit of measurement to be used throughout Dorico Elements for options that use absolute measurements, such as the size of page margins in **Layout Options**.

PROCEDURE

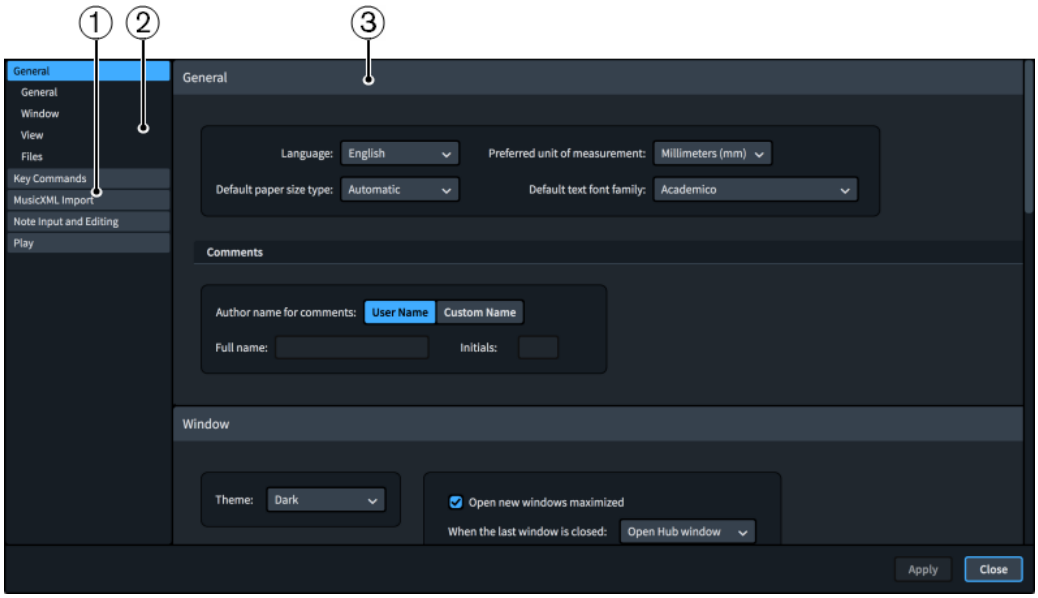
1. Press **Ctrl/Cmd-,** (comma) to open **Preferences**.
2. Click **General** in the page list.
3. In the **General** section, select one of the following options from the **Preferred unit of measurement** menu:
   - **Points (pt)**
   - **Millimeters (mm)**
   - **Inches (in)**
   - **Centimeters (cm)**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

# Preferences dialog

In the **Preferences** dialog, you can make permanent settings for your workspace and define key commands.

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

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




**Preferences**

The **Preferences** dialog contains the following:

1 **Page list**

Contains the categories of options that you can view and change in the dialog, divided into pages. When you click a page in this list, any applicable section titles appear below the page in the page list.

2 **Section titles**

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

3 **Section**

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

NOTE

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

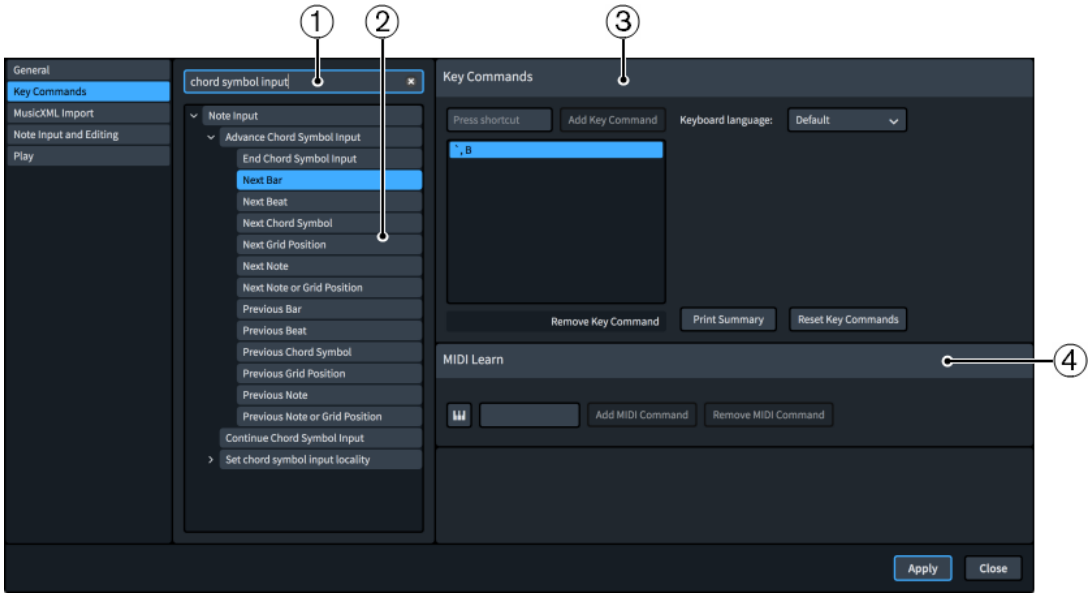
RELATED LINKS
View types on page 49
Zoom options on page 50
Selection tools on page 49
Layout Options dialog on page 100

# Key Commands page in the Preferences dialog

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

Most of the main menus in Dorico Elements have key commands for certain menu items. In addition, there are other Dorico Elements functions that can be assigned key commands. This can be helpful for items or actions that you find yourself performing regularly, such as changing the rhythmic grid resolution or exporting all layouts to PDF.

- You can find the **Key Commands** page by opening the **Preferences** dialog and clicking **Key Commands** in the page list.




**Key Commands** page in **Preferences**

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

**1 Search field**

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

**2 Menu items and functions**

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

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

**3 Key Commands section**

Allows you to see any existing key commands set for the selected menu item or function in the list of assigned key commands and to set new ones. If you enter a key command that has already been assigned to another menu item or function, a warning tells you that you cannot use that key command.

You can assign multiple key commands to the same menu item or function, and the **Keyboard language** menu allows you to assign different key commands for each of the available languages.

- **Add Key Command**: Adds the key command you pressed to the selected menu item or function.
- **Remove Key Command**: Removes the currently selected key command from the selected menu item or function.
- **Print Summary**: Directs you to an offline page in a web browser that displays your key commands on an interactive keyboard.
- **Reset Key Commands**: Resets all of your key commands to their defaults.

**4 MIDI Learn section**

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

- **MIDI Learn**: Prepares Dorico Elements to receive the MIDI input data that you want to save as a command.

- **Add MIDI Command**: Adds the MIDI controllers or notes you changed or pressed to the selected menu item or function.
- **Remove MIDI Command**: Removes the MIDI command from the selected menu item or function.

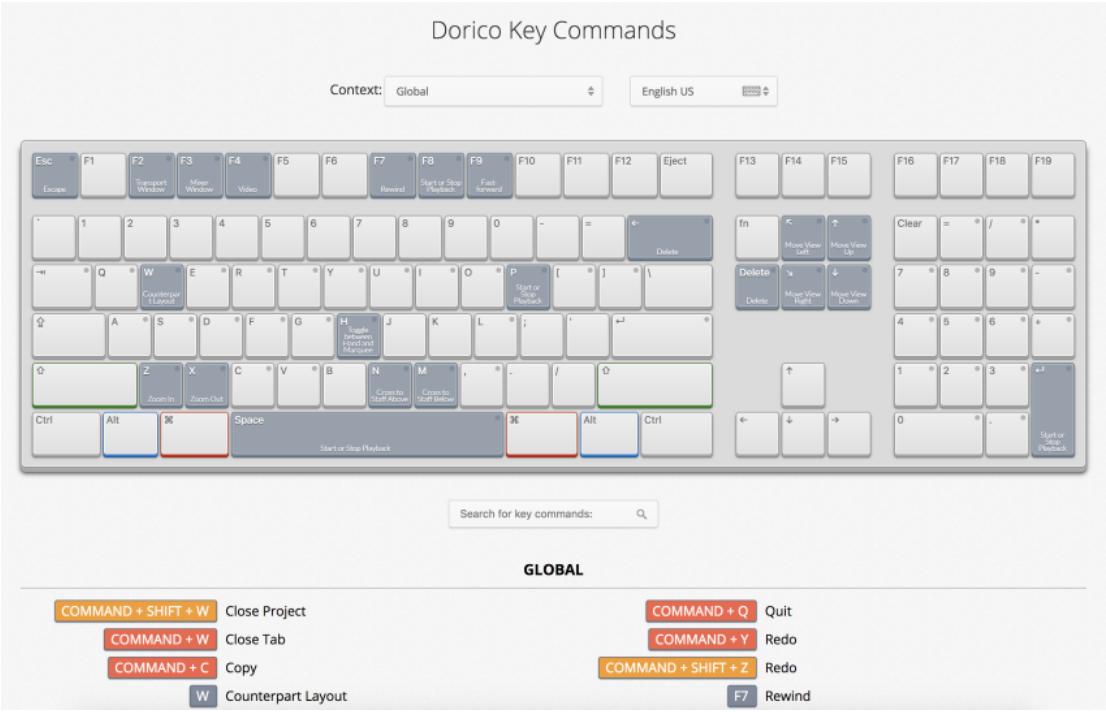
RELATED LINKS
Assigning key commands on page 62
Assigning MIDI commands on page 63

# Interactive Dorico Elements key commands map

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

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

- Choose **Help** > **Key Commands**.
- Choose **Edit** > **Preferences**, and click **Print Summary** in the **Key Commands** section of the **Preferences** dialog.




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

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

- To see the available key commands, select a context. The context of a key command is the mode in which it can be used. Key commands that have a global context work in all modes.
- To highlight the keys that you can press in combination with the modifier key to form a key command, press a modifier key on your computer keyboard, such as **Shift**, or click a

modifier key on the virtual keyboard. You can also press more than one modifier key. The virtual computer keyboard shows the highlighted keys and displays on each key to which functions it is assigned.

- To search for a specific key command, enter one or multiple words in the search field.
- To get an overview of all available key commands, browse the key commands that are listed below the virtual keyboard. The key commands are listed according to the context in which they can be used.

RELATED LINKS
Changing the keyboard layout on page 63

## Searching for the key commands of functions

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

PROCEDURE

1. Press **Ctrl/Cmd-,** (comma) to open **Preferences**.
2. Click **Key Commands** in the page list.
3. Enter the name of a function in the **Search** field.
   The entries that are listed below are filtered according to the words that you enter.
4. Expand an entry and select the function for which you want to see the key command.
   For particularly long names, you can hover over them to see a tool tip.

RESULT

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

TIP

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

## Assigning key commands

You can assign key commands to many menu items and functions, for example, if you use a menu item frequently and want to be able to access it quickly but it does not have a key command assigned by default. You can also change existing key commands.

PROCEDURE

1. Press **Ctrl/Cmd-,** (comma) to open **Preferences**.
2. Click **Key Commands** in the page list.
3. Search for the name of a function and select it.
   For particularly long names, you can hover over them to see a tool tip.
4. Optional: Press **Remove Key Command** if the function already has an assigned key command.
   If you assign a new key command without removing an existing one, you can use either key command.
5. Click the **Press shortcut** input field.
6. Press the key command that you want to assign on your computer keyboard.
7. Click **Add Key Command**.
   The key command is added to the list of assigned key commands.

8. Click **Apply**, then **Close**.

RESULT

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

RELATED LINKS

Resetting key commands on page 64

## Assigning MIDI commands

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

PROCEDURE

1. Press **Ctrl/Cmd-,** (comma) to open **Preferences**.
2. Click **Key Commands** in the page list.
3. Select the menu item or function to which you want to assign MIDI commands.
   For particularly long names, you can hover over them to see a tool tip.
4. Click **MIDI Learn**.

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

## Changing the keyboard layout

You can change the keyboard layout in Dorico Elements to that of another language. This allows you to use the predefined key commands for the selected language.

PROCEDURE

1. Press **Ctrl/Cmd-,** (comma) to open **Preferences**.
2. Click **Key Commands** in the page list.
3. Select a different keyboard layout from the **Keyboard language** menu.
4. Click **Apply**, then **Close**.

RESULT

You can immediately use the available key commands for the selected language.

## Removing key commands

You can remove individual key commands from a function.

PROCEDURE

1. Press **Ctrl/Cmd-,** (comma) to open **Preferences**.
2. Click **Key Commands** in the page list.
3. Search for the name of a function and select it.

4. Click **Remove Key Command**.
5. Click **Apply**, then **Close**.

RESULT

The key command is removed from the selected function.

RELATED LINKS

Searching for the key commands of functions on page 62

## Resetting key commands

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

PROCEDURE

1. Press **Ctrl/Cmd-,** (comma) to open **Preferences**.
2. Click **Key Commands** in the page list.
3. Click **Reset Key Commands**.
4. Click **Apply**, then **Close**.

RESULT

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

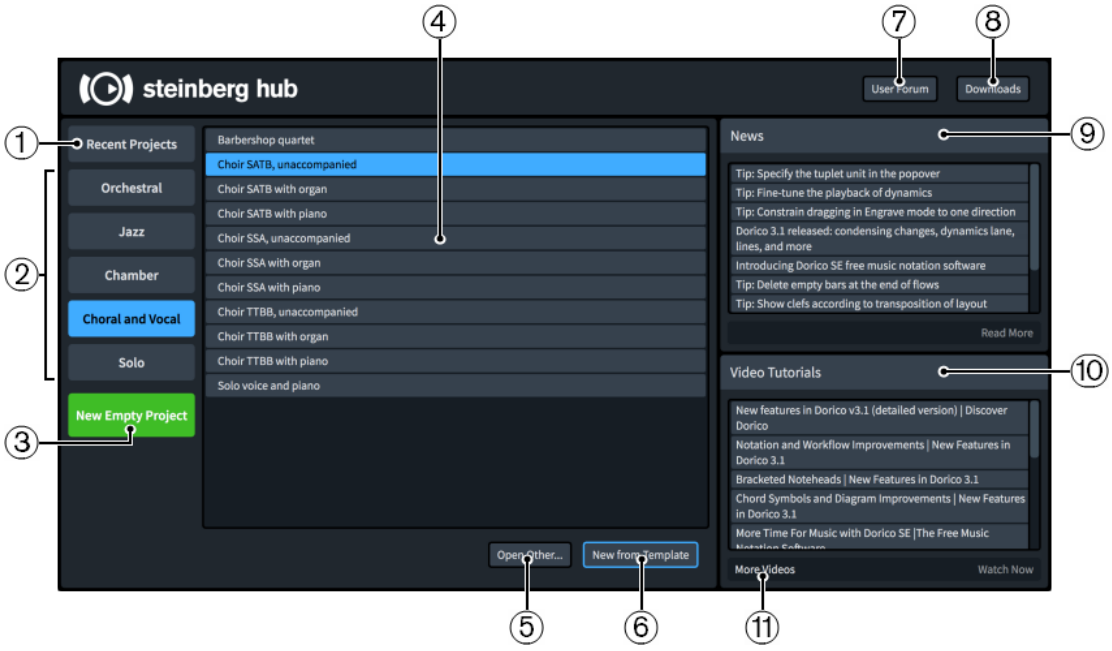
# Project and file handling

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

RELATED LINKS
File import and export on page 71
Auto-save on page 87
Project backups on page 88

## Hub

When you start Dorico Elements, the Hub opens. The Hub keeps you up-to-date with the latest Dorico information and tutorials, and assists you with organizing your projects.




The Hub contains the following:

1 **Recent Projects**

Allows you quick access to the projects that you worked on last. Selecting **Recent Projects** shows them in the list. You can scroll through the list using either a mouse/touchpad or the **Up Arrow** / **Down Arrow** keys.

2 **Project template categories**

Allows you quick access to a suitable project template in the available categories. Selecting a category shows the possible templates in that category in the list.

3 **New Empty Project**

Starts a new project with no players or flows.

4 **List**

Displays either recent projects or project templates, depending on your selection on the left of the dialog.

5 **Open Other**

Allows you to search for and open any other project file in the File Explorer/macOS Finder.

6 **New from Template** (project template selected)

Creates a new project using the selected project template. This option is only available if you have selected a project template.

**Open Selected Project** (recent project selected)

Opens the recent project file that you selected in the list.

7 **User Forum**

Links you to the user forum on the Steinberg website.

8 **Downloads**

Links you to the downloads page on the Steinberg website, where you can find relevant update installers and a link to the documentation.

9 **News**

Displays recent Dorico news from the Dorico blog. Double-clicking a news item, or selecting it and clicking **Read More**, opens it in a web browser.

10 **Video Tutorials**

Displays recent Dorico video tutorials. Double-clicking a video tutorial, or selecting it and clicking **Watch Now**, opens it in a web browser.

11 **More Videos**

Links you directly to the Dorico YouTube channel, where you can find tutorial videos and information about new features.

RELATED LINKS

Project template categories on page 67

## Starting new projects

Dorico Elements provides several ways to start new projects.

PROCEDURE

- Start a new project in any of the following ways:
  - Press **Ctrl/Cmd-N** at any time.
  - Choose **File** > **New** at any time.
  - In the Hub, click **New Empty Project**.

RESULT

A new project window opens.

## Starting new projects from project templates

Dorico Elements provides multiple project templates that you can use to start a new project, for example, multiple types of orchestras and vocal ensembles.

NOTE

In Dorico Elements, the maximum number of players you can have in a single project is 12, so only templates containing 12 or fewer players are available.

PROCEDURE

1. In the Hub, select one of the following project template categories:
   - **Orchestral**
   - **Band**
   - **Jazz**
   - **Chamber**
   - **Choral and Vocal**
   - **Solo**
2. Select a project template in the list.
3. Click **New from Template**.

RESULT

The project template opens in a new project window.

TIP

You can also start a new project from a template at any time by choosing **File** > **New From Template** > **[Template category]** > **[Project template]**.

AFTER COMPLETING THIS TASK

You can add additional players/instruments and delete players/instruments that were included in the template to customize your project.

RELATED LINKS

Brackets according to ensemble type on page 528
Adding solo/section players on page 104
Adding instruments to players on page 112
Deleting players on page 106
Deleting instruments on page 115

## Project template categories

Dorico Elements provides a number of different project template categories. Projects started from different project template categories have different default settings that follow conventions as appropriate for the ensemble, such as for bracketing and bracing or staff labels.

**Orchestral**

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

**Band**

Large ensembles containing primarily wind instruments, including woodwind and brass instruments, and optionally percussion and other instruments, such as strings and guitars.

**Jazz**

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

**Chamber**

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

**Choral and Vocal**

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

**Solo**

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

RELATED LINKS
Brackets according to ensemble type on page 528
System objects on page 805

# Opening projects/files

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

PROCEDURE

1. Open the File Explorer/macOS Finder in any of the following ways:
   - In the Hub, click **Open Other**.
   - Choose **File** > **Open**.
   - Choose **File** > **Open Recent** > **[Project file name]**.
2. In the File Explorer/macOS Finder, locate and select the files you want to open.
3. Click **Open**.

RESULT

The selected Dorico projects are opened.

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

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

NOTE

- You can also import MusicXML and MIDI files as new flows in existing projects rather than opening them as separate projects.
- In Dorico Elements, the maximum number of players you can have in a single project is 12. If you open a project that contains more than 12 players, it opens in read-only mode.

RELATED LINKS
Hub on page 65
Importing MusicXML files on page 74
Importing MIDI on page 77

# Opening recent projects from the Hub

You can open a project on which you have recently worked from the Steinberg Hub.

PROCEDURE

1. In the Hub, click **Recent Projects**.
2. In the list, select a recent project in any the following ways:
   - Press **Up Arrow** / **Down Arrow** to navigate to the project file name, then press **Return** to open it.
   - Double-click a project file name.

- Select a project file name and click **Open Selected Project**.

RESULT

The selected Dorico projects are opened.

NOTE

In Dorico Elements, the maximum number of players you can have in a single project is 12. If you open a project that contains more than 12 players, it opens in read-only mode.

# Projects from different versions of Dorico

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

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

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

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

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

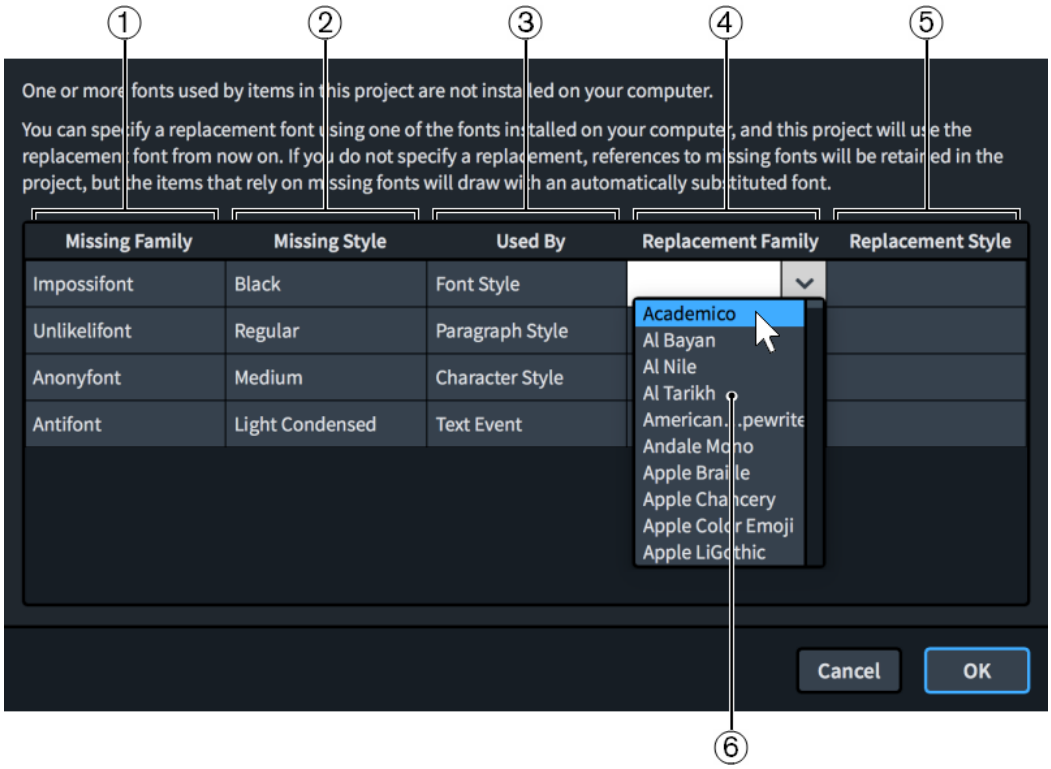
RELATED LINKS

Preferences dialog on page 58

# Missing Fonts dialog

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

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




**Missing Fonts** dialog

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

1 **Missing Family column**

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

2 **Missing Style column**

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

3 **Used By column**

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

4 **Replacement Family column**

Allows you to select replacement font families. Once selected, their names are displayed in the corresponding entry.

5 **Replacement Style column**

Allows you to select any of the available styles within the corresponding replacement font families. Once selected, the styles are displayed in the corresponding entry.

6 **Available font menu**

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

TIP

You can choose whether or not the **Missing Fonts** dialog appears when you open a project containing fonts not installed on your computer on the **General** page in **Preferences**.

RELATED LINKS

Preferences dialog on page 58
Text editor options in Write mode on page 299

# File import and export

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

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

## Importing flows

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

PROCEDURE

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

RESULT

The selected flows are imported into the project.

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

NOTE

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

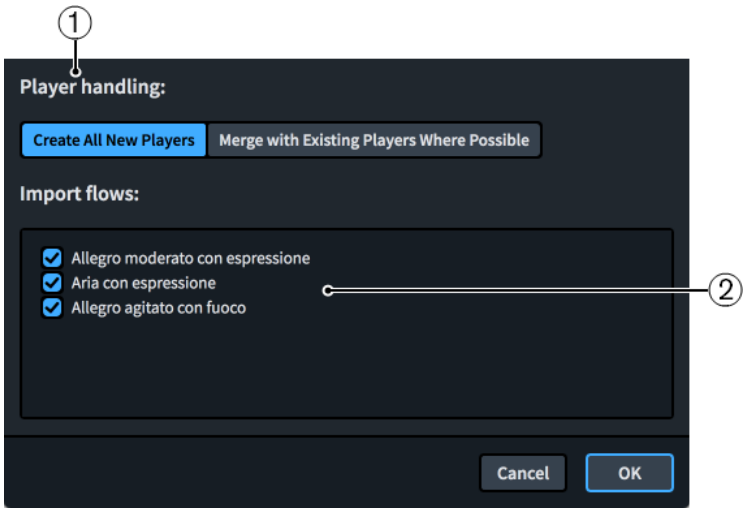
RELATED LINKS

Opening projects/files on page 68

## Flow Import Options dialog

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

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




**Flow Import Options** dialog

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

1 **Player handling**

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

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

2 **Import flows**

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

# Exporting flows

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

NOTE

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

PROCEDURE

1. Choose **File** > **Export** > **Flows** to open the **Export Flows** dialog.
2. In the **Export Flows** dialog, activate/deactivate **Export each selected flow as a separate file**.
3. In the **Select flows to export** list, activate the checkbox for each flow you want to export. You can also click **Select All** or **Select None** at the bottom of the list.
4. Activate/Deactivate **Export layouts as separate files**.

5. Optional: If you activated **Export layouts as separate files**, activate the checkbox for each layout you want to export in the **Select layouts to export** list. You can also click **Select All** or **Select None** at the bottom of the list.
6. Click **Choose Folder** beside the **Export to** field to open the File Explorer/macOS Finder.

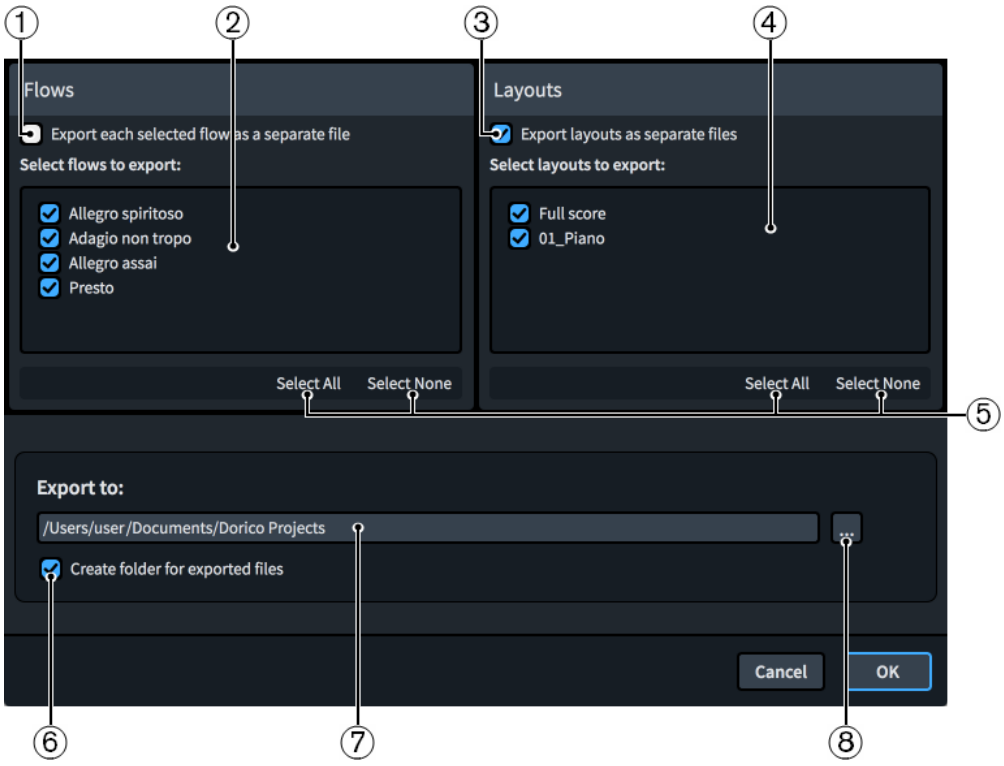
   
   
7. In the File Explorer/macOS Finder, locate and select the destination folder you want.
8. Click **Select Folder** (Windows)/**Open** (macOS) to insert the new path in the **Export to** field.
9. Activate/Deactivate **Create folder for exported files**.
10. Click **OK** to export the selected flows and layouts and close the dialog.

RELATED LINKS
Exporting MusicXML files on page 75
Exporting MIDI on page 80
Exporting tempo tracks on page 84
Exporting audio on page 85

## Export Flows dialog

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

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




**Export Flows** dialog

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

1 **Export each selected flow as a separate file**

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

2 **Select flows to export**

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

3 **Export layouts as separate files**

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

4 **Select layouts to export**

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

5 **Selection options**

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

6 **Create folder for exported files**

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

7 **Export to field**

Displays the current export path where exported flows will be saved.

8 **Choose Folder**

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

# Importing MusicXML files

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

PROCEDURE

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

RESULT

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

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

TIP

- You can also open MusicXML files directly if you want them to be separate projects rather than new flows in existing projects.
- You can change your default preferences for the handling of imported MusicXML files on the **MusicXML Import** page in **Preferences**.

RELATED LINKS
Flow Import Options dialog on page 72
Opening projects/files on page 68

# Exporting MusicXML files

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

PROCEDURE

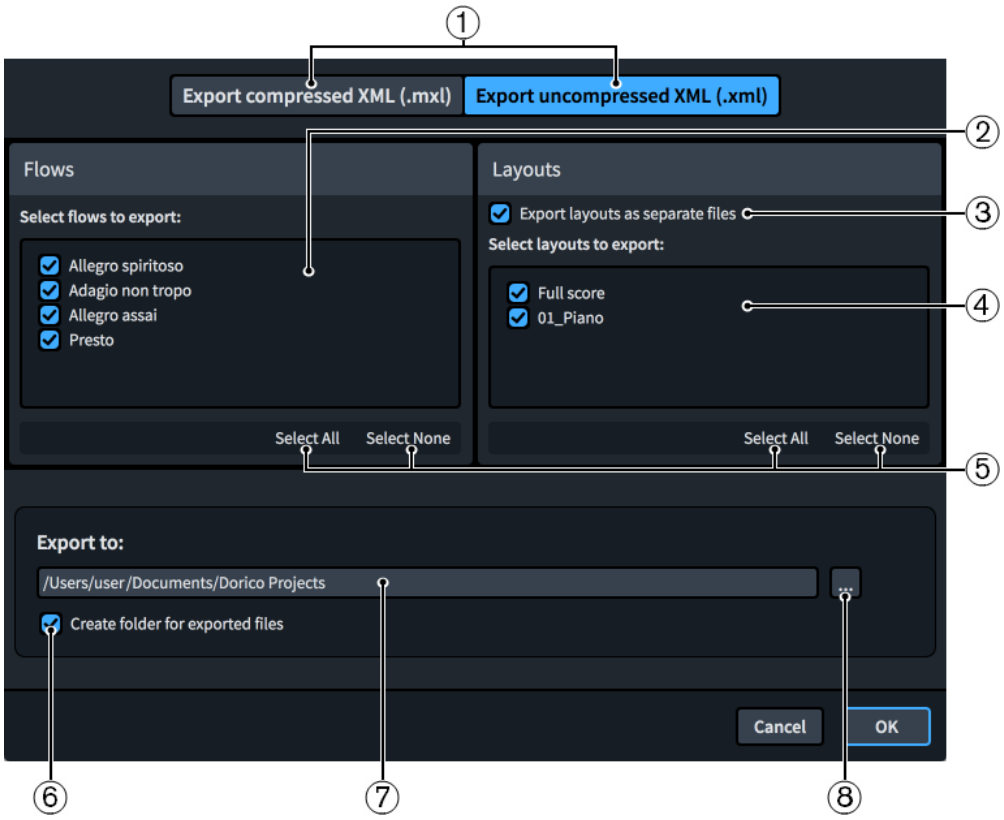
1. Choose **File** > **Export** > **MusicXML** to open the **Export MusicXML** dialog.
2. In the **Export MusicXML** dialog, choose one of the following file format options:
   - **Export compressed XML (.mxl)**
   - **Export uncompressed XML (.xml)**
3. In the **Select flows to export** list, activate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

   
7. In the File Explorer/macOS Finder, locate and select the destination folder you want.
8. Click **Select Folder** (Windows)/**Open** (macOS) to insert the new path in the **Export to** field.
9. Activate/Deactivate **Create folder for exported files**.
10. Click **OK** to export the selected flows/layouts as MusicXML files and close the dialog.

## Export MusicXML dialog

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

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




**Export MusicXML** dialog

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

1 **File format options**

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

2 **Select flows to export**

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

3 **Export layouts as separate files**

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

4 **Select layouts to export**

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

5 **Selection options**

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

6 **Create folder for exported files**

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

7 **Export to field**

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

8 **Choose Folder**

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

# Importing MIDI

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

PROCEDURE

1. Choose **File** > **Import** > **MIDI** to open the File Explorer/macOS Finder.
2. In the File Explorer/macOS Finder, locate and select the MIDI files you want to import.
3. Click **Open** to open the **MIDI Import Options** dialog for the first selected MIDI file.
4. In the **MIDI Import Options** dialog, change the settings as required.
5. Optional: If you want to customize the quantization settings, click **Quantize Options** and change the settings in the **MIDI Quantize Options** dialog.
6. Optional: Click **OK** to save your quantization settings and return to the **MIDI Import Options** dialog.
7. Click **OK** to close the **MIDI Import Options** dialog, which automatically opens the **Flow Import Options** dialog for the first selected MIDI file.
8. In the **Flow Import Options** dialog, choose one of the following options for **Player handling**:
   - **Create All New Players**
   - **Merge with Existing Players Where Possible**
9. Click **OK** to import the selected flows and close the dialog.
10. Optional: If you selected multiple MIDI files, repeat steps 4 to 9 for each file. The **MIDI Import Options** and **Flow Import Options** dialogs reopen automatically for each file.

RESULT

The selected MIDI files are imported into the project as new flows. Dorico Elements uses an algorithm on imported MIDI notes to produce the correct enharmonic spelling for the imported notes.

- If the MIDI files contained markers, they are also imported, and if they have SMPTE offset values defined, Dorico Elements uses them to set the timecode position for the start of the flow.
- If you chose **Create All New Players**, new players are added as required for each MIDI file.
- If you chose **Merge with Existing Players Where Possible**, any players that the imported MIDI files and existing project have in common are merged, for example, if you imported a MIDI file containing a solo piano into a project containing a piano and viola, the imported MIDI file is added to the existing piano player.

TIP

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

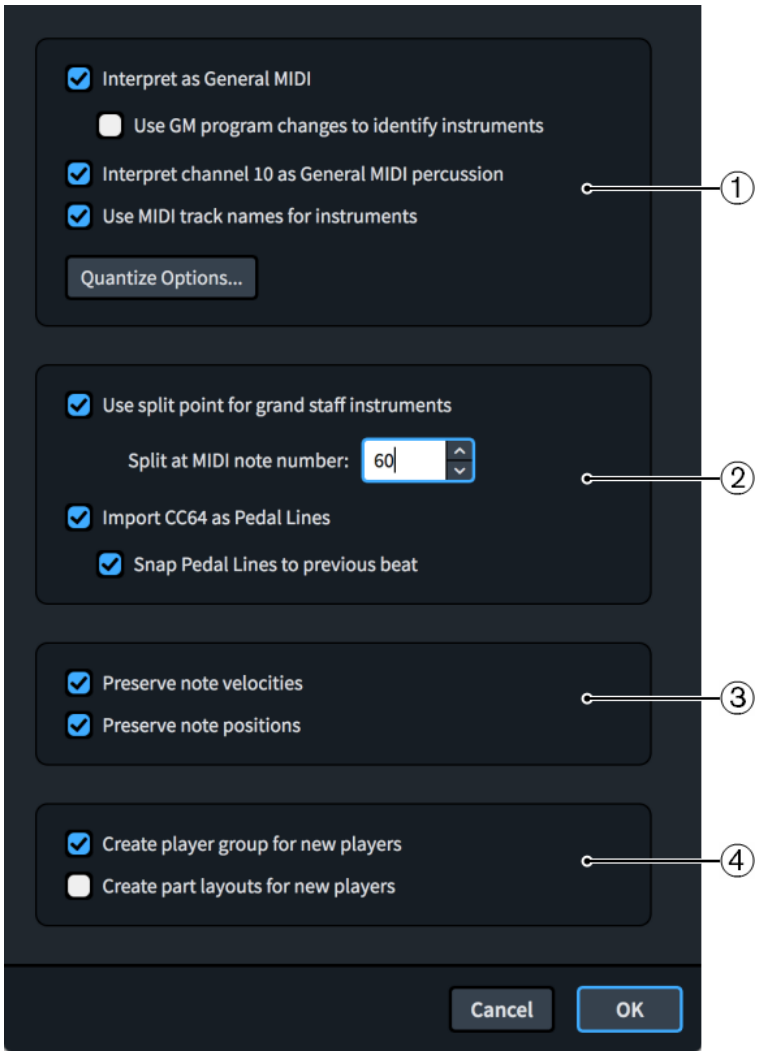
RELATED LINKS

Opening projects/files on page 68
Requantizing notes on page 198
Changing the sustain pedal controller settings for MIDI recording/import on page 200

## MIDI Import Options dialog

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

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




**MIDI Import Options** dialog

The **MIDI Import Options** dialog contains the following sections:

1 **Instrument handling**

The options in this section determine how Dorico Elements chooses and names instruments based on the imported MIDI file.

The **Quantize Options** button opens the **MIDI Quantize Options** dialog, which allows you to customize the quantization settings.

2 **Keyboard handling**

The options in this section determine how Dorico Elements interprets keyboard music based on the imported MIDI file, including the MIDI note number at which notes are split between the right and left hand staves and whether CC64 indicates pedal lines.

3 **Performance preservation**

The options in this section allow you to determine how much of the original performance in the MIDI file you want to preserve for playback purposes. They do not affect how the imported MIDI notes are notated, as this is controlled by the quantization options set.

4 **Player handling**

The options in this section allow you to determine the players and layouts to which instruments in the MIDI file are assigned. For example, if you are importing a MIDI file into an existing project in order to orchestrate, you might want to activate **Create player group for new players** and deactivate **Create part layouts for new players** to add a single, independent group of players without creating any extra part layouts for them.

RELATED LINKS

Changing the sustain pedal controller settings for MIDI recording/import on page 200

## MIDI Quantize Options dialog

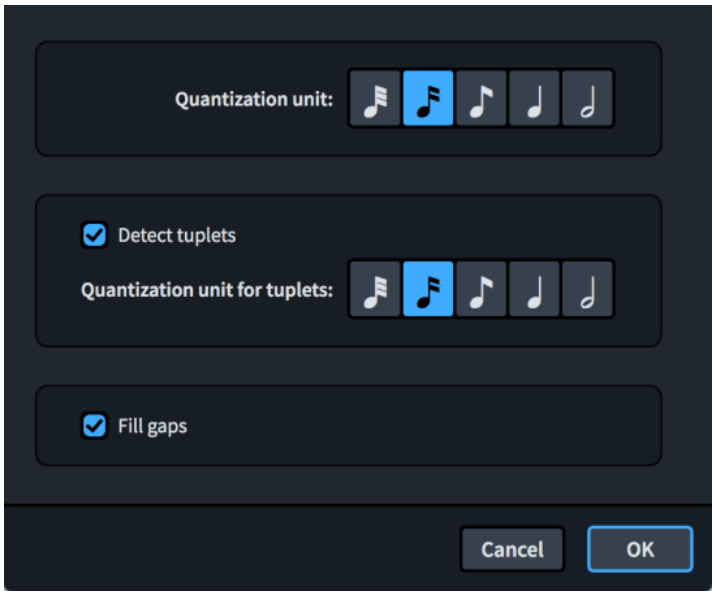
The **MIDI Quantize Options** dialog allows you to customize the quantization settings you want to apply to imported MIDI files and notes input by recording with a MIDI device.

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

- Click **Quantize Options** in the **MIDI Import Options** dialog.
- Click **Quantization Options** in the **Recording** subsection of the **Play** page in **Preferences**.

NOTE

Your settings are linked between both ways of accessing the dialog.




**MIDI Quantize Options** dialog

The **MIDI Quantize Options** dialog contains the following options:

**Quantization unit**

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

**Detect tuplets**

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

**Quantization unit for tuplets**

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

**Fill gaps**

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

RELATED LINKS

MIDI recording on page 195

# Exporting MIDI

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

PREREQUISITE

You have positioned a layout containing the players whose MIDI you want to export at the top of the **Layouts** panel in Setup mode.

PROCEDURE

1. Choose **File** > **Export** > **MIDI** to open the **Export MIDI** dialog.
2. In the **Select flows to export** list, activate the checkbox for each flow you want to export. You can also click **Select All** or **Select None** at the bottom of the list.
3. Click **Choose Folder** beside the **Export to** field to open the File Explorer/macOS Finder.

   
4. In the File Explorer/macOS Finder, locate and select the destination folder you want.
5. Click **Select Folder** (Windows)/**Open** (macOS) to insert the new path in the **Export to** field.
6. Activate/Deactivate **Create folder for exported files**.
7. Click **OK** to export the selected flows as MIDI files and close the dialog.

RESULT

The selected flows are exported as MIDI files. They contain the MIDI of all the players assigned to the layout at the top of the **Layouts** list in Setup mode.

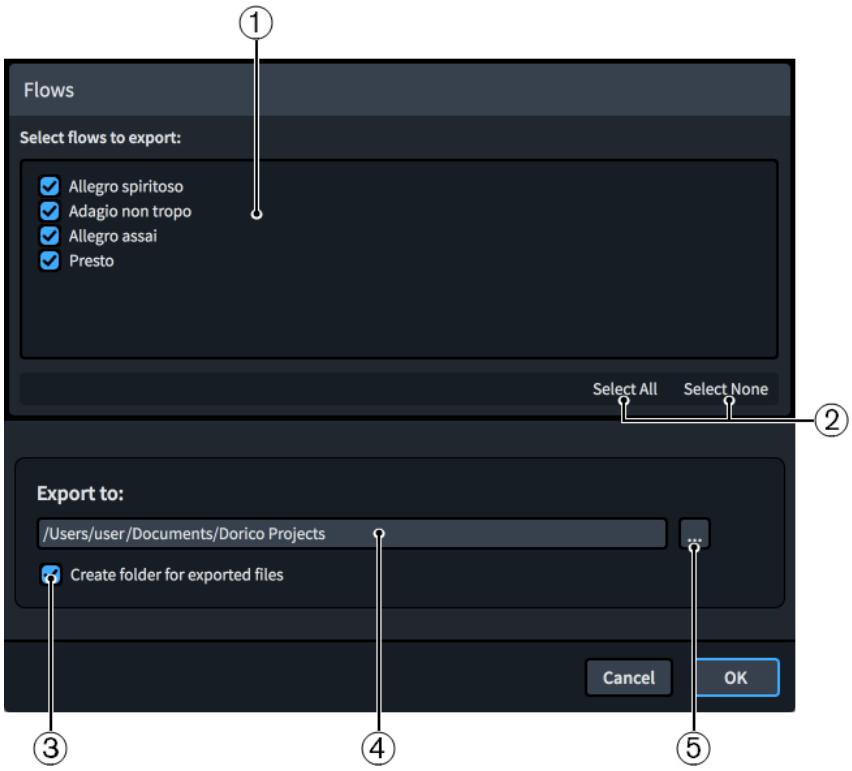
RELATED LINKS

Sorting layouts on page 134
Layouts panel (Setup mode) on page 94
Changing the players assigned to layouts on page 132

## Export MIDI dialog

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

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




**Export MIDI** dialog

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

1 **Select flows to export**

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

2 **Selection options**

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

3 **Create folder for exported files**

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

4 **Export to field**

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

5 **Choose Folder**

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

# Importing tempo tracks

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

PROCEDURE

1. Choose **File** > **Import** > **Tempo Track** to open the File Explorer/macOS Finder.
2. In the File Explorer/macOS Finder, locate and select the MIDI file whose tempo track you want to import.
3. Click **Open** to open the **Import Tempo Track** dialog.
4. In the **Import into flow** list, select the flow into which you want to import the tempo track.
5. In the **Import and replace** section, activate the checkbox for each tempo track aspect you want to include.
6. Optional: If you activated the checkbox for **Markers as**, choose one of the following options:
   - **Markers**
   - **System Text**
7. Optional: If you chose **System Text** for **Markers as**, activate/deactivate **Show border around system text markers**.
8. Click **OK** to import the tempo track and close the dialog.

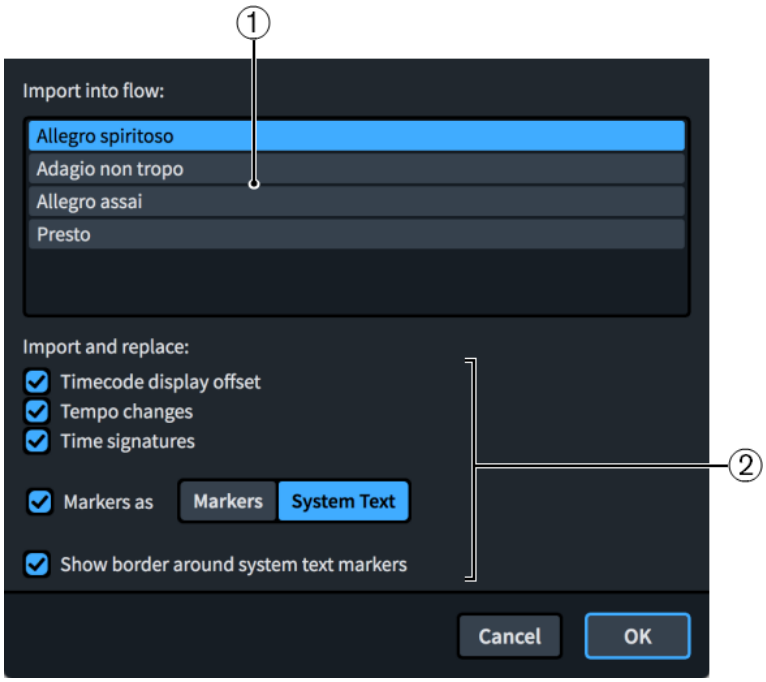
RESULT

The tempo track is imported into the selected flow. All selected aspects are applied to the existing music, and notes and tempo marks are adjusted as required.

## Import Tempo Track dialog

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

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




**Import Tempo Track** dialog

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

1 **Import into flow**

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

NOTE

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

2 **Import and replace**

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

- **Timecode display offset** sets the initial timecode position at the start of the flow.
- **Tempo changes** replaces all immediate and gradual tempo changes in the flow with the tempo changes from the MIDI file.
- **Time signatures** replaces all time signatures in the flow with time signatures from the MIDI file.
- **Markers as** adds any markers from the MIDI file to the flow as either **Markers** or **System Text**.

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

# Exporting tempo tracks

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

PROCEDURE

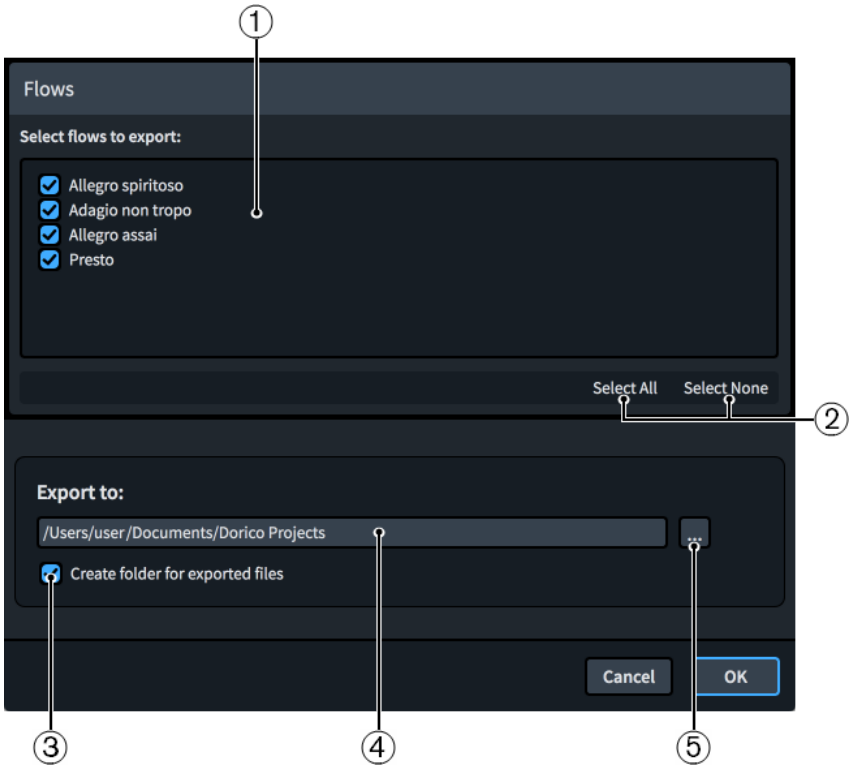
1. Choose **File** > **Export** > **Tempo Track** to open the **Export Tempo Track** dialog.
2. In the **Export Tempo Track** dialog, activate the checkbox for each flow you want to export as a tempo track. You can also click **Select All** or **Select None** at the bottom of the list.
3. Click **Choose Folder** beside the **Export to** field to open the File Explorer/macOS Finder.

   
   
4. In the File Explorer/macOS Finder, locate and select the destination folder you want.
5. Click **Select Folder** (Windows)/**Open** (macOS) to insert the new path in the **Export to** field.
6. Activate/Deactivate **Create folder for exported files**.
7. Click **OK** to export the selected flows as tempo tracks and close the dialog.

## Export Tempo Track dialog

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

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




**Export Tempo Track** dialog

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

**1 Select flows to export**

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

2 **Selection options**

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

3 **Create folder for exported files**

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

4 **Export to field**

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

5 **Choose Folder**

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

# Exporting audio

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

PREREQUISITE

You have positioned the full score layout from which you want to export audio at the top of the **Layouts** panel in Setup mode.

PROCEDURE

1. Choose **File** > **Export** > **Audio** to open the **Export Audio** dialog.
2. In the **Export Audio** dialog, choose one of the following file format options:
   - **Export compressed mp3 (.mp3)**
   - **Export uncompressed WAV (.wav)**
3. Activate/Deactivate **Export each selected flow as a separate file**.
4. In the **Select flows to export** list, activate the checkbox for each flow you want to export as audio. You can also click **Select All** or **Select None** at the bottom of the list.
5. Activate/Deactivate **Export players as separate files**.
6. Optional: If you activated **Export players as separate files**, activate the checkbox for each player you want to export in the **Select players to export** list. You can also click **Select All** or **Select None** at the bottom of the list.
7. Click **Choose Folder** beside the **Export to** field to open the File Explorer/macOS Finder.

   
   
8. In the File Explorer/macOS Finder, locate and select the destination folder you want.
9. Click **Select Folder** (Windows)/**Open** (macOS) to insert the new path in the **Export to** field.
10. Click **OK** to export the selected flows/players as the selected type of audio file and close the dialog.

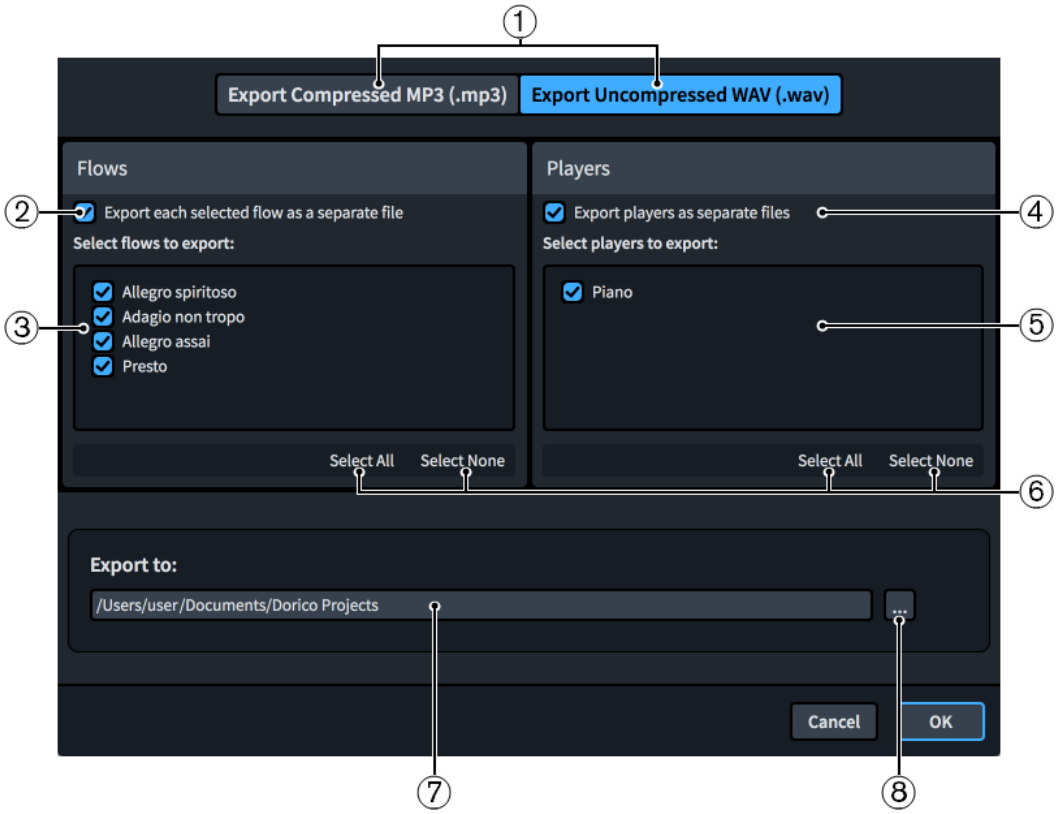
RELATED LINKS

Sorting layouts on page 134
Layouts panel (Setup mode) on page 94
Changing the players assigned to layouts on page 132

## Export Audio dialog

The **Export Audio** dialog allows you to save individual flows and players as separate audio files, either MP3 or WAV.

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




**Export Audio** dialog

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

1 **File format options**

Allows you to choose the audio file format you want to export. Compressed MP3 files are smaller than WAV files but this corresponds to a reduced audio quality.

2 **Export each selected flow as a separate file**

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

3 **Select flows to export**

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

4 **Export players as separate files**

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

5 **Select players to export**

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

6 **Selection options**

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

7 **Export to field**

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

8 **Choose Folder**

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

# Auto-save

The auto-save function stores a version of the currently active project at regular intervals, including new projects you have not explicitly saved yet. This reduces the chances of losing significant amounts of work if you accidentally close a project without saving or in the unlikely event that Dorico Elements or your computer crashes.

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

NOTE

Dorico Elements might become less responsive briefly in order to perform auto-saves, particularly for larger projects.

## Auto-save with multiple projects open

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

## Removal of auto-save files

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

IMPORTANT

This includes any file in the **AutoSave** folder, not just auto-save projects. Therefore, it is important that you do not manually save anything in the **AutoSave** folder.

TIP

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

RELATED LINKS

Toolbar on page 39
Project backups on page 88

# Recovering auto-saved projects

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

PROCEDURE

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

NOTE

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

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

RESULT

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

AFTER COMPLETING THIS TASK

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

## Changing the auto-save frequency

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

PROCEDURE

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

## Disabling auto-save

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

PROCEDURE

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

# Project backups

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

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

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

## Changing the number of backups per project

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

PROCEDURE

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

## Changing the backup location

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

PROCEDURE

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

RESULT

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

# Setup mode

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

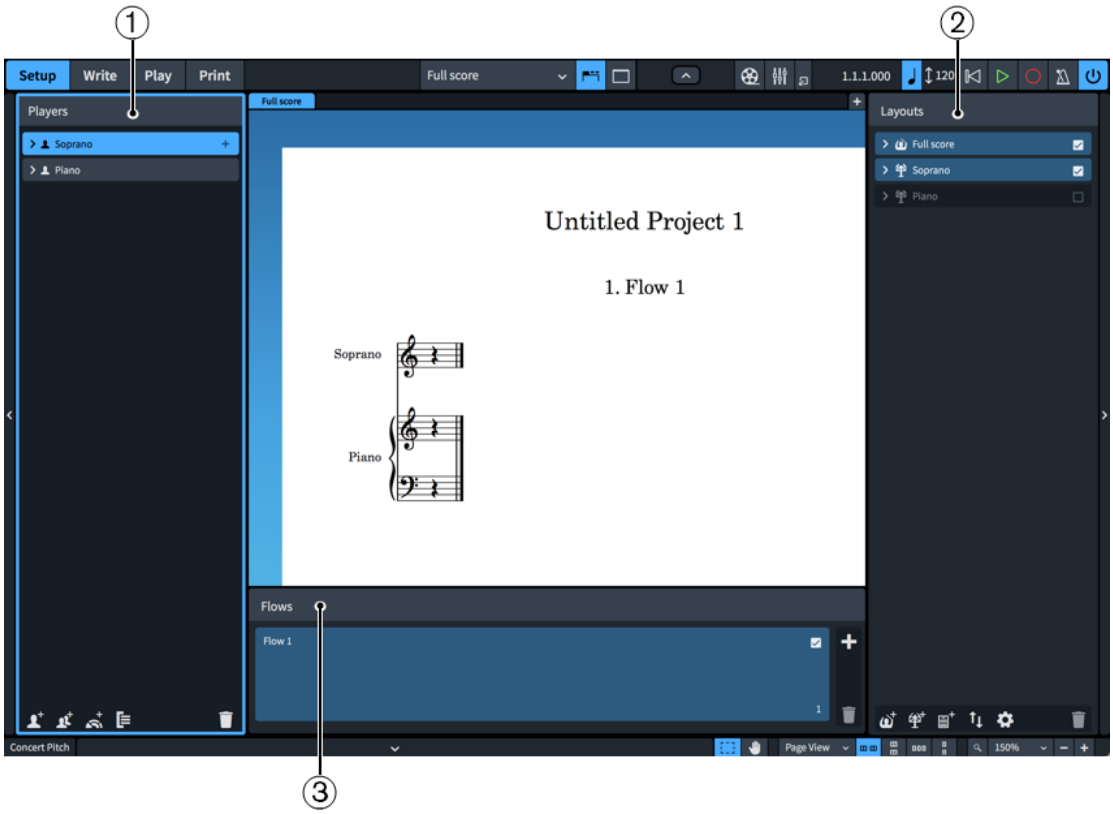
You can view music in the music area and switch between viewing other tabs and layouts, but you cannot select or interact with anything in the music area in Setup mode.

## Project window in Setup mode

The project window in Setup mode contains the default toolbar, the music area, and the status bar. It provides panels with all the tools and functions that allow you to add players and instruments as well as to create layouts and flows for your project.

You can switch to Setup mode in any of the following ways:

- Press **Ctrl/Cmd-1**.
- Click **Setup** in the toolbar.
- Choose **Window** > **Setup**.




Panels in Setup mode

The following panels are available in Setup mode:

**1 Players**

Lists the players, instruments, and groups in your project. By default, players are assigned to all flows and to both the full score layout and their own part layout.

2 **Layouts**

Lists the layouts in your project. A single full score layout and a part layout for each player are created automatically, but you can create and delete layouts as required. By default, layouts contain all flows and full score layouts contain all players.

3 **Flows**

Shows the flows in your project, ordered left to right. By default, flows contain all players and are assigned to all layouts.

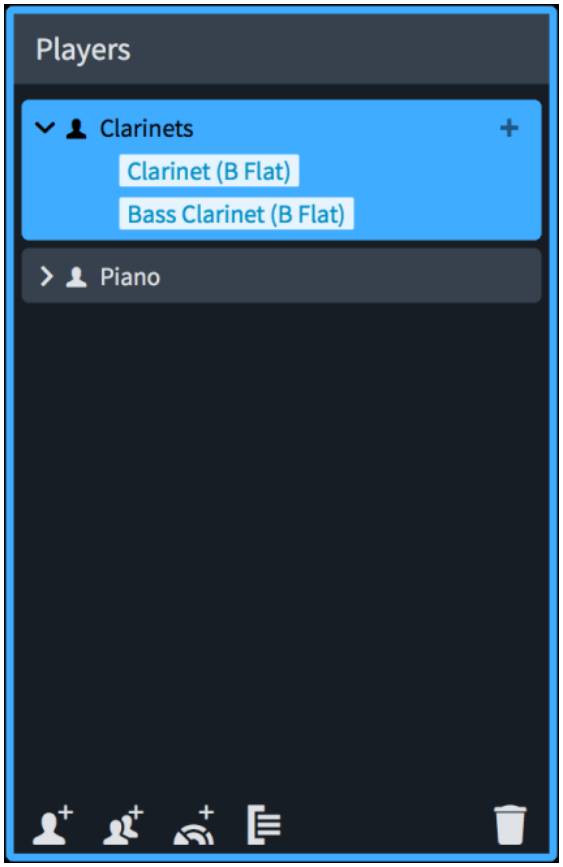
The three panels work together to allow you to control how and where the players, layouts, and flows in your project are used. When you select an item in one of the panels, that panel and the selected item are highlighted in a different color and checkboxes appear in cards in the other panels. You can activate/deactivate these checkboxes independently to change how material is distributed across players, layouts, and flows.

## Players panel

The **Players** panel contains all the players and groups in the project, shown in a list. It is located on the left of the window in Setup mode.

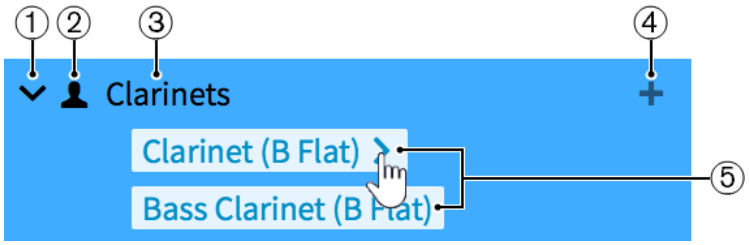
You can hide/show the **Players** panel in Setup mode in any of the following ways:

- Press **Ctrl/Cmd-7**.
- Click the disclosure arrow on the left edge of the main window.
- Choose **Window** > **Show Left Panel**.




**Players** panel in Setup mode

In the **Players** panel, each player is shown as a card that contains the instruments held by that player. Each player card shows the following:




1 **Disclosure arrow**

Expands/Collapses the player card.

2 **Player type**

Shows the type of player from the following options:

- Solo player

- Section player

3 **Player name**

Shows the name of the player. Dorico Elements automatically adds the names of the assigned instruments to the player name. If required, you can rename the player.

4 **Add instruments icon**

Opens the instrument picker from which you can select an instrument for the player.

5 **Instrument labels**

Each instrument assigned to a player has its own instrument label. If you hover the mouse pointer over an instrument label, an arrow appears that allows you to open a menu with further options that allow you to, for example, change the instrument names or move the instrument to another player.

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

**Add Solo Player**

Adds an individual player to your project. Dorico Elements also automatically adds a part layout for the player to the **Layouts** panel.

**Add Section Player**

Adds a player to your project that represents multiple players who all play the same instrument. Dorico Elements also automatically adds a part layout for the player to the **Layouts** panel.

**Add Ensemble**

Adds multiple players to your project that represent standard combinations of musical instruments. Dorico Elements also automatically adds part layouts for each player in the ensemble to the **Layouts** panel.

**Add Group**

Adds a group to your project to which you can assign all types of players.

**Delete Player**

Deletes selected players or groups from the project. When you delete a player, a warning message appears that allows you to delete only the player but leave their part layouts in the project, delete both the player and their part layouts, or cancel.

The order in which the players are listed in the panel is the default order in which they appear in layouts. You can change the player order for each layout individually in the **Players** section of the **Players** page in **Setup** > **Layout Options**.

RELATED LINKS
Players on page 103
Layouts panel (Setup mode) on page 94
Layout Options dialog on page 100

## Instrument picker

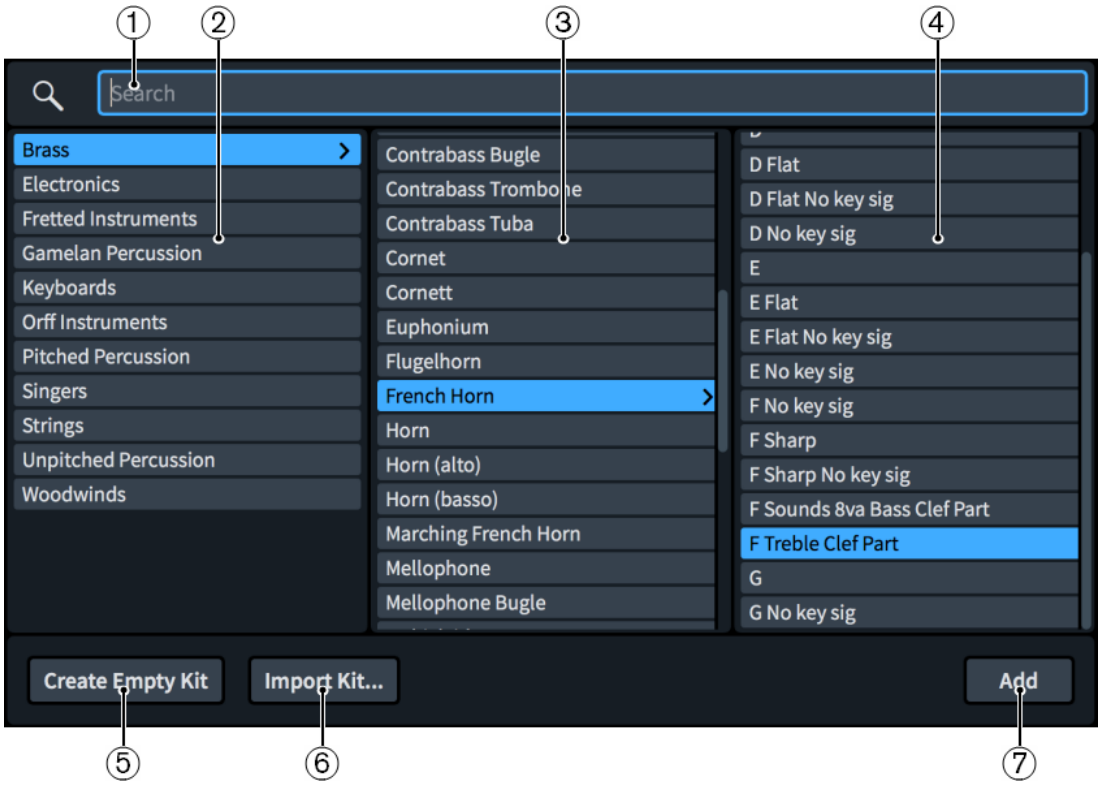
The instrument picker allows you to find and add instruments and ensembles to your project. It contains multiple versions of some instruments that have specific formatting and tuning requirements, such as French Horn, which has a version whose part layouts are always in treble clef.

You can open the instrument picker in Setup mode in any of the following ways:

- Click the plus symbol in solo player cards in the **Players** panel.

- Select a player in the **Players** panel and press **Shift-I**.
- Right-click a player in the **Players** panel and choose **Add Instrument to Player**.
- Add a new player or ensemble.




Instrument picker

The instrument picker contains the following sections and options:

1 **Search field**

Allows you to enter the instrument you are searching for directly. You can enter only part of the instrument name, such as **cello** for Violoncello.

2 **Instrument family column**

Contains instrument families to help you focus your instrument search.

3 **Instrument column**

Contains the instruments available in the selected instrument family.

4 **Instrument type column**

Contains options for multiple possible transpositions, tunings, key signature options, or different behavior in part layouts for the selected instrument. This column is not populated for instruments that do not have further options.

5 **Create Empty Kit**

Adds an empty percussion kit to the player.

6 **Import Kit**

Imports an existing percussion kit previously exported as a library file.

7 **Add/Add Ensemble to Score**

Adds the selected instrument/ensemble to the project. Adding an ensemble adds multiple players at once.

In addition to entering the instrument or ensemble you want directly into the **Search** field, you can click options in the instrument picker to select them, and you can also select other items in the same column by pressing **Up Arrow** / **Down Arrow**.

You can cycle forwards through the instrument picker by pressing **Tab**, which navigates in the following order: **Search field**, **Instrument**, **Instrument type**, **Instrument family**. You can also cycle backwards by pressing **Shift-Tab**, which navigates in the opposite direction.

An enclosure line shows which instrument family or instrument is selected when using the keyboard to navigate.

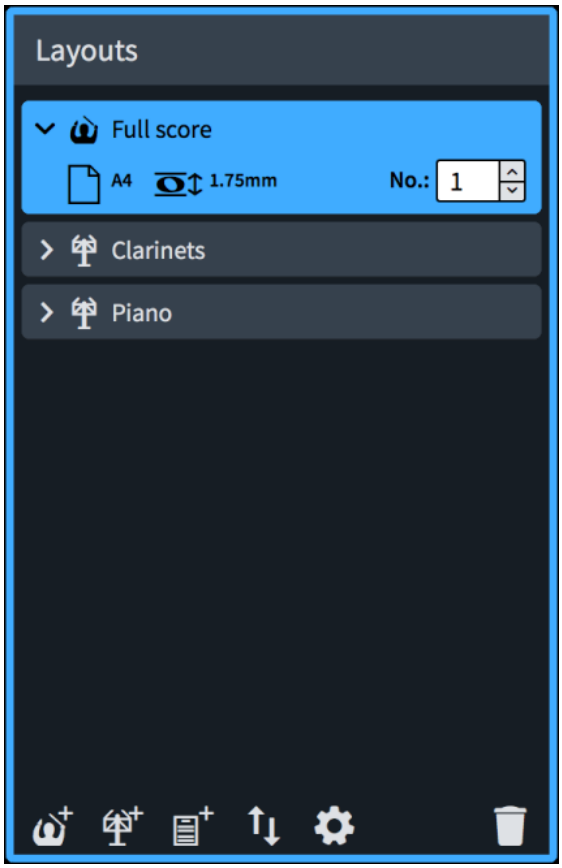
RELATED LINKS
Transposing instruments on page 111
Adding solo/section players on page 104
Adding ensembles on page 107
Adding empty percussion kits to players on page 112
Importing percussion kits on page 870

# Layouts panel (Setup mode)

The **Layouts** panel contains all the layouts in the project, shown in a list. In Setup mode, it is located on the right of the window.

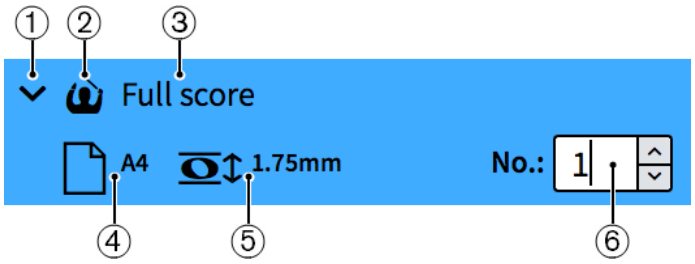
You can hide/show the **Layouts** panel in Setup mode in any of the following ways:

- Press **Ctrl/Cmd-9**.
- Click the disclosure arrow on the right edge of the main window.
- Choose **Window** > **Show Right Panel**.




**Layouts** panel in Setup mode

In the **Layouts** panel, each layout is shown as a card. Each layout card shows the following:




1 **Disclosure arrow**

Expands/Collapses the layout card.

2 **Layout type**

Shows the type of layout from the following options:

- Full score layout

- Instrumental part layout

- Custom score layout

3 **Layout name**

Shows the name of the layout. Dorico Elements automatically adds default names depending on the name of the instrument that is assigned to a player and on the type of layout that is

added. For example, if you assign a flute to a player, the instrumental part layout automatically gets the same name. If you add an empty instrumental part layout, the layout name shows **Empty part** and an incremental number if you add multiple empty part layouts.

4 **Page size and orientation**

Shows the size and orientation of the layout as set on the **Page Setup** page in **Setup** > **Layout Options**.

5 **Space size**

Shows the space size between two staff lines in points, as set on the **Page Setup** page in **Layout Options**. This indicates the size of staves in the layout.

6 **Layout number**

Allows you to set a unique number for the layout that can be used as part of its file name when exported as a graphic. This can be useful to ensure exported part layout files are organized in their orchestral order, as this is usually different to their alphabetical order.

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

**Add Full Score Layout**

Adds a full score layout to your project. By default, every player and flow is automatically included in the layout.

**Add Instrumental Part Layout**

Adds an empty instrumental part layout to your project. You can then add one or multiple players to the layout. By default, a part layout contains all flows that are created in your project.

**Add Custom Score Layout**

Adds a custom score layout that initially without players or flows.

**Sort Layouts**

Sorts all layouts in the **Layouts** panel according to their type in the following order: full score layouts, instrumental part layouts, custom score layouts. It does not sort part layouts according to orchestral order.

**Layout Options**

Opens the **Layout Options** dialog for one or multiple selected layouts.

**Delete Layout**

Deletes selected layouts from the project.

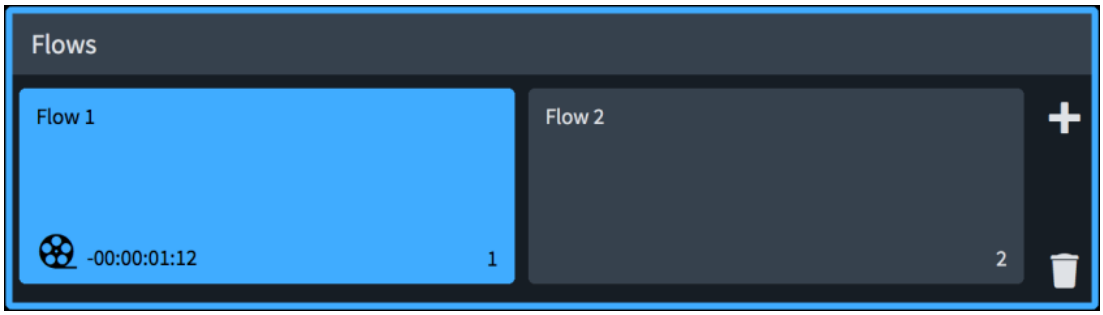
RELATED LINKS
Layouts on page 130
Layout Options dialog on page 100

# Flows panel

The **Flows** panel contains all the flows in the project, shown in horizontal list. It is located at the bottom of the window in Setup mode.

You can hide/show the **Flows** panel in Setup mode in any of the following ways:

- Press **Ctrl/Cmd-8**.
- Click the disclosure arrow at the bottom of the main window.
- Choose **Window** > **Show Bottom Panel**.




**Flows** panel in Setup mode

In the **Flows** panel, each flow is shown as a card. Each flow card shows the following:


**1 Flow name**

Shows the name of the flow. If you create multiple flows without renaming them, each flow name shows a number that increments with each new flow that you create. The number also indicates the position of the flow in a layout.

**2 Film reel icon**

Indicates the flow has an attached video.

**3 Flow timecode**

Shows the start timecode for the flow.

**4 Flow number**

Shows the number of the flow. The number increments with each new flow that you create. The number also indicates the position of the flow in a layout.

To the right of the **Flows** panel, the following options are available:

**Add Flow**

Adds a new flow to your project. By default, every new flow is automatically included in all layouts, and every player is added to the new flow.

**Delete Flow**

Deletes the selected flows from the project.

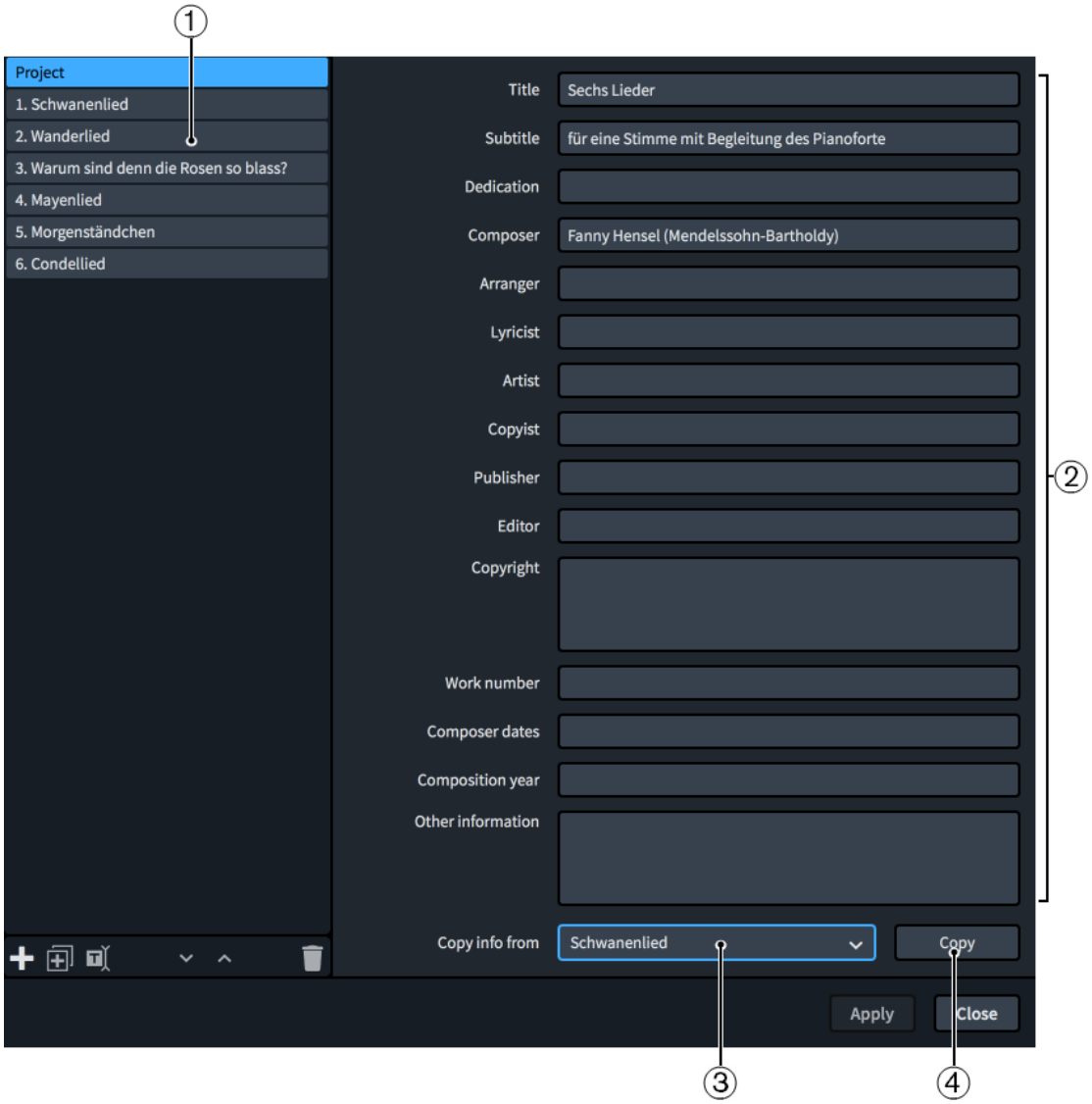
RELATED LINKS
Flows on page 128
Videos on page 141

# Project Info dialog

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

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

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




**Project Info** dialog

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

1 **Flows list**

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

NOTE

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

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

- **New Flow**: Creates a new flow with no information. Its default name is **New Flow**.

- **Duplicate Flow**: Creates a new flow with all the information of the selected flow. Its default name is **Copy of [selected flow]**.

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

NOTE

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

- **Move Down**: Moves the selected flows down the flows list, which changes their order in the project.

- **Move Up**: Moves the selected flows up the flows list, which changes their order in the project.

- **Delete Flow**: Deletes the selected flows.

2 **Information fields**

Allow you to enter information about the currently selected flows or the whole project in the corresponding field, such as **Composer** and **Lyricist**. If you have selected multiple flows with different entries in the same fields, such as flows with different composers, those fields display **Mixed**.

3 **Copy info from menu**

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

4 **Copy**

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

TIP

- You can use tokens in text frames to refer to information in the **Project Info** dialog.

- You cannot specify line breaks in single-line fields. However, you can enter line breaks in larger fields, namely **Copyright** and **Other information**, which you can then copy into single-line fields.

RELATED LINKS
Text tokens on page 355
Flow names and flow titles on page 140

# Layout Options dialog

The **Layout Options** dialog provides multiple options that allow you to make changes that affect the way the notation is laid out on pages of each layout.

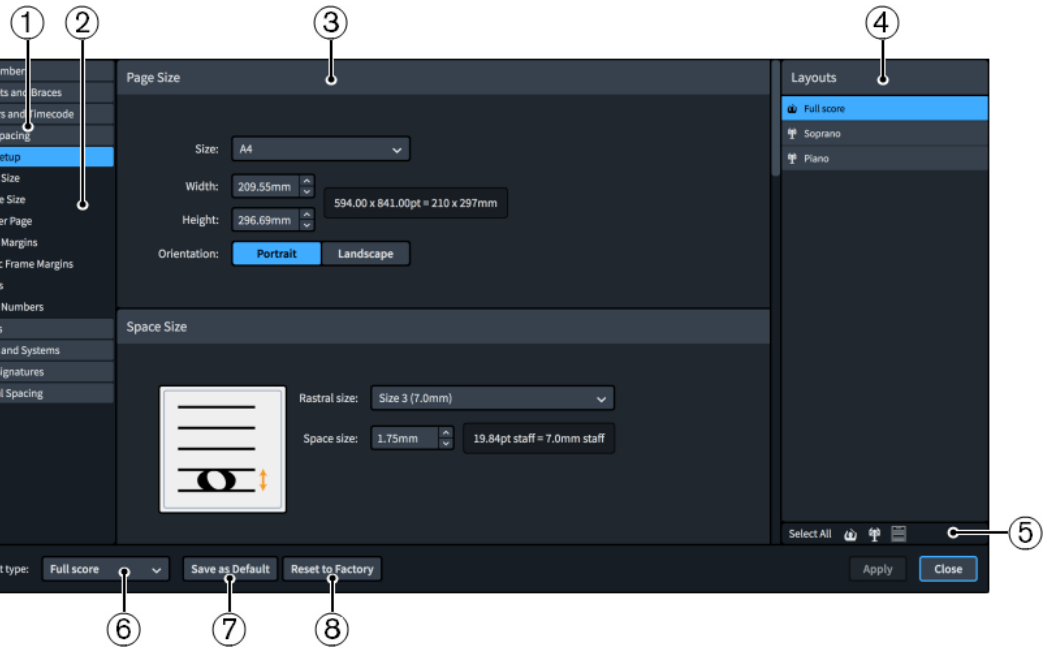
You can change the physical properties of the layout, such as page size, staff size, or margins, and the notation, such as note spacing or staff labels.

TIP

You can save all options that you set in **Layout Options** as the default for new projects by selecting a layout type from the **Layout type** menu and clicking **Save as Default**.

You can open **Layout Options** in any of the following ways:

- Press **Ctrl/Cmd-Shift-L** in any mode.
- Choose **Setup** > **Layout Options** in Setup mode.
- Click **Layout Options** in the **Layouts** panel in Setup mode.




**Layout Options**

The **Layout Options** dialog contains the following:

**1 Page list**

Contains the categories of options that you can view and change in the dialog, divided into pages. When you click a page in this list, any applicable section titles appear below the page in the page list.

2 **Section titles**

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

3 **Section**

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

4 **Layouts list**

Contains all the layouts in your project. You can select one, multiple, or all layouts. You can select multiple layouts in any of the following ways:

- Click one of the selection options in the action bar.
- **Ctrl/Cmd**-click to select multiple layouts.
- **Shift**-click to select multiple adjacent layouts.

5 **Action bar**

Contains selection options that allow you to select layouts in the **Layouts** list according to their type.

- **Select All** selects all layouts, regardless of their type.
- **Select All Full Score Layouts** selects all full score layouts only.
- **Select All Part Layouts** selects all part layouts only.
- **Select All Custom Score Layouts** selects all custom score layouts only.

6 **Layout type**

Allows you to select the layout type for which you want to save your settings as the default. For example, you can save new default settings for part layouts without affecting the default settings for full score layouts.

7 **Save as Default**/**Remove Saved Defaults**

This button has different functions depending on whether you have existing saved defaults for the selected layout type.

- **Save as Default** saves all options currently set in the dialog as the default for the selected layout type in new projects.
- **Remove Saved Defaults** deletes your previous saved defaults without resetting the options in the current project. After removing your saved defaults, all layouts of the selected type in future projects start with the default factory settings. If you have existing saved defaults, you can access **Remove Saved Defaults** by pressing **Ctrl (Windows) or Opt (macOS)**.

8 **Reset to Factory**/**Reset to Saved Defaults**

This button has different functions depending on whether you have existing saved defaults for the selected layout type.

- If you have no saved defaults for the selected layout type, this button is **Reset to Factory**, which resets all the options in the dialog back to the default factory settings for the selected layout type.
- If you have existing saved defaults for the selected layout type, this button is **Reset to Saved Defaults**, which resets all the options in the dialog back to your saved defaults for the selected layout type. You can access **Reset to Factory** instead by pressing **Ctrl (Windows) or Opt (macOS)**. Resetting options back to the default factory settings only affects the selected layout type in the current project and does not delete your saved defaults, meaning future projects still start with your saved defaults.

RELATED LINKS
Staves on page 801

## Making layout-specific changes in Layout Options

You can make project-wide changes for each layout independently in **Layout Options**.

PROCEDURE

1. Open **Layout Options** in any of the following ways:
   - Press **Ctrl/Cmd-Shift-L** in any mode.
   - Choose **Setup** > **Layout Options** in Setup mode.
   - Click **Layout Options** at the bottom of the **Layouts** panel in Setup mode.

     
2. In the **Layouts** list, select the layouts in which you want to change options in one of the following ways:
   - Click **Select All** in the action bar.
   - Click **Select All Full Score Layouts** in the action bar.
   - Click **Select All Part Layouts** in the action bar.
   - Click **Select All Custom Score Layouts** in the action bar.
   - **Shift**-click adjacent layouts.
   - **Ctrl/Cmd**-click individual layouts.

   By default, the layout currently open in the music area is selected when you open the dialog.
3. Click a page in the page list.
4. Look through the available options, and change the settings as required.
5. Click **Apply**, then **Close**.
   If you make changes and close the dialog without clicking **Apply**, you are prompted to save or discard your changes.

RESULT

The changes are applied immediately to the selected layouts.

# Players, layouts, and flows

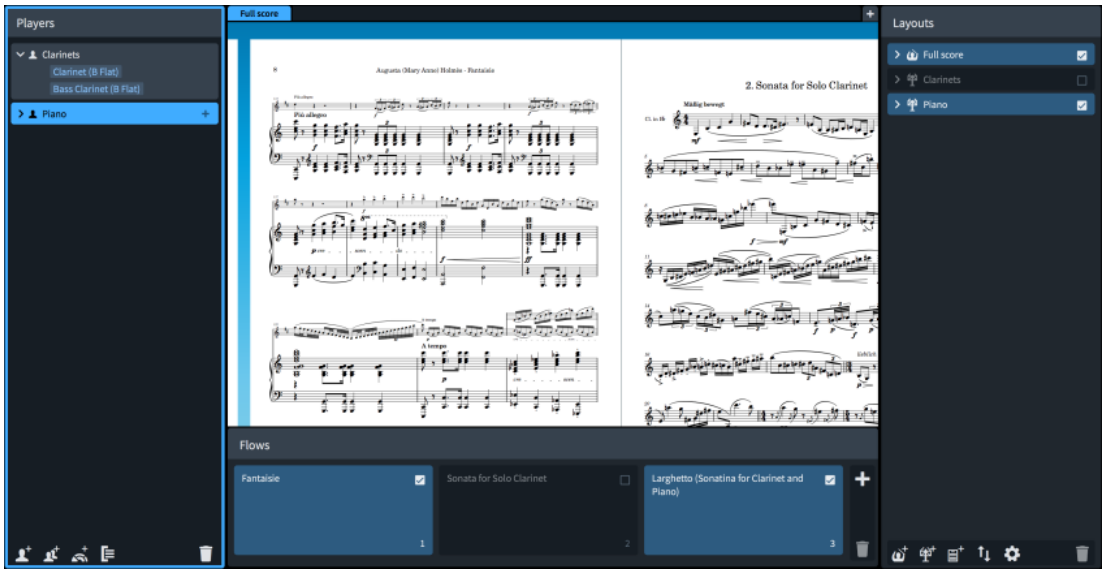
In Dorico Elements, players, layouts, and flows are all connected to each other. Because they exist in the project rather than in a single score, you can, for example, have players and flows saved in the project without showing them in the full score.

- Players can be assigned to any combination of layouts and flows. For example, you can assign a single player to both the full score layout and their own part layout, and remove them from flows in which they do not play. By default, players are assigned to all flows that originated in the project, all full score layouts, and their own part layout.
- Layouts can contain any combination of players and flows. For example, you can assign all the singers to a single part layout, then remove the flows from the layout in which they do not sing. By default, layouts contain all flows and full score layouts contain all players.
- Flows can contain any combination of players and be assigned to/removed from layouts. By default, flows contain all players and are assigned to all layouts.

NOTE

- If you remove a player from a flow, any notes you have already input for that player in that flow are deleted.
- Removing a flow from a layout automatically removes that layout from the flow, and vice versa. The same is true for players and layouts, and players and flows.

When you select a card in one of the panels in Setup mode, each card in the other panels shows a checkbox. Connected cards appear highlighted and have activated checkboxes, while unconnected cards are not highlighted and have deactivated checkboxes. For example, if you select a single player card in the **Players** panel, all the flows to which the player is assigned are highlighted and activated in the **Flows** panel and all layouts to which the player is assigned are highlighted and activated in the **Layouts** panel.




A piano player selected in the **Players** panel with connected flows and layouts highlighted in the **Flows** and **Layouts** panels

RELATED LINKS

Project window in Setup mode on page 90
Flows on page 128
Layouts on page 130
Changing the flows assigned to layouts on page 132
Changing the players assigned to layouts on page 132
Changing the players assigned to flows on page 129

# Players

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

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

NOTE

Section players cannot double instruments, but they can play divisi. This means that they can be divided into smaller units, which is commonly required for strings.

When you add a player in Dorico Elements, the following happens automatically:

- A part layout is created and the new player is assigned to it.
- The player is added to any full score layouts that already exist. If no full score layouts exists, a new full score layout is created.
- The player is assigned to all existing flows that originated in the project. It is not added to any flows that you imported into the project.

NOTE

In Dorico Elements, the maximum number of players you can have in a single project is 12. If you open a project that contains more than 12 players, it opens in read-only mode.

RELATED LINKS
Players, layouts, and flows on page 102
Flows on page 128
Layouts on page 130
Changing the players assigned to layouts on page 132
Changing the players assigned to flows on page 129
Player, layout, and instrument names on page 135
Changing player names on page 138
Brackets according to ensemble type on page 528
Instrument numbering on page 108

## Adding solo/section players

You can add both solo and section players to your project. Solo players can hold multiple instruments, whereas section players can divide.

NOTE

In Dorico Elements, the maximum number of players you can have in a single project is 12.

PREREQUISITE

The **Players** panel is open.

PROCEDURE

1. In the **Players** panel, add an empty-handed player in any of the following ways:
   - To add a solo player, press **Shift-P**.
   - To add a section player, press **Shift-Alt/Opt-P**.
   - If you have started a new project, click **Add Solo Player** in the project start area.

     
   - If you have started a new project, click **Add Section Player** in the project start area.

- At the bottom of the **Players** panel, click **Add Solo Player**.

- At the bottom of the **Players** panel, click **Add Section Player**.

The instrument picker opens.

TIP

You can also open the instrument picker at any time selecting a player in the **Players** panel and pressing **Shift-I**.

2. Select the instrument you want in the instrument picker.
3. Press **Return** to add the selected instrument.

RESULT

The solo/section player is added to all flows in the project. It is automatically named after the selected instrument.

Dorico Elements automatically loads sounds for the instrument according to the current playback template.

NOTE

- Players are not automatically added to flows that you imported into the project.
- If you want to add multiple instruments to your project at the same time, you can add ensembles or use a project template.

AFTER COMPLETING THIS TASK

If you added a solo player and you want them to hold multiple instruments, add other instruments to the solo player.

RELATED LINKS

Instrument picker on page 93
Changing player names on page 138
Project start area on page 43
Adding instruments to players on page 112
Adding ensembles on page 107
Starting new projects from project templates on page 66
Playback templates on page 425

## Duplicating players

You can duplicate players. This adds another player of the same type holding the same instruments as the original.

NOTE

In Dorico Elements, the maximum number of players you can have in a single project is 12.

PROCEDURE

- In the **Players** panel, right-click the player you want to duplicate and choose **Duplicate Player** from the context menu.

RESULT

A new player is added, with the same instruments as the original player. The original and new players are automatically numbered to ensure their names are unique. However, any existing music belonging to the original player is not duplicated.

RELATED LINKS

Changing player names on page 138
Instrument numbering on page 108

## Changing the orchestral order of players

You can change the order in which players appear in the score in the **Players** panel.

PROCEDURE

1. In the **Players** panel, select the player card of the player whose position in the score you want to change.
2. Click and drag the player card upwards/downwards in the panel.
   An insertion line indicates where the player will be positioned.

## Deleting players

You can delete players from your project, which also deletes all instruments held by those players.

IMPORTANT

Deleting instruments permanently deletes any music that you have input on their staves.

PROCEDURE

1. In the **Players** panel, select the players that you want to delete.
2. Press **Backspace or Delete**.
3. Choose one of the following options in the warning message that appears:
   - **Delete Player Only**: Deletes the player and the music that you created for the instruments belonging to that player.
   - **Delete Player and Part Layouts**: Deletes the player, the music, and all part layouts to which the player is assigned.

     NOTE

     The part layout cannot be deleted if it also contains other players.

RELATED LINKS

Deleting instruments on page 115

# Ensembles

If you add an ensemble in Dorico Elements, multiple players are added to your project at the same time.

Dorico Elements provides a set of predefined ensembles that you can use. Adding an ensemble is one of the ways to achieve building up an instrumentation quickly. The predefined ensembles that you can create with Dorico Elements follow standard patterns, such as double woodwind which refers to two flutes, two oboes, two clarinets, and two bassoons.

NOTE

In Dorico Elements, the maximum number of players you can have in a single project is 12. If you open a project that contains more than 12 players, it opens in read-only mode.

## Adding ensembles

You can add multiple players at once by adding ensembles, such as a complete string section or four-part choir.

NOTE

In Dorico Elements, the maximum number of players you can have in a single project is 12.

PREREQUISITE

The **Players** panel is open.

PROCEDURE

1. Open the instrument picker for ensembles in any of the following ways:
   - If you have started a new project, click **Add Ensemble** in the project start area.

     
   - Click **Add Ensemble** at the bottom of the **Players** panel.

     
2. Select the ensemble you want in the instrument picker.
3. Click **Add Ensemble to Score**.

RESULT

The ensemble players are added to the **Players** panel, either as solo or as section players.

TIP

You can also add multiple instruments to your project at the same time by using a project template.

RELATED LINKS

Instrument picker on page 93
Changing player names on page 138
Project start area on page 43
Starting new projects from project templates on page 66

# Instruments

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

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

This means that before you can add instruments to a project, you must first add players or ensembles, which may in turn also be assigned to groups if needed. If you add ensembles, the appropriate instruments for the ensemble are automatically added to the players.

Each instrument automatically gets its own staff, but when instrument changes are allowed, the music for multiple instruments held by the same solo player can appear on the same staff as long as no notes overlap. By default, Dorico Elements allows instrument changes in all layouts and automatically shows instrument change labels. This means that only the top instrument held by players is shown automatically in the music area. You can see staves for all instruments in galley view, and you can allow/disallow instrument changes in each layout independently. You can also hide/show empty staves in each layout independently.

Instruments in Dorico Elements do not have limited ranges; it is possible to notate any pitch in any register on every instrument. However, in the piano roll editor in Play mode, only pitches that fall in the MIDI note range 0-127 can be represented. Similarly, if you input a pitch beyond the range of samples in the assigned VST instrument, the pitch does not sound in playback.

You can change instruments at any time, add/delete them from players, and move them between players.

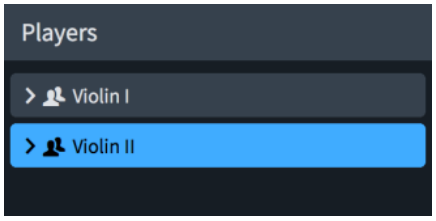
RELATED LINKS
Players on page 103
Piano roll editor on page 374
VST and MIDI Instruments panel on page 369
Inputting notes on page 164
Adding instruments to players on page 112
Player, layout, and instrument names on page 135
Changing instrument names on page 139
Staff labels on page 793
Brackets according to ensemble type on page 528
Changing instruments on page 113
Changing the open pitches of fretted instrument strings on page 124
Moving instruments on page 114
Deleting instruments on page 115
Switching to galley/page view on page 56
Allowing/Disallowing instrument changes on page 110
Hiding/Showing empty staves on page 335
Edit Percussion Kit dialog on page 115

## Instrument numbering

It is customary to number instruments when there is more than one in a piece so that they can be easily identified, such as Horn 1 and Horn 2. Dorico Elements automatically numbers instruments where there are multiple instruments of the same type in the same project.

For example, if there is only one flute in a project, it is called Flute, but if there are three flutes, they are automatically called Flute 1, Flute 2, and Flute 3.


One violin with no number




Adding a second violin automatically generates numbers for both violins

Instrument numbering applies to individual instruments, rather than players. For example, if an ensemble contains two flute players and a piccolo player, but the second flute is also holding a piccolo, then the instruments are numbered in the following way:

- Flute 1
- Flute 2 & Piccolo 1
- Piccolo 2

TIP

You can move individual instruments to different players if you want to change which numbered instruments are held by each player. For example, if you want the second flute to double second piccolo rather than first piccolo, you can swap the piccolo instruments between the players.

Dorico Elements automatically generates instrument numbers for players if the following criteria are met:

- There are multiple instruments of the same type in the project.
- The instrument names are the same.
- The instruments have the same transposition.
- The players holding them are the same type, either solo or section.
- The players are in the same group.

For example, if you have two flutes in your project, but one flute is a section player and the other flute is a solo player, they are not numbered automatically. Similarly, if the two flutes are in different player groups, they are not numbered automatically.

RELATED LINKS
Player, layout, and instrument names on page 135
Changing instrument names on page 139
Player groups on page 125
Instrument transpositions in staff labels on page 796
Moving instruments on page 114
Instrument names in staff labels on page 794
Transposing instruments on page 111

## Instrument changes

Instruments changes are when a player holding multiple instruments switches from playing one instrument to a different instrument. They are usually indicated in full scores and parts with text indications both after the last note before the change and at the first note after the change.

Dorico Elements handles instrument changes automatically, including showing the appropriate instrument change labels, when you have input notes onto multiple instrument staves held by the same solo player, as long as the notes do not overlap.

You can see staves for all instruments in galley view, and you can allow/disallow instrument changes in each layout independently.

RELATED LINKS
Adding instruments to players on page 112
Switching to galley/page view on page 56

## Allowing/Disallowing instrument changes

You can allow/disallow instrument changes in each layout independently, for example, if you want to show multiple percussion instruments on as few staves as possible in the score but on separate staves for each percussion instrument in the percussion part.

Disallowing instrument changes shows all instrument staves in the selected layouts, including multiple instruments held by a single solo player.

TIP

If you want to input notes for other instruments held by solo players but keep instrument changes in the layout, you can switch to galley view to see all staves in the project.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to allow/disallow instrument changes.

   By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Players** in the page list.
4. In the **Instrument Changes** section, activate/deactivate **Allow instrument changes**.
5. Click **Apply**, then **Close**.

RESULT

Instrument changes are allowed in the selected layouts **Allow instrument changes** is activated, and disallowed when it is deactivated.

NOTE

Multiple instruments can only appear on the same staff with an instrument change if none of their notes overlap. If any of their notes do overlap, multiple staves are shown.

RELATED LINKS
Instruments on page 108
Inputting notes on page 164
Hiding/Showing empty staves on page 335
Switching to galley/page view on page 56

# Transposing instruments

While most instruments produce notes at concert pitch, transposing instruments produce a note that is different to the one that is written. For example, two common orchestral transposing instruments are clarinet in B♭ and horn in F.

When a clarinet in B♭ plays a C, the sound produced is a B♭, one tone below. When a horn in F plays a C, the sound produced is an F, a fifth below. Other instruments that conventionally produce a pitch different to the one notated include the piccolo (sounding an octave above written), double bass (sounding an octave below written), and glockenspiel (sounding two octaves above written).

Dorico Elements stores all note information in concert pitch and automatically transposes notes as appropriate for the transposition of the instrument. This means notes, key signatures, and chord symbols are automatically changed in transposing layouts compared to non-transposing layouts. You can also change instruments at any time, and the music is adjusted automatically to ensure the correct pitches are shown.

RELATED LINKS
Instrument picker on page 93
Instrument numbering on page 108
Concert vs. transposed pitch on page 134
Making layouts transposing/concert pitch on page 133
Setting different clefs for concert/transposed pitch on page 550
Changing instruments on page 113
Hiding/Showing clefs according to layout transpositions on page 550

# Fretted instrument tuning

Fretted instruments can have different numbers of strings and frets. In order to display tablature for fretted instruments in Dorico Elements, you must specify information about the tuning of fretted instruments.

Dorico Elements requires the following information to display tablature:

- The number of strings the instrument has
- The open pitch of each string
- The number of frets
- The fret number at which each string starts, such as for the fifth string on a banjo
- The pitch intervals between frets

When you assign a fretted instrument to a player or change an existing instrument, any available tunings for that instrument are shown in the instrument picker.

You can also customize all aspects of fretted instruments in the **Edit Strings and Tuning** dialog.

NOTE

Any fretted instruments in projects created in earlier versions of Dorico Elements are automatically assigned the standard set of strings and tunings associated with that instrument when the project is first opened in Dorico Elements 3. The quickest way to change their tuning is changing the instrument type in the instrument picker.

RELATED LINKS
Instrument picker on page 93
Changing instruments on page 113
Edit Strings and Tuning dialog on page 123

# Adding instruments to players

You can add instruments to both solo and section players. You can add multiple instruments to solo players but only a single instrument to section players.

PREREQUISITE

You have added a solo or section player.

PROCEDURE

1. In the **Players** panel, select the player to which you want to add instruments.

   NOTE

   You can only add instruments to a single player at a time.

2. Press **Shift-I** to open the instrument picker.
3. Select the instrument you want in the instrument picker.
4. Press **Return** to add the selected instrument.
5. Optional: Repeat steps 2 to 4 to add multiple instruments to a single solo player.

   NOTE

   - You can only add a single instrument to each section player.
   - If you want to add multiple instruments to your project at the same time, you can add ensembles or use a project template.

RESULT

The selected instrument is added to the selected player.

Dorico Elements automatically loads sounds for the instrument according to the current playback template.

NOTE

Before you have input any notes, only the first instrument held by solo players is shown in full scores in page view. All instrument staves are shown in galley view, so we recommend switching to galley view to input notes for any other instruments held by solo players.

RELATED LINKS

Instrument picker on page 93
Adding ensembles on page 107
Starting new projects from project templates on page 66
Switching to galley/page view on page 56
Playback templates on page 425

# Adding empty percussion kits to players

You can add empty percussion kits to players, to which you can then add unpitched percussion instruments.

PROCEDURE

1. In the **Players** panel, open the **Edit Percussion Kit** dialog in any of the following ways:
   - Select a solo or section player, press **Shift-I**, and click **Create Empty Kit** in the instrument picker.

- Click the plus symbol to the right of the added empty-handed player and click **Create Empty Kit** in the instrument picker.

- Right-click a player and choose **Create Empty Kit** from the context menu.

2. Add the percussion instruments you want to the kit in the **Edit Percussion Kit** dialog.

RELATED LINKS
Edit Percussion Kit dialog on page 115
Instrument picker on page 93

## Combining individual percussion instruments into kits

If a player is holding one or more individual percussion instruments, you can combine them into a percussion kit.

PROCEDURE

1. Right-click the card of the player whose percussion instruments you want to combine into a kit and choose **Combine Instruments into Kit** from the context menu.
2. Edit the kit in the **Edit Percussion Kit** dialog that opens.

   For example, you can change the order in which the instruments appear in a grid or on a five-line staff.

RESULT

A new kit is created containing all the instruments held by the player.

NOTE

If the player was already holding one or more kit instruments, all individual instruments and any other kits are combined into the first kit.

## Changing instruments

You can change the instruments held by players without affecting any music already entered onto their staves, for example, if your Clarinet part is very low and you want to change it to a Bass Clarinet or you want to change the tuning of a guitar.

NOTE

- You cannot change percussion kits into other instruments, you can only change individual unpitched percussion instruments.
- You cannot change a pitched instrument into an unpitched instrument, and vice versa.
- These steps describe changing the instrument type, not an instrument change partway through a flow.

PROCEDURE

1. In the **Players** panel, expand the card of the player whose instrument you want to change.

   The card lists the instruments of the player.

2. Hover over the label of the instrument you want to change, click the arrow that appears, and choose **Change Instrument** to open the instrument picker.

3. Select the instrument you want in the instrument picker.
4. Press **Return** to change to the selected instrument.

RESULT

The selected instrument is changed, without affecting any music on its staff.

NOTE

Where appropriate, new clefs are input. This means that notes can appear differently so that they are notated correctly according to the new clef.

RELATED LINKS

Instrument picker on page 93
Fretted instrument tuning on page 111
Transposing instruments on page 111
Edit Strings and Tuning dialog on page 123
Instrument changes on page 109

## Moving instruments

You can move individual instruments without affecting any music already input for those instruments. You can move instruments between players or to a different position in the instrument list for a solo player, for example, if you want to change the order of staves in the score.

PROCEDURE

- In the Players panel, move instruments in any of the following ways:
  - To change the order of instruments for a single player, click and drag a single instrument and release it at the required position.
  - To move instruments to another player, click and drag a single instrument and release it over the player card to which you want to move them.
  - To move instruments to another player, click the arrow that appears in the instrument label when you hover over it and choose **Move Instrument to Player** > **[Player]**.

    NOTE

    You can only move instruments to players already added to your project.

RELATED LINKS

Instrument changes on page 109
Adding solo/section players on page 104

# Deleting instruments

You can delete individual instruments without deleting the player holding them or other instruments held by the same player.

IMPORTANT

Deleting instruments permanently deletes any music that you have input on their staves.

PROCEDURE

1. In the **Players** panel, expand the card of the player holding the instrument you want to delete.
2. Click the arrow that appears in the instrument label when you hover over it and choose **Delete Instrument**.
3. Click **OK**.

RESULT

The instrument is deleted from the player.

TIP

If you want to delete all instruments held by a single player, you can also delete the player.

RELATED LINKS

Deleting players on page 106

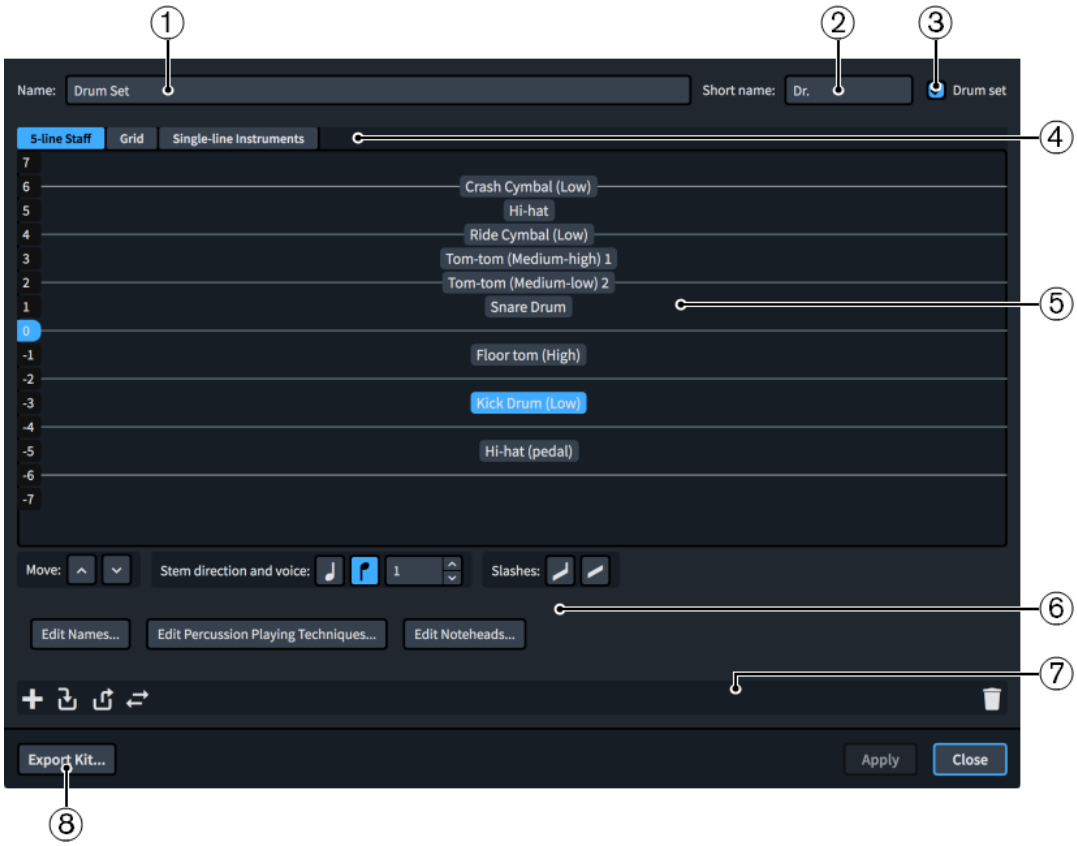
# Edit Percussion Kit dialog

The **Edit Percussion Kit** dialog allows you to make changes to percussion kits, including which instruments are included in them and how instruments are arranged in the different available kit presentations.

- The dialog opens automatically when you create empty kits or combine existing instruments into a kit.
- You can also open the **Edit Percussion Kit** dialog manually for existing percussion kit instruments by expanding the player card of the player holding the percussion kit in the **Players** panel in Setup mode, then clicking the arrow in its label and choosing **Edit Percussion Kit**.

NOTE

Percussion kit instrument labels are green in the **Players** panel in Setup mode.




**Edit Percussion Kit** dialog

**1 Name**

Allows you to enter or change the full name for the percussion kit. This is used in **Full** staff labels for percussion kits that use the five-line staff presentation type.

**2 Short name**

Allows you to enter or change the abbreviated name for the percussion kit. This is used in **Abbreviated** staff labels for percussion kits that use the five-line staff presentation type.

**3 Drum set**

Percussion kits are defined as drum sets when the checkbox is activated. Percussion kits that are defined as drum sets have different default settings, including for voicing and default stem directions.

**4 Presentation types**

Allows you to select a percussion kit presentation type in order to edit how the selected percussion kit appears in that presentation type.

- **5-line Staff**: Kit instruments are shown on a five-line staff. You can determine which instruments are shown on each line and in each space of the staff. A single staff label containing the name of the kit is shown.
- **Grid**: Kit instruments are shown on a grid, with each instrument on its own line. You can customize how large the gaps between each line are. Staff labels are shown for each instrument in a smaller font than normal staff labels.
- **Single-line Instruments**: Kit instruments are shown as individual instruments with their own lines. Normal-sized staff labels are shown for each instrument.

**5 Editor**

Displays the current arrangement of instruments in the selected percussion kit presentation type. You can change the order of instruments and the layout of lines and spaces in the grid presentation type by using the controls.

**6 Controls**

Allows you to change the order and stem direction of instruments in the selected percussion kit presentation type. It also allows you to add slash voices to the kit.

You can access dialogs to change the noteheads used for each instrument in the kit by clicking **Edit Noteheads**. You can also change how combinations of noteheads, articulations, and tremolos affect playback by clicking **Edit Percussion Playing Techniques**.

You can also change the names of individual instruments within percussion kits. Click **Edit Names** to open the **Edit Instrument Names** dialog.

NOTE

This changes the appearance of percussion instrument names in all presentations. Depending on the percussion kit presentation type, staff labels might use different information than these instrument names.

**7 Action bar**

Contains options that apply to all presentation types.

- **Add New Instrument**: Opens the instrument picker, which allows you to choose a new unpitched percussion instrument to be added to the kit.

- **Add Existing Instrument From Player**: Shows a menu listing the other players in your project that are holding individual percussion instruments not in kits. You can select a percussion instrument from another player to move to this kit, bringing its music with it.

- **Remove Instrument From Kit**: Removes the selected instrument from the kit, so it appears as an individual instrument. You can move individual instruments to other players or into other kit instruments.

- **Change Instrument**: Opens the instrument picker, which allows you to choose a new unpitched instrument to replace the selected instrument while retaining its music.

- **Delete Instrument**: Deletes the instrument from the kit, including its music.

**8 Export Kit**

Allows you to export the percussion kit as a library file so you can use it in other projects.

RELATED LINKS

Percussion kits and drum sets on page 869
Staff labels for percussion kits on page 798
Percussion kit presentation types on page 873
Percussion Instrument Playing Techniques dialog on page 876
Playing techniques for unpitched percussion instruments on page 875

## Adding instruments to percussion kits

You can add new instruments to percussion kits within the **Edit Percussion Kit** dialog.

PROCEDURE

1. In the **Players** panel, expand the card of the player holding the kit to which you want to add instruments.
2. Click the arrow that appears in the kit instrument label when you hover over it and choose **Edit Percussion Kit** to open the **Edit Percussion Kit** dialog.
3. Click **Add New Instrument** to open the instrument picker.

   
4. Select the percussion instrument you want in the instrument picker.
5. Press **Return** to add the selected instrument.
6. Click **Close**.

RESULT

The selected instrument is added to the percussion kit.

## Changing instruments in percussion kits

You can change existing instruments in percussion kits while retaining any existing music for that instrument.

PROCEDURE

1. In the **Players** panel, expand the card of the player holding the kit in which you want to change instruments.
2. Click the arrow that appears in the kit instrument label when you hover over it and choose **Edit Percussion Kit** to open the **Edit Percussion Kit** dialog.
3. Click the instrument you want to change.
4. Click **Change Instrument** in the action bar to open the instrument picker.

   
5. Select the percussion instrument you want in the instrument picker.
6. Press **Return** to change to the selected instrument.
7. Click **Close**.

RESULT

The instrument is changed to the one selected in the instrument picker. Any music input for the previous instrument is retained.

NOTE

Playing techniques expressed using playing technique-specific noteheads are not retained.

## Defining percussion kits as drum sets

You can define individual percussion kits as drum sets. Drum sets use a different voicing than percussion kits when using the five-line staff presentation.

PROCEDURE

1. In the **Players** panel, expand the card of the player holding the kit you want to define as a drum set.
2. Click the arrow that appears in the kit instrument label when you hover over it and choose **Edit Percussion Kit** to open the **Edit Percussion Kit** dialog.
3. Activate **Drum set** in the top right of the dialog.
4. Click **Apply**, then **Close**.

RESULT

The selected percussion kit is defined as a drum set. The arrangement of voices for instruments in the kit when using the five-line staff presentation type follows the default settings for drum sets.

NOTE

If you no longer want a percussion kit to be defined as a drum set, you can deactivate **Drum set** in the **Edit Percussion Kit** dialog for that kit.

RELATED LINKS

Percussion Instrument Playing Techniques dialog on page 876

## Creating groups of instruments within grid presentation percussion kits

You can create groups of instruments within percussion kits that use the grid presentation type in order to have a better overview of the instruments in the kit.

In grid presentation percussion kits, the name of each individual instrument is shown in the staff label. You can simplify the staff label of grid presentation percussion kits by creating groups, for example, to show Wood Blocks instead of Wood Block (High), Wood Block (Medium), and Wood Block (Low).

PROCEDURE

1. In the **Players** panel, expand the card of the player holding the kit in which you want to create groups in the grid presentation.
2. Click the arrow that appears in the kit instrument label when you hover over it and choose **Edit Percussion Kit** to open the **Edit Percussion Kit** dialog.
3. Click **Grid** at the top of the dialog.
4. Click the first instrument you want to include in the group.
5. **Shift**-click the last instrument you want to include in the group.

   NOTE

   You can only include adjacent instruments in groups.
6. Click **Add**.

RESULT

A group is created containing the selected instruments. The group is given a default name that you can change.

## Renaming groups in grid presentation percussion kits

Group names are shown as instrument labels. You can change the names of groups in percussion kits using grid presentation.

PROCEDURE

1. In the **Players** panel, expand the card of the player holding the kit in which you want to change the names of groups in the grid presentation.
2. Click the arrow that appears in the kit instrument label when you hover over it and choose **Edit Percussion Kit** to open the **Edit Percussion Kit** dialog.
3. Click **Grid** at the top of the dialog.
4. Double-click the group you want to rename to open the **Edit Percussion Grid Group Names** dialog.

   Groups are shown as colored blocks in the column to the left of the list of percussion kit instruments.
5. Enter the names you want to give the group in the corresponding fields in the **Edit Percussion Grid Group Names** dialog:
   - **Full Name**
   - **Short Name**
6. Click **OK** to save your changes and close the dialog.

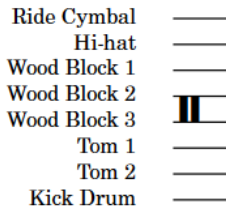
RESULT

The name of the group is changed. This also changes the staff label for the group.

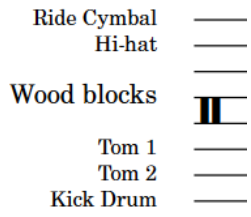
NOTE

Staff labels for groups in grid presentation percussion kits use a different paragraph style to the staff labels for non-grouped instruments in grid presentation percussion kits.

EXAMPLE




Ungrouped grid presentation percussion kit




Grid presentation percussion kit with wood blocks grouped

RELATED LINKS

Staff labels for percussion kits on page 798

## Deleting groups within grid presentation percussion kits

You can delete groups in percussion kits using grid presentation, without deleting the instruments within the group.

PROCEDURE

1. In the **Players** panel, expand the card of the player holding the kit from whose grid presentation you want to delete groups.
2. Click the arrow that appears in the kit instrument label when you hover over it and choose **Edit Percussion Kit** to open the **Edit Percussion Kit** dialog.
3. Click **Grid** at the top of the dialog.
4. Click the group you want to delete.

   Groups are shown as colored blocks in the column to the left of the list of percussion kit instruments.
5. Click **Delete**.

RESULT

The group is deleted. The individual staff labels for each instrument in the group are restored.

## Changing the positions of instruments within percussion kits

You can change the positions of instruments within percussion kits of all presentation types to change the order in which the instruments appear in the score and parts. In five-line staff presentation types, you can also change the staff position of slash voices.

PROCEDURE

1. In the **Players** panel, expand the card of the player holding the kit in which you want to change the positions of instruments.
2. Click the arrow that appears in the kit instrument label when you hover over it and choose **Edit Percussion Kit** to open the **Edit Percussion Kit** dialog.
3. Click the kit presentation type in which you want to change the order of instruments.

   For example, click **Grid** to change the order of instruments when the kit uses the grid presentation type.
4. Click the percussion instruments and/or slash voices whose position you want to change.

   NOTE

   When using the mouse, you can only move one instrument or slash voice at a time.
5. Change the position of the selected instruments/slash voices in any of the following ways:
   - Click **Move** up arrow to move them upwards.
   - Click **Move** down arrow to move them downwards.
   - Click and drag a single instrument upwards/downwards (five-line staff presentation only).
6. Optional: Repeat these steps for other instruments in the percussion kit, and for other kit presentation types for the same percussion kit.
7. Click **Apply**, then **Close**.

RESULT

The positions of the selected instruments and/or slash voices within the kit is changed. Multiple instruments can share the same staff position, but we recommend that they use different noteheads so that the player can tell them apart.

RELATED LINKS

Moving notes to different instruments in percussion kits on page 871

## Changing the size of gaps between lines in percussion grids

You can change the size of gaps between lines in percussion kits using the grid presentation type.

PROCEDURE

1. In the **Players** panel, expand the card of the player in whose percussion kit you want to change the size of gaps in the grid presentation.
2. Click the arrow that appears in the kit instrument label when you hover over it and choose **Edit Percussion Kit** to open the **Edit Percussion Kit** dialog.
3. Click **Grid** at the top of the dialog.
4. Click the instruments below which you want to change the gap size.
5. Change the value for **Gap**.
6. Click **Apply**, then **Close**.

RESULT

The size of the gaps below the selected instruments is changed.

## Removing individual instruments from percussion kits

You can remove individual instruments from percussion kits, for example, if you want to move an instrument from one percussion kit to another player.

PROCEDURE

1. In the **Players** panel, expand the card of the player holding the kit from which you want to remove instruments.
2. Click the arrow that appears in the kit instrument label when you hover over it and choose **Edit Percussion Kit** to open the **Edit Percussion Kit** dialog.
3. Click the instruments you want to remove from the kit.
4. Click **Remove Instrument From Kit** in the action bar.

5. Click **Close**.

RESULT

The selected instruments appears as individual instruments belonging to the same player but separate from the percussion kit.

You can then move the instruments to other players if required.

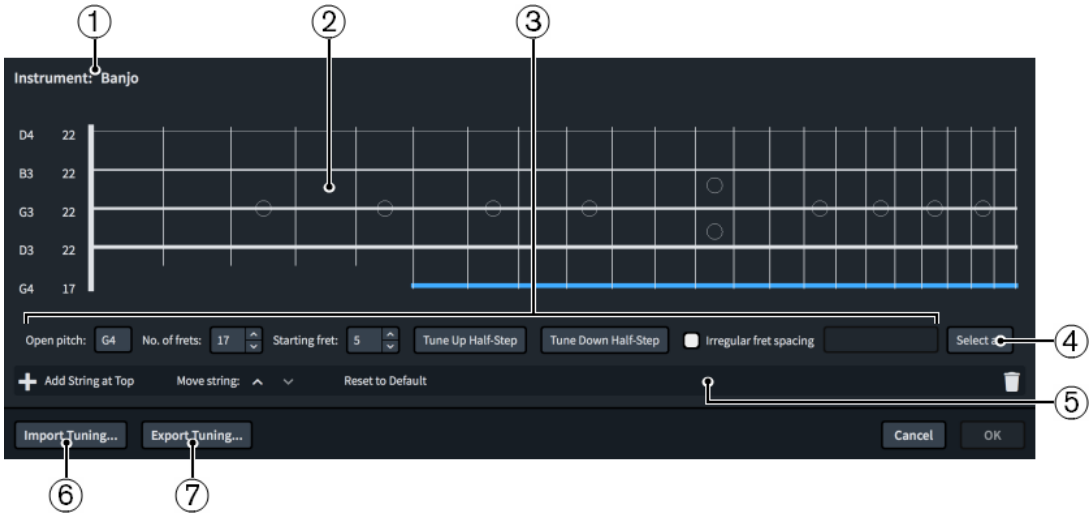
RELATED LINKS

Moving instruments on page 114

# Edit Strings and Tuning dialog

The **Edit Strings and Tuning** dialog allows you to customize the tuning of individual fretted instruments by changing the number of strings and frets they have, the pitches of their open strings, and the spacing of their frets.

- You can open the **Edit Strings and Tuning** dialog in Setup mode by expanding the player card of the player holding the fretted instrument in the **Players** panel, then clicking the arrow in its label and choosing **Edit Strings and Tuning**.




**Edit Strings and Tuning** dialog

The **Edit Strings and Tuning** dialog comprises the following:

**1 Instrument**

Displays the name of the selected fretted instrument.

**2 String editor**

Allows you to select and edit individual or all strings of the fretted instrument. The arrangement of strings in the editor matches that of the real instrument. The pitch and total number of frets of each string is shown to the left of the vertical line that represents the nut.

**3 Controls**

Allow you to edit individual or multiple strings. The following controls are available when at least one string is selected in the string editor:

- **Open pitch**: Allows you to set the open pitch of the string using the note name and octave, such as **C4** for middle C. If necessary, you can add **#** for sharp and **b** for flat.
- **No. of frets**: Allows you to set the number of frets for the selected strings.
- **Starting fret**: Allows you to set the number of the first fret on the selected strings. For example, the fifth string on the banjo starts at fret 5.
- **Tune Up Half-Step**: Allows you to raise the open pitch of the selected strings by a half-step (semitone).
- **Tune Down Half-Step**: Allows you to lower the open pitch of the selected strings by a half-step (semitone).
- **Irregular fret spacing**: Allows you to set non-chromatic fret arrangements for instruments with fretboards that correspond to other scales, such as the dulcimer. Enter **1** for a half-step and **2** for a whole-step, with each step separated by a comma. For example, enter **2,2,1,2,2,2,1** to set the pattern for a major scale.

**4 Select all**

Selects all strings at once.

5 **Action bar**

Contains options that allow you to change the number and arrangement of strings.

- **Add String**: Adds a new string below the lowest currently selected string. The new string is a duplicate of the lowest currently selected string.
- **Add String at Top**: Adds a new string at the top of the fretboard. The new string is a duplicate of the previous top string.
- **Move string buttons**: Allow you to move the currently selected strings up/down the fretboard.
- **Reset to Default**: Returns all strings and corresponding tunings to the factory default settings for the fretted instrument.
- **Delete String**: Deletes the selected strings.

6 **Import Tuning**

Opens the File Explorer/macOS Finder, where you can select the `.doricotuning` file that you want to import and apply to the fretted instrument.

7 **Export Tuning**

Opens the File Explorer/macOS Finder, where you can select the location to which you want to export the strings and tuning settings of the fretted instrument as a `.doricotuning` file. You can then import the `.doricotuning` file into other instruments/projects and share it with other users.

RELATED LINKS
Tablature on page 809
Fretted instrument tuning on page 111

## Changing the open pitches of fretted instrument strings

You can change the open pitch of each fretted instrument string independently, for example, if your project requires an unconventional tuning that is not available as an instrument type in the instrument picker.

PROCEDURE

1. In the **Players** panel, expand the card of the player holding the fretted instrument whose open pitches you want to change.
2. Click the arrow that appears in the instrument label when you hover over it and choose **Edit Strings and Tuning** to open the **Edit Strings and Tuning** dialog.
3. Select the string whose open pitch you want to change.
4. Change the **Open pitch** value, for example, to **G2**.
5. Optional: Repeat steps 3 and 4 to change the open pitch of other strings.
6. Click **OK** to save your changes and close the dialog.

RESULT

The open pitches of the selected strings are changed. This affects the tuning of the instrument and the pitch of all fret positions on those strings.

RELATED LINKS
Fretted instrument tuning on page 111

## Importing fretted instrument tunings

You can import custom fretted instrument tunings that you have already created and apply them to instruments. This allows you to reuse tunings without having to create them from scratch.

PROCEDURE

1. In the **Players** panel, expand the card of the player holding the fretted instrument to which you want to apply an imported tuning.
2. Click the arrow that appears in the instrument label when you hover over it and choose **Edit Strings and Tuning** to open the **Edit Strings and Tuning** dialog.
3. Click **Import Tuning** at the bottom of the dialog to open the File Explorer/macOS Finder.
4. Locate and select the `.doricotuning` library file you want to import.
5. Click **Open**.

RESULT

The selected `.doricotuning` file is applied to the fretted instrument.

## Exporting fretted instrument tunings

You can export fretted instrument tunings so you can reuse them for other instruments and in other projects. Fretted instrument tunings are exported as `.doricotuning` library files.

PROCEDURE

1. In the **Players** panel, expand the card of the player holding the fretted instrument whose tuning you want to export.
2. Click the arrow that appears in the instrument label when you hover over it and choose **Edit Strings and Tuning** to open the **Edit Strings and Tuning** dialog.
3. Click **Export Tuning** at the bottom of the dialog to open the File Explorer/macOS Finder.
4. In the File Explorer/macOS Finder, specify a name and location for the library file.
5. Click **Save**.

RESULT

The tuning of the selected fretted instrument is exported and saved as a `.doricotuning` library file.

AFTER COMPLETING THIS TASK

You can import the library file into other projects to reuse the fretted instrument tuning.

# Player groups

A group represents a collection of musicians that are considered together, such as one choir in a work for double choir or an off-stage ensemble. Player groups have their own brackets.

Grouping players together means they are positioned together in the score, numbered independently of players outside the group, and are bracketed together according to the ensemble type set for each layout.

For example, if your project is for double choir (SATB/SATB), all voices are joined by a single bracket by default because they are in the same family. However, if you add each choir to its own group, they are bracketed separately. This is useful in works containing multiple groups, such as in Britten's “War Requiem”, which has three distinct groups, or in Walton's “Belshazzar's Feast” which requires two separate off-stage brass groups.

You can add as many player groups as required, for example, to allow easy separation of forces or to prevent automatic instrument numbering for percussion instruments when multiple percussion players hold the same instrument to accommodate instrument changes.

NOTE

If the instruments you group together were not already next to each other according to orchestral order, this changes the order of players in the score project-wide.

RELATED LINKS

Instrument numbering on page 108
Brackets and braces on page 526
Brackets according to ensemble type on page 528

## Adding player groups

You can organize players into groups, for example, if you want to bracket them together. Players in different groups are also numbered separately.

PREREQUISITE

The **Players** panel is open.

PROCEDURE

1. Optional: If you want to add a group that includes existing players, select those players in the **Players** panel.
2. At the bottom of the **Players** panel, click **Add Group**.

RESULT

A new player group is added to the **Players** panel. If you selected players, those players are added to the group. If you did not select players, the new group is empty.

AFTER COMPLETING THIS TASK

You can add players to groups and move them between groups.

RELATED LINKS

Adding players to groups on page 127
Moving players between groups on page 127

## Renaming player groups

You can change the name of player groups after you have added them.

PROCEDURE

1. In the **Players** panel, double-click the name of the group.
2. Enter a new name for the group or edit the existing name.
3. Press **Return**.

## Deleting player groups

You can delete groups of players, for example, if you no longer need a group of players that you created when importing a MIDI file. When deleting player groups, you can choose to keep the players within the group or delete them as well.

PROCEDURE

1. In the **Players** panel, select the group that you want to delete.
2. Press **Backspace or Delete**.
3. Choose one of the following options in the warning message that opens:
   - **Keep Players**: Deletes the group but keeps the players.
   - **Delete Players**: Deletes the group and the players it contains.

## Adding players to groups

You can add existing or new players to player groups.

PREREQUISITE

You have added at least one player, one ensemble, or one group.

PROCEDURE

- In the **Players** panel, do one of the following:
  - Select one or more players and click **Add Group**.
  - Select a group, and click **Add Solo Player**, **Add Section Player**, or **Add Ensemble**.

RESULT

If you clicked **Add Group**, a new group is added for the selected players.

If you clicked **Add Solo Player**, **Add Section Player** or **Add Ensemble**, a new player or ensemble is added to the selected group.

RELATED LINKS

Adding solo/section players on page 104

## Moving players between groups

You can move players from one group to another.

PROCEDURE

1. In the **Players** panel, select the players that you want to move to another group.
2. Click and drag the selected players to the position you want in the other group.
   An insertion line indicates where the players will be positioned.

RESULT

The players are moved to the other group.

## Removing players from groups

You can remove players from groups.

PROCEDURE

- In the **Players** panel, remove players from groups in any of the following ways:
  - Click and drag multiple selected players out of the group and release the mouse.
  - Right-click a single player and choose **Remove Player from Group** from the context menu.

    NOTE

    You can only remove a single player from a group at a time when using the context menu.

RESULT

The players are removed from their groups but remain in the project as individual players.

# Flows

Flows are separate spans of music that are completely independent in musical content, meaning they can contain completely different players from each other and have different time signatures and key signatures. A single project can contain any number of flows.

Depending on the purpose of each project, a flow could be, for example, a single song in an album, a movement in a sonata or symphony, a number in a stage musical, or a short scale or sight-reading exercise of only a few bars in length.

Dorico Elements automatically adds a flow to projects once you have added at least one player. You cannot add flows until you have added at least one player to the project.

When you add a flow in Dorico Elements, the following happens automatically:

- The flow is assigned to all full score and part layouts in the project.
- All players are assigned to the new flow.

By default, all layouts include all flows in the project. If necessary, you can change the layouts to which flows are assigned and which players are assigned to flows.

IMPORTANT

If you exclude a player from a flow, any notes that you have already input for that player in that flow are deleted.

RELATED LINKS

Flows panel on page 97
Players on page 103
Layouts on page 130
Tacets on page 347
Changing the players assigned to flows on page 129
Changing the flows assigned to layouts on page 132
Importing flows on page 71
Exporting flows on page 72

# Adding flows

You can add any number of new flows to your project.

PREREQUISITE

You have added at least one player to the project.

PROCEDURE

1. In the **Flows** panel, click **Add Flow**.

2. Optional: Repeat for as many flows as you require.

RESULT

A new flow is added to your project each time you click **Add Flow**. All existing players are assigned to new flows, and new flows are automatically assigned to all existing full score and part layouts.

AFTER COMPLETING THIS TASK

You can double-click the flow card to rename the flow. You can also change the players assigned to the flow and the layouts to which the flow is assigned.

RELATED LINKS

Importing flows on page 71
Changing the flows assigned to layouts on page 132

# Duplicating flows

You can duplicate flows, for example, if you want to experiment with some ideas without affecting the original flow or if you want to copy material with any barlines you have added.

PROCEDURE

- In the **Flows** panel, right-click the flow you want to duplicate and choose **Duplicate Flow** from the context menu.

RESULT

A new flow is added, containing all the music and players of the original flow. It is automatically added to all full score and part layouts.

RELATED LINKS

Changing the flows assigned to layouts on page 132
Changing the players assigned to layouts on page 132

# Changing the players assigned to flows

By default, all players in your project are added to all flows that originated in the project. You can assign players to and remove players from flows manually, for example, if the soloists in a choral work do not sing for an entire flow.

NOTE

If you remove a player from a flow, any notes you have already input for that player in that flow are deleted.

PROCEDURE

1. In the **Flows** panel, select the flow whose assigned players you want to change.
2. In the **Players** panel, activate the checkbox in the player card of each player you want to assign to the flow.


TIP

You can **Shift**-click to activate/deactivate the checkboxes in multiple player cards at once.

3. Optional: Repeat steps 1 and 2 for other flows whose assigned players you want to change.

RESULT

Players are assigned to the selected flow when the checkbox in their player card is activated, and removed from the flow when the checkbox is deactivated.

RELATED LINKS

Players on page 103
Layouts on page 130
Tacets on page 347
Changing the flows assigned to layouts on page 132
Changing the players assigned to layouts on page 132

## Deleting flows

You can delete flows that you no longer need. This deletes all music for all instruments belonging to all players in the flows.

PROCEDURE

1. In the **Flows** panel, select the flows you want to delete.
2. Press **Backspace or Delete**.

# Layouts

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

Dorico Elements provides the following layout types:

**Full score**

A full score layout includes all players and all flows in your project by default. Full score layouts are concert pitch by default.

**Part**

A part layout is automatically created when you add a player to your project. You can also create empty part layouts and assign players to them manually.

By default, instrumental part layouts contain all flows. They are also transposed pitch by default.

**Custom score**

A custom score layout initially does not contain any players or flows. This allows you to create your score manually and, for example, to assign only one flow instead of all flows or only vocal and piano players to create a vocal score. Custom score layouts are concert pitch by default.

TIP

You can combine players, layouts, and flows together in any combination. For example, you might add all percussion players to a single part layout so that the performers can manage instrument changes themselves. In a large-scale work, you might also create a piano reduction for choir rehearsals, but only assign that piano player to the vocal score, meaning it does not appear in the orchestral full score at all.

RELATED LINKS

Page formatting on page 330
Flows on page 128
Players on page 103
Players, layouts, and flows on page 102
Changing the flows assigned to layouts on page 132
Changing the players assigned to layouts on page 132
Player, layout, and instrument names on page 135
Changing layout names on page 139
Brackets according to ensemble type on page 528

# Creating layouts

You can create multiple layouts for full scores and instrumental parts. You can also create multiple custom score layouts.

PROCEDURE

- At the bottom of the **Layouts** panel, click one of the following layout types:
  - **Add Full Score Layout**

    
  - **Add Instrumental Part Layout**

    
  - **Add Custom Score Layout**

RESULT

The layout is added to the list of layouts in the **Layouts** panel.

AFTER COMPLETING THIS TASK

- You can assign players and flows to your layout.
- If you want to change the position of the new layout in the layouts list, you can sort and renumber layouts.

RELATED LINKS

Sorting layouts on page 134
Renumbering layouts on page 134

Switching between layouts on page 51
Opening new tabs on page 52

## Changing the players assigned to layouts

By default, all players are included in full score layouts and each player is automatically assigned its own part layout. You can assign players to and exclude players from layouts manually, for example, if you want to remove unnecessary players from the full score, or you want to add the soloists' music to the part for the accompanist.

PROCEDURE

1. In the **Layouts** panel, select the layout whose assigned players you want to change.
2. In the **Players** panel, activate the checkbox in the player card of each player you want to assign to the layout.


TIP

You can **Shift**-click to activate/deactivate the checkboxes in multiple player cards at once.

3. Optional: Repeat steps 1 and 2 for any other layouts whose assigned players you want to change.

RESULT

Players are assigned to the selected layout when the checkbox in their player card is activated, and removed from the layout when the checkbox is deactivated. If you have not changed the name of the layout, it is automatically updated to reflect the players included in the layout.

RELATED LINKS

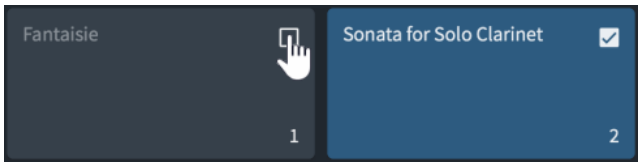
Player, layout, and instrument names on page 135
Changing layout names on page 139
Changing the players assigned to flows on page 129

## Changing the flows assigned to layouts

By default, all flows in your project are added to all layouts. You can exclude flows that you do not want to show in a layout. You can assign flows to and remove flows from layouts manually, for example, if a flow in your project contains specific performance instructions for strings that you want to show in string part layouts but not in other part layouts.

PROCEDURE

1. In the **Layouts** panel, select the layout whose assigned flows you want to change.
2. In the **Flows** panel, activate the checkbox in the flow card of each flow you want to assign to the layout.



TIP

You can **Shift**-click to activate/deactivate the checkboxes in multiple flow cards at once.

3. Optional: Repeat steps 1 and 2 for other layouts whose assigned flows you want to change.

RESULT

Flows are assigned to the selected layout when the checkbox in their flow card is activated, and removed from the layout when the checkbox is deactivated.

RELATED LINKS

Changing the players assigned to flows on page 129

## Making layouts transposing/concert pitch

You can change whether each layout in your project is transposing or concert pitch. In Dorico Elements, full score layouts are concert pitch and part layouts are transposing by default.

For example, full scores are often concert pitch, to show notes at their sounding pitch, but part layouts are transposing so the player can read the notes they must play in order to achieve the desired sounding pitch.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts you want to make transposing/non-transposing.
   By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Players** in the page list.
4. In the **Players** section, activate/deactivate **Transposing layout**.
5. Click **Apply**, then **Close**.

RESULT

The selected layouts are transposed pitch when **Transposing layout** is activated, and concert pitch when it is deactivated.

TIP

You can also make layouts transposing by choosing **Edit** > **Transposed Pitch**, and concert pitch by choosing **Edit** > **Concert Pitch**. This automatically updates the layout option but only for the layout currently open in the music area.

RELATED LINKS

Transposing instruments on page 111
Transpose dialog on page 194
Transposing selections on page 193
Setting different clefs for concert/transposed pitch on page 550
Hiding/Showing clefs according to layout transpositions on page 550

## Concert vs. transposed pitch

Layouts in Dorico Elements can use concert or transposed pitch. This affects the pitches and key signatures on staves belonging to transposing instruments.

When music is in concert pitch, all notes are written as they sound. This means that players with transposing instruments reading music in concert pitch must transpose the music themselves. For example, if a clarinet in B♭ reads a C in concert pitch, they must play the note D on their instrument to produce the sounding note C.

When music is in transposed pitch, the notes written are the ones each instrument must play in order to produce the desired sounding pitch. For example, if a clarinet in B♭ reads a D in transposed pitch, the pitch that sounds from the instrument is C.

Transposing scores and parts also transpose key signatures according to the transposition of the instrument.

RELATED LINKS
Transposing key signatures alongside selections on page 611
Enharmonic equivalent key signatures on page 612

# Sorting layouts

You can change the order in which layouts appear in the **Layouts** panel and the layout selector, for example, if you added a custom score layout and want it to be positioned at the top next to the full score layout.

PROCEDURE

1. In the **Layouts** panel, click and drag a layout card to a different position.
   An insertion line indicates where the players will be positioned.
2. Release the mouse.

RESULT

The layout is inserted at the selected position.

# Renumbering layouts

You can renumber all the layouts in their project according to their current position in the **Layouts** panel in Setup mode, for example, after you have dragged layouts to different positions.

PROCEDURE

- In the **Layouts** panel, right-click any layout card and choose **Renumber Layouts** from the context menu.

RESULT

All layouts are renumbered according to their current position in the panel. Full score layouts, custom score layouts, and part layouts are all numbered separately.

RELATED LINKS
Layouts panel (Setup mode) on page 94

## Deleting layouts

You can delete any layout from the project, for example, if you only want to use a combined Violin I and II part, you can delete their separate parts.

PROCEDURE

1. In the **Layouts** panel, select the layouts that you want to delete.
2. Press **Backspace or Delete**.

## Restoring default layouts

You can recreate all the part layouts that Dorico Elements provides by default, for example, if you accidentally deleted some part layouts.

PROCEDURE

- Choose **Setup** > **Create Default Part Layouts**.

RESULT

The default set of part layouts is restored, recreating a single part layout for each player that contains all flows in the project. Any part layouts that were recreated are added at the bottom of the **Layouts** list. Their order matches the order of the corresponding players in the **Players** panel.

# Player, layout, and instrument names

In Dorico Elements, you can use three different names to refer to the same player in different contexts. This allows you to show relevant information in different places in the score.

The following names relate to players and instruments:

**Player name**

Given to players in the **Players** panel. It is not used in the score, instead you can use the player name as part of your own workflow, independently of what instruments and players are called in staff labels and layout names.

Player names are automatically generated when you add instruments.

**Layout name**

The name for each layout in the **Layouts** panel. They are used at the top of individual part layouts.

Layout names are automatically generated when you add instruments, and are linked to the player name until you change the layout name.

**Instrument names**

Used in staff labels. This means that the instrument label on each staff is relevant to the instrument or percussion kit currently being played by that player, rather than listing all instruments that player is playing in the flow.

For example, if a clarinettist is doubling bass clarinet, the staff label where the player plays clarinet automatically shows **Clarinet**, and the staff label automatically shows **Bass Clarinet** where the player plays bass clarinet.

All instruments in Dorico Elements come with a set of instrument names that you can change for individual instruments, independently of other players in the project holding the same instrument. You can also save changes to instrument names as default, which are then used whenever you add that instrument again in the current project and all future projects.

NOTE

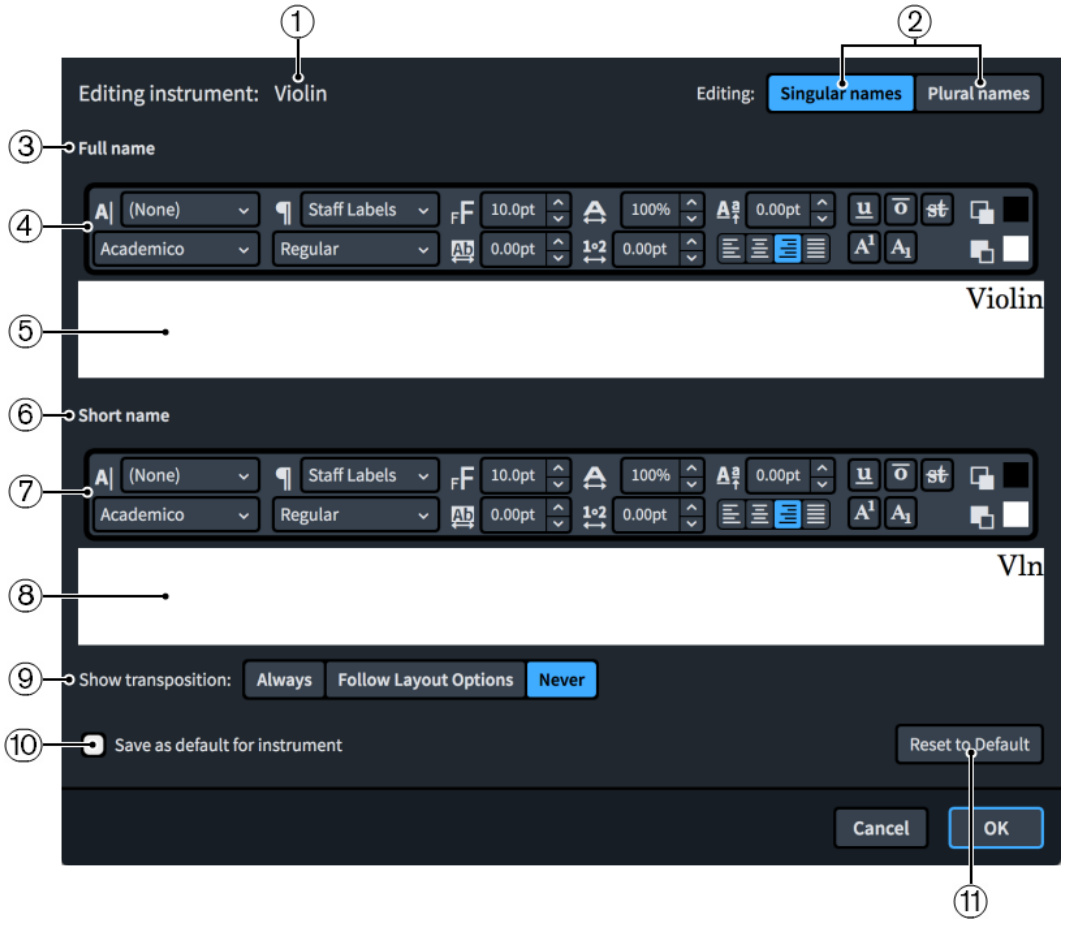
Changing the default instrument names does not change the instrument names of existing instruments of that type in your project.

RELATED LINKS
Instrument numbering on page 108
Text tokens on page 355
Staff labels on page 793
Staff labels for percussion kits on page 798
Percussion legends on page 879
Players on page 103
Layouts on page 130

## Edit Instrument Names dialog

The **Edit Instrument Names** dialog allows you to change the content and formatting of each instrument's names, which are used in staff labels and instrument change labels shown above the staff. You can edit both singular/plural full instrument names and singular/plural short instrument names.

- You can open the **Edit Instrument Names** dialog in Setup mode by clicking the arrow in an instrument label in the **Players** panel and choosing **Edit Names**.




**Edit Instrument Names** dialog

The **Edit Instrument Names** dialog contains the following options and sections:

1 **Editing instrument**

Displays the permanent underlying name of the instrument.

2 **Editing**

Allows you to switch between editing the **Singular names** and **Plural names** of the selected instrument.

**Singular names** is used when staff labels are shown by default, **Plural names** is used when the staff contains multiple players.

3 **Full name section**

Contains options that allow you to edit the appearance of the full instrument name.

4 **Full name text editor options**

Allows you to customize the font, size, and formatting of the long staff label of the selected instrument.

NOTE

The horizontal alignment of staff labels always uses the alignment of the paragraph style, not the alignment set in the **Edit Instrument Names** dialog.

5 **Full name text editing area**

Shows the current long name for the selected instrument, as it appears in **Full** staff labels. You can select any part of the instrument name and edit it independently of other parts, for example, if you want to add additional information on a new line and in italics. However, when used for instrument change labels above the staff, instrument names are always shown on a single line.

Staff labels are right-aligned by default, so appear at the right edge of the text editing area.

NOTE

Staff labels always use the alignment set for the paragraph style, they do not use the alignment set in the **Edit Instrument Names** dialog. This ensures consistent alignment across the whole system.

6 **Short name section**

Contains options that allow you to edit the appearance of the short instrument name.

7 **Short name text editor options**

Allows you to customize the font, size, and formatting of the short staff label of the selected instrument.

NOTE

The horizontal alignment of staff labels always uses the alignment of the paragraph style, not the alignment set in the **Edit Instrument Names** dialog.

8 **Short name text editing area**

Shows the current short staff label for the selected instrument, as it appears in **Abbreviated** staff labels. You can select any part of the instrument name and edit it independently of other parts, for example, if you want to add additional information on a new line and in italics. However, when used for instrument change labels above the staff, instrument names are always shown on a single line.

Staff labels are right-aligned by default, so appear at the right edge of the text editing area.

NOTE

Staff labels always use the alignment set for the paragraph style, they do not use the alignment set in the **Edit Instrument Names** dialog. This ensures consistent alignment across the whole system.

9 **Show transposition**

Allows you to choose when the transposition is shown in the instrument name for the selected instrument. It is common to see the transposition included in the name of transposing instruments, such as Clarinet in B♭.

You can choose when the transposition is shown from the following options:

- **Always**: Instrument transpositions are shown even if you have chosen to hide them on the **Staves and Systems** page in **Setup** > **Layout Options**.
- **Follow Layout Options**: Instrument transpositions can be hidden and shown, depending on your per-layout settings in **Layout Options**.
- **Never**: Instrument transpositions are never shown, even if you have chosen to show them in **Layout Options**.

10 **Save as default for instrument**

Activating the checkbox saves your changes in the dialog as the default. This affects all new instruments of that type that you add to the project and all future projects. It does not affect any existing instruments of that type.

11 **Reset to Default**

Removes all your changes to staff labels for the selected instrument type and reverts them to the default settings.

RELATED LINKS
Staff labels on page 793
Hiding/Showing staff labels on page 795

# Changing player names

You can change the player names of players, and reset renamed players to their default name.

NOTE

Player names are not used for staff labels in the score or for naming layouts, instead they are for your own reference in Setup mode.

Staff labels use the name set for each instrument in the **Edit Instrument Names** dialog.

PROCEDURE

1. In the **Players** panel, select the card of the player whose player name you want to change.
2. Open the player name text field in any of the following ways:
   - Double-click anywhere in the player card.
   - Right-click in the player card and choose **Rename** from the context menu.
3. Enter a new name, or click **Reset to Default** to revert the name to the default name.
   
4. Press **Return**.

RESULT

The player name of the selected player is changed.

NOTE

This does not change the staff label that appears in the score. You can change the name used for staff labels in the **Edit Instrument Names** dialog, and change the layout name for the names at the top of parts.

# Changing layout names

Layout names are used to identify individual layouts, for example, as the name at the top of parts. You can change the layout names of players, and reset renamed players to their default name.

NOTE

Layout names are not used for staff labels. Staff labels use the name set for each instrument in the **Edit Instrument Names** dialog.

PROCEDURE

1. In the **Layouts** panel, select the name of the player whose layout name you want to change.
2. Open the layout name text field in any of the following ways:
   - Double-click anywhere in the layout card.
   - Right-click in the layout card and choose **Rename** from the context menu.
3. Enter a new name, or click **Reset to Default** to revert the name to the player name.
   
4. Press **Return**.

RESULT

The layout name of the selected player is changed, or reverted to the default name.

NOTE

This does not change the staff label that appears in the score. You can change the name used for staff labels in the **Edit Instrument Names** dialog, and change the layout name for the names at the top of parts.

RELATED LINKS

Instrument numbering on page 108

# Changing instrument names

Instrument names are used in staff labels and instrument change labels shown above the staff. You can change the different instrument names used for each instrument.

NOTE

Changing instrument names does not change the name shown at the top of part layouts. If you want to change the name used at the top of part layouts, change the layout name.

PROCEDURE

1. In the **Players** panel, click the disclosure arrow in the player card containing the instrument whose names you want to change.

   This expands the card to show the instruments held by the player.
2. Click the arrow that appears in the instrument label when you hover over it and choose **Edit Names** to open the **Edit Instrument Names** dialog.
3. Enter new names in any of the name fields.
4. Optional: Activate **Save as default for instrument**.

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

RESULT

The instrument names for the selected instrument are changed.

- If you did not save your changes as default, only the names of the selected instrument are changed. Any instruments of the same type added later or in future projects use the original default names.
- If you saved your changes as default, any instruments of the same type added later or in future projects use your new instrument names. This does not affect any existing instruments of that type.

RELATED LINKS

Instruments on page 108
Edit Instrument Names dialog on page 136

# Flow names and flow titles

Whenever you add a flow to a project, the default name of a flow is **Flow** plus an incremental number. You can rename flows in the **Project Info** dialog and in the **Flows** panel in Setup mode.

When you enter names for flows, those names are automatically added in the **Title** field for the appropriate flow in the **Project Info** dialog. If you later change the names of flows, the corresponding flow titles are updated.

Titles shown in scores and parts are linked to the **Title** field for each flow in the **Project Info** dialog, using the **{@projectTitle@}** and **{@flowTitle@}** text tokens.

Changing the titles of flows in the **Project Info** dialog removes this link, meaning that changing flow names no longer automatically updates the corresponding flow titles.

This allows you to organize flows with different names to their official title, for example, if you want to differentiate a sketch version of a flow.

TIP

You can change flow names and flow titles in the **Project Info** dialog, and you can also change flow names in the **Flows** panel in Setup mode.

RELATED LINKS

Text tokens on page 355
Project Info dialog on page 98
Flows panel on page 97

## Renaming flows

You can change the names of flows in Setup mode. This automatically updates the title of the corresponding flow until you change the title in the **Project Info** dialog.

PROCEDURE

1. In the **Flows** panel in Setup mode, double-click the card of the flow you want to rename to open the flow name text field.
2. Enter a new name for the flow or edit the existing name.
3. Press **Return**.

RESULT

The name of the flow is changed. If you have not entered a different title for the flow in the **Project Info** dialog, the title shown in the music area is updated to match the new flow name.

TIP

You can also rename flows in the **Project Info** dialog.

## Changing flow titles

You can change flow titles in the **Project Info** dialog. Once you have done so, flow titles are no longer automatically changed if you change their flow name.

PROCEDURE

1. Press **Ctrl/Cmd-I** to open the **Project Info** dialog.
2. Select the flow whose title you want to change in the flows list.
3. Enter a new title in the **Title** field.
4. Optional: Repeat steps 2 and 3 for other flows in your project.
5. Click **OK** to save your changes and close the dialog.

RESULT

The titles of the selected flows are changed.

NOTE

This breaks the link between flow names and the title shown in the music area.

# Videos

Dorico Elements supports the use of videos within the program as well as the associated notations, such as markers and timecodes, and allows you to find appropriate tempos based on where important markers occur.

Videos are a fast sequence of images that create the impression of a moving image. They can be any length, from only a few seconds up to several hours for feature-length films.

Videos in Dorico Elements are shown in a separate **Video** window and play back in sync with the music. Any existing audio in the video is also played back, and you can control the volume of this audio independently of the volume of the music.

TIP

You can use these features, including setting a project frame rate, without having a video attached.

RELATED LINKS

Adding videos on page 143
Frame rates on page 146
Changing the project frame rate on page 146
Timecodes on page 743
Markers on page 738
Changing the volume of video audio on page 145

# Supported video formats

Dorico Elements uses the same video engine that was introduced in Cubase and Nuendo in 2017. It supports the most commonly-used video formats.

The following video formats are supported:

- MOV: Including H263, H264, Apple ProRes, DV/DVCPro and Avid DNxHR codecs
- MP4: Including H263 and H264
- AVI: Including DV/DVCPro and MJPEG/PhotoJPEG

All the common frame rates, such as 23.976, 24, 24.975, 25, 29.97, and 30 frames per second, are fully supported in Dorico Elements.

NOTE

- Videos with variable frame rates are not supported.
- Support for more formats is planned for future versions.

You can consult the Steinberg support site for more information about the supported formats as well as how to identify and change video formats.

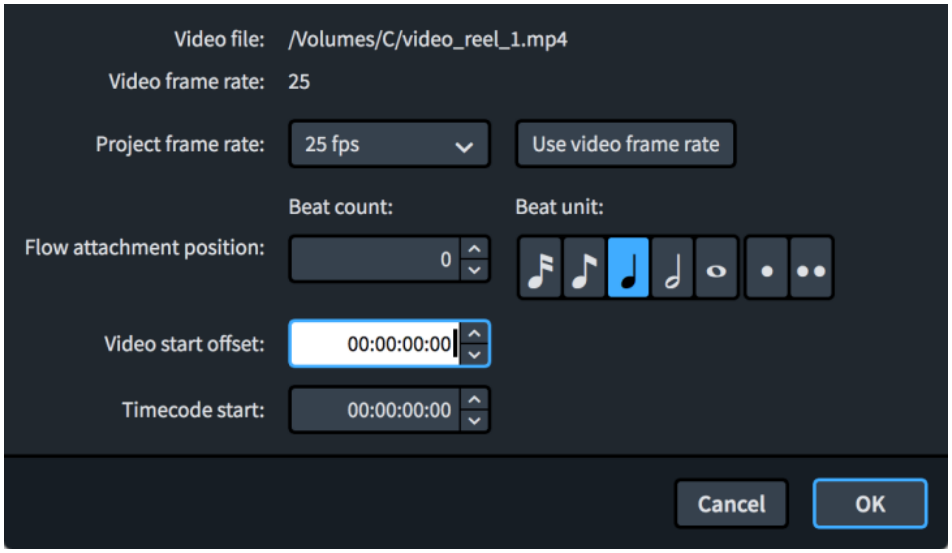
RELATED LINKS
Frame rates on page 146

# Video Properties dialog

The **Video Properties** dialog allows you to change video-related settings, including their frame rate and start position.

- You can open the **Video Properties** dialog in Setup mode by right-clicking a flow in the **Flows** panel and choosing **Video** > **Properties** from the context menu.

The dialog also opens automatically when you add a new video.




**Video Properties** dialog

The **Video Properties** dialog contains the following fields and options:

**Video file**

Shows the location of the video file on your computer. This field is read-only.

**Video frame rate**

Shows the frame rate of the video file. This field is read-only.

**Project frame rate**

Allows you to select a frame rate for your project from the menu. You can only have a single frame rate across the project.

**Use video frame rate**

Sets the project frame rate to be the same as the video file.

**Flow attachment position**

Allows you to set the rhythmic position at which the video attaches. This is set using the **Beat count** and **Beat unit** settings in combination, such as eight dotted quarter notes.

**Video start offset**

Allows you to set a position within the video that syncs with the flow attachment position, for example, you can set the fifth second of the video to attach to the start of the third bar.

**Timecode start**

Allows you to set the timecode at the start of the video. This also affects the timecode of the flow, but the initial timecode of the flow adjusts to accommodate the video. For example, if the initial timecode of the video is 02:00:00:00 but the video does not start until the start of the third bar in 4/4, the initial timecode of the flow is eight beats of time less than 02:00:00:00; if the tempo is 60 bpm, this makes the initial flow timecode 01:59:52:00.

NOTE

Flow timecodes are shown in their flow cards in the **Flows** panel.

RELATED LINKS

Timecodes on page 743
Flows panel on page 97

# Adding videos

You can add a video to each flow in your project. You can also follow these steps to reload videos previously added to the project that Dorico Elements can no longer locate.

Flows with missing videos show a warning icon instead of the video icon in the flow card in the **Flows** panel. This can happen if you send a project to someone else without the video file.

PREREQUISITE

You have added at least one player to the project.

PROCEDURE

1. In the **Flows** panel, right-click the flow to which you want to add/reload a video.
2. Choose **Video** > **Attach** from the context menu to open the File Explorer/macOS Finder.
3. In the File Explorer/macOS Finder, locate and select the video file you want to add.
4. Click **Open** to open the **Video Properties** dialog.
5. In the **Video Properties** dialog, change the options as appropriate for your project.
6. Click **OK** to save your changes and close the dialog.

RESULT

The selected video file is added to the flow and is shown in the **Video** window. A video reel icon appears in the flow card in the **Flows** panel, beside a timecode indicating the combination of the **Video start offset** and **Timecode start**.

If you reloaded a video, all your previous settings are retained.

RELATED LINKS

Timecodes on page 743
Changing the initial timecode value on page 744

## Changing the start position of videos

You can change both the rhythmic position in the music at which videos start, and the position in the video that coincides with that rhythmic position, for example, if you want the fifth second of a video to sync with the start of the third bar of music.

PROCEDURE

1. In Setup mode, open the **Video Properties** dialog in one of the following ways:
   - Add a video to a flow.
   - In the **Flows** panel, right-click a flow and choose **Video** > **Properties** from the context menu.
2. In the **Video Properties** dialog, change the values for **Flow attachment position** and/or **Video start offset**.
3. Click **OK** to save your changes and close the dialog.

RESULT

Changing the value for **Flow attachment position** changes the rhythmic position in the music at which the video starts.

Changing the value for **Video start offset** changes the position in the video that occurs at the **Flow attachment position**.

For example, if you change the **Video start offset** to **00:00:05:00** and the **Flow attachment position** to **8**, then the fifth second in the video happens on the eighth beat in the music.

NOTE

- The initial rhythmic position is 0. Therefore, if the **Flow attachment position** is set to **8** and the time signature is 4/4, the flow attachment occurs on the first beat in the third bar.
- Changing the **Video start offset** changes what part of the video coincides with the **Flow attachment position**, but this does not cut the video before this point. Any preceding video material is shown as long as it happens within the flow.

RELATED LINKS

Timecodes on page 743
Changing the initial timecode value on page 744

## Hiding/Showing the Video window

You can hide and show the **Video** window at any time and in any mode, for example, if you do not want it in view when working on the music in the music area.

PROCEDURE

- Hide/Show the **Video** window in any of the following ways:

- Press **F4**.
- In the toolbar, click **Show Video**.

  
- Choose **Window** > **Video**.

RESULT

The **Video** window is hidden/shown. It is shown when a tick appears beside **Video** in the **Window** menu, and hidden when no tick appears.

RELATED LINKS

Toolbar on page 39

## Changing the size of the Video window

You can change the size of the **Video** window at any time.

PREREQUISITE

The **Video** window is shown.

PROCEDURE

- Change the size of the **Video** window in any of the following ways:
  - Click and drag the corners/edges in any direction.
  - **Shift**-click and drag a corner/edge to change the size without changing the shape.

RESULT

The size of the **Video** window is changed. Dorico Elements saves the new size and shape and uses this for all projects until you change the size again.

## Removing videos

You can remove videos from each flow independently.

PROCEDURE

- In the **Flows** panel, right-click the flow from which you want to remove a video and choose **Video** > **Detach** from the context menu.

RESULT

The video is removed from the selected flow.

## Changing the volume of video audio

Any audio that is part of a video you have added is played back in sync with the music in the project. You can change the video volume manually.

PREREQUISITE

The Mixer window is shown.

PROCEDURE

1. Optional: If the **Video** channel is not shown in the Mixer window, click **Video** in the Mixer toolbar.

2. Change the **Video** channel volume in any of the following ways:
   - Click and drag the **Video** channel fader upwards/downwards.
   - Click **Mute** at the top of the **Video** channel.

RESULT

The volume of audio from videos in your project is changed. If you clicked **Mute**, no audio from videos sounds in playback.

RELATED LINKS

Hiding/Showing the Mixer window on page 423

# Frame rates

The frame rate of a video is the number of still images that are used per unit of time in order to create the impression of a moving image, commonly measured in frames per second, or “fps”.

The number of frames per second required to create the impression of a moving image is determined by how fast the human eye processes movement, and so the most common frame rate is around 24 fps. However, recent major films have been released at 48 fps, which results in sharper images.

Dorico Elements supports frame rates from 23.976 fps to 60 fps, for example, the US and Canadian broadcast standard NTSC, which is used in, uses 29.97 fps.

Frame rates are closely linked to timecodes, as timecodes include both the time and the current frame position.

All the common frame rates, such as 23.976, 24, 24.975, 25, 29.97, and 30 frames per second, are fully supported in Dorico Elements.

By default, Dorico Elements uses the same frame rate for the project as the video file, but you can manually choose a different frame rate.

RELATED LINKS

Timecodes on page 743

## Changing the project frame rate

By default, Dorico Elements uses the video frame rate as the project frame rate. You can change the project frame rate if you want it to be different, for example, if your project contains multiple videos with different frame rates.

TIP

You can change the frame rate even if there are no videos in the project.

PROCEDURE

1. In Setup mode, open the **Video Properties** dialog in one of the following ways:
   - Add a video to a flow.
   - In the **Flows** panel, right-click a flow and choose **Video** > **Properties** from the context menu.
2. In the **Video Properties** dialog, select the frame rate you want to use for the project from the **Project frame rate** menu.
3. Click **OK** to save your changes and close the dialog.

RESULT

The project frame rate is changed.

# Write mode

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

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

## Project window in Write mode

The project window in Write mode contains the default toolbar, the music area, and the status bar. It provides toolboxes and panels with the tools and functions required to write your music.

You can switch to Write mode in any of the following ways:

- Press **Ctrl/Cmd-2**.
- Click **Write** in the toolbar.
- Choose **Window** > **Write**.


Toolboxes and panels in Write mode

The following panels and toolboxes are available in Write mode:

1 **Notes toolbox**

Contains tools that affect note input.

2 **Notes panel**

Contains the note durations, accidentals, and articulations that are most commonly used during note input.

3 **Notations panel**

Contains notation items that you can add to your music, such as dynamics and playing techniques, divided into separate categories. Your current selection in the Notations toolbox determines which notation items are shown.

4 **Notations toolbox**

Allows you to determine which notation items are shown in the Notations panel, and to input certain items directly, such as rehearsal marks, chord symbols, and fingerings.

5 **Properties panel**

Contains properties that allow you to make individual modifications to the currently selected notes and notations.

NOTE

Many properties are layout-specific, meaning changing the properties of an item in one layout does not affect the same item in other layouts. However, you can copy property changes to other layouts.

RELATED LINKS
Copying property settings to other layouts on page 353

# Notes toolbox

The tools in the Notes toolbox allow you to modify notes and change the type of notes you input. The Notes toolbox is located on the left of the window in Write mode.

**Dotted Notes**

During note input, this inputs dotted notes, rests, or chords based on the currently selected duration. When editing existing notes, you can use this tool to add/remove rhythm dots from existing notes, rests, and chords.

You can also activate/deactivate **Dotted Notes** by pressing **.** (period). You can increase the number of dots on notes by pressing **Alt/Opt-.** (period).

**Rests**

When this option is activated, you input rests of the currently selected duration instead of notes.

You can also start/stop rest input by pressing **,** (comma).

**Chords**

When this option is activated, you add multiple notes at the same rhythmic position in order to build a chord. This function prevents the caret from advancing automatically after inputting a note. It also allows you to copy notes and items without overwriting any existing notes or items.

You can also start/stop chord input by pressing **Q**.

**Tuplets**

Clicking this option inputs a triplet bracket and the respective number of rests at the specified rhythmic position. If the notes are beamed, no brackets are used.

You can input other types of tuplet, such as quintuplets, by using the tuplets popover.

**Grace Notes**

When this option is activated, you input grace notes at the current rhythmic position instead of normal notes.

You can also start/stop grace note input by pressing **/**.

**Insert**

When this option is activated, the notes you input are inserted before existing music ahead of the caret instead of overwriting it. Similarly, reducing the duration of notes with Insert mode activated pulls them closer together without leaving rests between the notes. Insert mode also instructs Dorico Elements to add any extra beats required to fill bars when inputting or changing time signatures.

You can also activate/deactivate Insert mode by pressing **I**.

**Lock to Duration**

When this option is activated, the durations of existing notes are used as you input notes. This allows you to maintain the duration of notes while you change their pitches.

You can also activate/deactivate **Lock to Duration** by pressing **L**.

**Force Duration**

When this option is activated, Dorico Elements always inputs notes/rests with the explicit duration you have selected. For example, you can activate **Force Duration** to force the input of a dotted quarter note on the second quarter beat of 4/4, where Dorico Elements splits the note with a tie by default.

IMPORTANT

You can get unexpected results if you force the duration of notes and later change the time signature or move barlines, for example.

If you activated **Force Duration** during input, you can remove the restrictions on how Dorico Elements notates the music by selecting the affected passage of music and selecting **Edit** > **Reset Appearance**.

You can also activate/deactivate **Force Duration** by pressing **O**.

**Tie**

During note input, this ties the note to be input to the previous note of the same pitch. When editing existing notes, you can use this tool to tie together notes of the same pitch in different voices or to tie grace notes to rhythmic notes.

You can also activate **Tie** by pressing **T**.

NOTE

You cannot deactivate **Tie**. If you want to delete ties, you must use **Scissors**.

**Scissors**

During note input, this splits notes, chords, and explicit rests in two at the caret position. When editing existing notes, it deletes all ties in tie chains.

You can also activate **Scissors** by pressing **U**.

**Select**

Activates/Deactivates mouse input. When mouse input is deactivated, you cannot input notes by clicking on the staff.

RELATED LINKS

Inputting notes with rhythm dots on page 170
Inputting chords on page 185
Inputting tuplets on page 186
Inputting grace notes on page 184
Activating/Deactivating mouse input on page 167
Input methods for time signatures on page 210

## Notes panel

The Notes panel contains buttons that allow you to select note and rest durations, and to input accidentals, slurs, and articulations. It is located on the left of the window in Write mode.

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

- Press **Ctrl/Cmd-7**.
- Click the disclosure arrow on the left edge of the main window.
- Choose **Window** > **Show Left Panel**.

The upper part of the Notes panel contains note durations that you can select for input or to change the duration of existing notes. By default, only the most common note durations are shown. You can see all note durations by clicking the **Show/Hide All Notes** disclosure arrows at the top and bottom of the section.

In the middle part of the Notes panel, you can activate/deactivate accidentals and activate slurs. However, you cannot deactivate slurs, you must delete them.

In the bottom part of the Notes panel, you can activate/deactivate articulations.

RELATED LINKS
Inputting notes on page 164
Inputting accidentals on page 180
Inputting articulations on page 201
Inputting slurs on page 202

## Properties panel (Write mode)

The Properties panel in Write mode contains quick access properties that allow you to change notes and notations, both during note input and by changing existing notes. It is located at the bottom of the window in Write mode.

The Properties panel contains a group of properties for each notation item. When you select a note or item in the music area, the Properties panel displays the groups and options that you might require to edit the selected note or item.

NOTE

- If you select multiple different types of notation items, only the groups that they have in common are displayed. For example, if you select a slur, the **Common** and **Slurs** groups are displayed in the Properties panel. However, if you select a slur and a note, only the **Common** group is displayed.
- Many properties are layout-specific, meaning changing the properties of an item in one layout does not affect the same item in other layouts. However, you can copy property changes to other layouts.

You can hide/show the Properties panel in Write mode in any of the following ways:

- Press **Ctrl/Cmd-8**.
- Click the disclosure arrow at the bottom of the main window.
- Choose **Window** > **Show Bottom Panel**.


**Notes and Rests** group of the Properties panel in Write mode

## Changing the properties of individual notes and items

You can change the properties of individual notes and notations independently, for example, if you want only a few crescendos to appear as text rather than as hairpins.

NOTE

You can only change the properties of complete notes and notations. For example, if a pedal line extends across multiple systems, you cannot change its line style on one system but keep the original line style on another system.

PROCEDURE

1. Select a note or notation item in the music area.
2. Optional: If the Properties panel is hidden, show it in any of the following ways:
   - Press **Ctrl/Cmd-8**.
   - Click the disclosure arrow at the bottom of the window.
   - Choose **Window** > **Show Bottom Panel**.
3. In the Properties panel, change the properties you want.

RESULT

The complete note or notation item is changed. The changes are immediately displayed in the music area.

NOTE

Many properties are layout-specific. For example, if you change the staff-relative placement of an item in a full score layout, this does not affect the placement of the item in the corresponding part layout. However, you can copy property settings to other layouts.

RELATED LINKS

Copying property settings to other layouts on page 353
Resetting the appearance of items on page 310
Resetting the position of items on page 311

# Notations toolbox

The options in the Notations toolbox allow you to determine what notation items are available in the Notations panel. The Notations toolbox is located on the right of the window in Write mode.

**Clefs**

Hides/Shows the Clefs panel, which contains sections for the different clefs and octave lines that you can input.

**Key Signatures, Tonality Systems, and Accidentals**

Hides/Shows the Key Signatures, Tonality Systems, and Accidentals panel, which contains sections for the different key signatures, tonality systems, and accidentals that you can input. You can also create and edit custom tonality systems from this panel.

**Time Signatures (Meter)**

Hides/Shows the Time Signatures (Meter) panel, which contains sections for the different types of time signatures that you can input, including a section where you can create custom time signatures, such as interchangeable time signatures and time signatures with pick-up bars.

**Tempo**

Hides/Shows the Tempo panel, which contains sections for the different types of tempo changes that you can input, including gradual tempo changes, metronome marks, and tempo equations.

**Dynamics**

Hides/Shows the Dynamics panel, which contains sections for the different dynamics that you can input, including immediate, gradual, and custom combined dynamics.

**Ornaments**

Hides/Shows the Ornaments panel, which contains sections for the different ornaments and glissando lines that you can input.

**Repeat Structures**

Hides/Shows the Repeat Structures panel, which contains sections for the different types of repeat structures, including repeat endings and segments, repeat markers, single-note and multi-note tremolos, bar repeats, and slash regions.

**Bars and Barlines**

Hides/Shows the Bars and Barlines panel, which allows you to insert bars and to input the different types of barlines.

**Holds and Pauses**

Hides/Shows the Holds and Pauses panel, which contains sections for the different types of fermatas, breath marks, and caesuras that you can input.

**Playing Techniques**

Hides/Shows the Playing Techniques panel, which contains sections for the various instrument family groups. Each section contains playing techniques for the corresponding instrument family.

**Lines**

Hides/Shows the Lines panel, which contains sections for the different types of lines that you can input.

**Cues**

Hides/Shows the Cues panel, which allows you to find suitable places for cues and input cues.

**Video**

Hides/Shows the Video panel, which allows you to open the **Video Properties** dialog and to view and edit markers in the current flow.

**Rehearsal Marks**

Inserts a rehearsal mark at the selected rhythmic position.

**Text**


Opens the text editor, which allows you to insert text at the selected rhythmic position.

**Lyrics**


Opens the lyrics popover above the selected note on the staff, which allows you to input lyrics.

**Chord Symbols**


Opens the chord symbols popover above the selected note on the staff, which allows you to input chord symbols.

**Fingering**


Opens the fingerings popover above the selected note on the staff, which allows you to input fingerings.

RELATED LINKS
Notations input on page 201
Text editor options in Write mode on page 299
Video Properties dialog on page 142

# Notations panel

The Notations panel contains different notation items for your music depending on your selection in the Notations toolbox. The Notations panel is located on the right of the window in Write mode.

You can hide/show the Notations panel at any time, for example, if you want to find a notation to input but then want to increase the size of the music area after inputting it.

RELATED LINKS
Hiding/Showing panels on page 21

# Inputting vs. editing

Dorico Elements distinguishes the processes for inputting and editing music.

## Inputting

If you can see the caret, you are inputting new music. The caret must be activated in order to input notes and notations. If the caret is activated, selecting tools or items in the Notes toolbox and the Notes panel affects the note or chord that you are about to input, as you can specify the duration, rhythm dot, accidentals, and articulations. Then you specify the pitch by clicking the note into the score, by pressing the letter name of the note on your computer keyboard, or by playing the note or chord on your MIDI keyboard.

When the caret is activated, notes and notations are input at the caret position.

If no notes or chords are selected in the music area and you select a duration, either by pressing its key command or by clicking it in the Notes panel, mouse input is activated. If you move the mouse pointer over the staff, a shadow note is displayed to indicate where the note will be input if you click.

NOTE

Deactivating mouse input prevents Dorico Elements from starting mouse input in this circumstance.

## Editing

If you cannot see the caret, you can edit existing music. Editing music includes deleting notes and notations, which you can only do in Write mode, although you can also delete notes in Play mode but not notations. You can switch back and forth between inputting and editing at any time.

When the caret is not activated, new items are input at the position of the first selected item in the music area. If there is no selection, the mouse pointer is loaded with the new item. The item is then created at the location where you click.

To edit existing notes and notations, you must select them in the music area. This allows you to update the selected notes or items when you select, for example, new note durations, accidentals, or articulations in the Notes panel.

We recommend that you spend a moment to understand the difference between how Dorico Elements behaves if the caret is shown and if it is not. In the latter case, all editing functions operate on the items that you have selected in the music area.

RELATED LINKS
Editing and selecting on page 301
Caret on page 159
Note input on page 159
Notations input on page 201

# Mouse input settings

There are a number of different settings that you can choose from to determine how mouse input functions in Dorico Elements.

You can set your preferences for mouse input in the **Editing** section of the **Note Input and Editing** page in **Preferences**.

You can choose between the following options for mouse input:

- **Create item at selection**: Items are input at the position of selected items or notes in the music area.
- **Load pointer with item**: Items are loaded onto the mouse pointer so you can click in the music area where you want to input the item.

You can also activate/deactivate **Allow multiple items to be created with the mouse**. When this option is activated, you can load an item onto your mouse pointer and input the same item in the music area multiple times without having to reselect the item each time you input it. When this option is deactivated, you can only input an item loaded onto your mouse pointer once. If you want to input the item at multiple positions, you must reselect it each time.

NOTE

Changing your preferences permanently changes the functionality for the current project and all new projects.

RELATED LINKS
Preferences dialog on page 58

## Changing your mouse input settings

You can change your mouse input settings, for example, if you want to load a playing technique on the pointer once and input it in multiple places without having to reselect the playing technique each time.

PROCEDURE

1. Press **Ctrl/Cmd-,** (comma) to open **Preferences**.
2. Click **Note Input and Editing** in the page list.
3. In the **Editing** section, choose one of the following options for **Creating items with the mouse**:
   - **Create item at selection**
   - **Load pointer with item**
4. Optional: If you chose **Load pointer with item**, activate/deactivate **Allow multiple items to be created with the mouse**.
5. Click **Apply**, then **Close**.

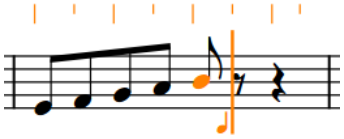
RESULT

Your mouse input settings are changed in the current project and for all future projects.

RELATED LINKS
Notations input on page 201

# Rhythmic grid

The rhythmic grid is a unit of rhythmic duration whose value affects certain aspects of inputting and editing, such as the amount by which items move. However, it does not control the duration of notes and items that you input.



Rhythmic grid set to eighth notes (quavers) shown above the staff

The current rhythmic grid resolution is shown by the note value in the status bar, and by ruler markings above the staff on which the caret is active. Longer lines in the rhythmic grid indicate beat divisions, while shorter lines indicate beat subdivisions. In Play mode, the rhythmic grid is shown by the frequency of vertical lines in tracks and in the ruler at the top of the event display.

The rhythmic grid controls the following:

- The possible input positions when using the caret or the mouse, and when copying and pasting. For example, setting the rhythmic grid resolution to 32nd notes allows you to input notes and items at a greater number of possible rhythmic positions than when the rhythmic grid is set to quarter notes.
- The amount by which the caret moves when using **Right Arrow** / **Left Arrow**
- The amount by which notes and items are lengthened/shortened
- The amount by which notes and items move

You can change the rhythmic grid resolution at any time.

RELATED LINKS
Rhythmic position on page 36
Caret on page 159
Moving the caret manually on page 163
Event display on page 372
Tracks on page 380
Inputting notes on page 164

## Changing the rhythmic grid resolution

You can change the resolution of the rhythmic grid. The resolution is indicated by the note value symbol in the status bar and by the beat divisions and subdivisions in the ruler markings above the caret.

The rhythmic grid resolution is set to eighth notes (quavers) by default.

PROCEDURE

- Change the resolution of the rhythmic grid in any of the following ways:
  - Press **Alt/Opt-]** to decrease the rhythmic grid resolution.
  - Press **Alt/Opt-[** to increase the rhythmic grid resolution.
  - Choose **Write** > **Rhythmic Grid** > **Decrease Grid Resolution**.
  - Choose **Write** > **Rhythmic Grid** > **Increase Grid Resolution**.
  - Choose **Write** > **Rhythmic Grid** > **[Beat division]**.
  - Select a value from the **Rhythmic Grid** selector in the status bar.

RESULT

Decreasing the rhythmic grid resolution makes it finer by making the note value shorter. Increasing the rhythmic grid resolution makes it coarser by making the note value longer.

TIP

You can assign your own key commands for increasing and decreasing the rhythmic grid resolution.

RELATED LINKS

Status bar on page 48
Assigning key commands on page 62

# Note input

In Dorico Elements, you can only input notes during note input, which is when the caret is activated. This allows you to input notations at the caret position at the same time as inputting notes, and also reduces the risk of you adding notes to staves accidentally.

You can input notes in different ways and using any of the following devices, including switching between them at any time:

- MIDI keyboard
- Computer keyboard
- Mouse or touchpad

TIP

A MIDI keyboard is the fastest way to input notes.

RELATED LINKS

Notes on page 631
Inputting notes on page 164

## Caret

In Dorico Elements, the caret is a vertical line that extends above and below five-line staves but appears shorter on percussion staves and tablature. It shows the rhythmic position at which notes, chords, or notation items are input.

A caret is a mark that is commonly used when proofreading published text to denote the position at which something should be inserted or added, for example, a missing letter or a word. In software, the caret shows where something is inserted. The caret is also known as an “insertion point” or “cursor”. In this documentation, we use “caret” to refer to the line that appears during note input, and “cursor” to refer to the line that appears during text input.

If you are inputting notes, the caret advances to the next rhythmic position automatically. If you are inputting chords or notes on tablature, the caret does not move automatically, and you must move it to the next rhythmic position manually. The caret has a note symbol beside it, which indicates the stem direction and type of the currently selected voice. It is accompanied by a + symbol if the voice is new.

The caret

The appearance of the caret changes depending on the input mode and the currently selected voice number.

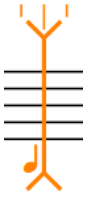
**Multiple staves**

The caret extends vertically across all the staves onto which notes and notations will be input. This allows you to input, for example, the same dynamics or playing techniques on multiple staves simultaneously or play in chords on a MIDI keyboard and distribute the notes in those chords onto multiple staves. The note symbol and rhythmic grid also appear for each included staff.

Caret when inputting notes onto multiple staves

**Insert**

The caret shows V and inverted V shapes at the top and bottom. In Insert mode, inserted notes shift all music in the current voice after the caret along by the input duration instead of replacing existing notes. Similarly, reducing the duration of notes with Insert mode activated pulls them closer together without leaving rests between the notes.



Caret in Insert mode

**Chords**

The caret shows a plus symbol at the top left. During chord input, you can input multiple notes at the same rhythmic position.

Caret when inputting chords

### Lock to Duration

The caret is dashed. **Lock to Duration** allows you to repitch notes without changing their duration or rhythm.

Caret when **Lock to Duration** is activated

### Grace Notes

The caret is shorter than the default caret. It allows you to input grace notes at the caret position.

Caret when inputting grace notes

### Voices

If you input multiple voices, the caret shows the following:

- A plus symbol at the bottom left
- The voice number into which you are inputting notes
- An up-stem note or a down-stem note symbol to indicate the stem direction of the voice

Caret when inputting notes into a new down-stem voice


Caret when inputting notes into a new, second up-stem voice

### Slash voices

The note beside the caret indicates a slash notehead.

If you input multiple slash voices, the caret shows the following:

- A plus symbol on the left at the bottom
- The number of the slash voice into which you are about to input notes
- An up-stem slash note or a down-stem slash note symbol indicating the stem direction of the voice, and whether it has stems or is stemless

Caret when inputting notes into an up-stem slash voice


Caret when inputting notes into a new, second up-stem slash voice

Caret when inputting notes into a new, stemless slash voice

**Percussion kits**

The caret appears significantly smaller than usual when inputting notes into percussion kits. The name of the kit instrument into which you are currently inputting notes is shown above the rhythmic grid.


Caret when inputting notes into percussion kits

**Tablature**

The caret appears significantly smaller than usual when inputting notes into tablature. On tablature, the caret behaves as if chord input is always active, meaning you must advance the caret and move it to other string lines manually.

Caret when inputting notes on tablature

RELATED LINKS

Inputting notes in Insert mode on page 175
Inputting chords on page 185
Repitching notes without changing their rhythm on page 193
Inputting grace notes on page 184
Inputting notes into multiple voices on page 171
Inputting notes in percussion kits on page 176
Inputting notes on tablature on page 179

## Activating/Deactivating the caret

When the caret is activated, you can input notes and notations at the caret position, for example, if you want to input a dynamic in the middle of a tie chain. When the caret is deactivated, you cannot input notes, instead you can select and edit items in the music area.

PROCEDURE

1. Activate the caret in any of the following ways:
   - Select an item and press **Shift-N**.
   - Double-click a rhythmic position on a staff.

2. Deactivate the caret in any of the following ways:
   - Press **Shift-N**, **Return**, or **Esc**.
   - If you have deactivated mouse input, click any selectable item in the music area.
   - Switch to another mode.

RELATED LINKS
Moving the caret manually on page 163
Functions of the modes on page 20
Activating/Deactivating mouse input on page 167
Inputting notes on page 164
Notations input on page 201

## Extending the caret to multiple staves

You can extend the caret so it spans multiple staves. This allows you to input notes and notations onto multiple staves simultaneously, including automatically exploding the notes in chords that you play on a MIDI keyboard onto the appropriate staves.

PROCEDURE

1. Activate the caret in any of the following ways:
   - Select an item and press **Shift-N**.
   - Double-click a rhythmic position on a staff.
2. Extend the caret to other staves in any of the following ways:
   - To extend to the staff above, press **Shift-Up Arrow**.
   - To extend to the staff below, press **Shift-Down Arrow**.
3. Optional: Repeat step 2 as many times as you require.

RELATED LINKS
Inputting notes and notations onto multiple staves on page 174

## Moving the caret manually

The caret moves automatically as you input notes, but you can also move it manually. For example, the caret does not move automatically when inputting chords.

PROCEDURE

- Move the caret in any of the following ways:
  - To move the caret according to the current rhythmic grid resolution, press **Right Arrow** / **Left Arrow**.
  - To advance the caret according to the note value currently selected, press **Space**.
  - To move the caret to the next/previous bar, press **Ctrl/Cmd-Right Arrow** / **Ctrl/Cmd-Left Arrow**.
  - To move the caret to the staff above/below, press **Up Arrow** / **Down Arrow**.
  - To move the caret to the top/bottom staff in the system, press **Ctrl/Cmd-Up Arrow** / **Ctrl/Cmd-Down Arrow**.

RELATED LINKS
Inputting chords on page 185

# Inputting notes

You can input notes into your project during note input, which is when the caret is activated. You can input notes with a computer keyboard, with the mouse, or by playing notes with a MIDI keyboard.

NOTE

- During note input, you must select the duration, articulations, and any accidentals not in the prevailing key signature for each note before inputting them. This applies to all input methods.
- You do not have to input rests between notes, as Dorico Elements automatically shows implicit rests of the appropriate duration between the notes you input. Similarly, you do not have to input ties, as Dorico Elements shows notes as tie chains if necessary.
- You can also input notations alongside inputting notes without deactivating note input.

PREREQUISITE

- You have chosen the appropriate input pitch setting.
- If you want to input notes into multiple instruments held by a single player or instruments not visible in the score in page view, you are in **Galley View**.
- If your music requires a key signature, you have input that key signature.
- If you want to input notes using a MIDI device, you have connected the MIDI device you want to use.

PROCEDURE

1. Start note input in any of the following ways:
   - Select a note or rest on the staff where you want to input notes and press **Shift-N**.

     NOTE

     If you select a notation, such as a dynamic, pressing **Return** opens the corresponding popover instead of starting note input.

   - Double-click the staff where you want to input notes.
2. Optional: If you want to input notes onto multiple staves at once, extend the caret to those staves.
3. Select a note duration in any of the following ways:
   - Press the number on your computer keyboard that corresponds to the duration you want.

     For example, press **6** for quarter notes (crotchets). Press smaller numbers for smaller durations, such as **5** for eighth notes (quavers) and **4** for 16th notes (semiquavers). Press larger numbers for larger durations, such as **7** for half notes (minims).
   - Click the duration you want in the Notes panel on the left of the window.
4. Optional: If you want to input a pitch whose accidental is not in the prevailing key signature, select the appropriate accidental.
5. Optional: Select any required articulations.
6. Input the pitches you want in any of the following ways:
   - Press the corresponding letters on your computer keyboard.

     TIP

     Dorico Elements automatically selects the note whose register is the smallest interval away from the previously input note. However, you can force a different register.

- To input a note above the previously input note, press **Shift-Alt/Opt** as well as the letter for the note, for example, **Shift-Alt/Opt-A**.
- To input a note below the previously input note, press **Ctrl-Alt (Windows) or Ctrl (macOS)** as well as the letter for the note, for example, **Ctrl-Alt-A (Windows) or Ctrl-A (macOS)**.

- Click the staff at the rhythmic position of each note you want to input.

  A shadow notehead appears when inputting with the mouse to indicate where the note will be input.
- Play the notes on a MIDI keyboard.

7. Optional: Press **Space** to advance the caret without inputting notes.

   TIP

   You can also move the caret in different ways and by different increments.

8. Press **Esc** or **Return** to stop note input.

RESULT

Notes are input at the caret position or where you click with the selected duration and are played back as you input them by default. Their pitch follows the prevailing key signature. For example, if you press **F** in G major, an F♯ is input automatically.

If you selected rhythm dots or articulations, notes continue to be input with them until you deactivate them. However, accidentals not in the prevailing key signature are only added to the first note you input after selecting them.

Dorico Elements notates and beams notes appropriately according to their duration, the current time signature, and their position in the bar. This includes showing notes as tie chains if required.

If you advance the caret without inputting notes, Dorico Elements fills the gaps between notes with implicit rests of the appropriate duration.

If you input notes on notation staves belonging to fretted instruments, Dorico Elements automatically allocates these notes to the strings on which they can be played closest to the nut. Because this calculation is done for each note separately, multiple notes can be allocated to the same string. In such cases, the notes are shown next to each other on tablature and are colored green. You can then select them individually and make your own string allocation.

TIP

You can specify custom beat groupings within individual time signatures.

AFTER COMPLETING THIS TASK

You can move notes to different rhythmic positions after they have been input, and move them to other staves.

You can also show brackets on noteheads individually.

RELATED LINKS

Changing the input pitch setting on page 166
Caret on page 159
Rhythmic grid on page 158
Extending the caret to multiple staves on page 163
Moving the caret manually on page 163
Adding notes above/below existing notes on page 189
Moving notes rhythmically on page 637
Creating cross-staff beams on page 517
Beam grouping according to meters on page 510

Note and rest grouping on page 524
Creating custom beat groupings for meters on page 524
Implicit vs. explicit rests on page 773
Ties on page 831
Key signatures on page 607
View types on page 49
Arranging tools on page 316
Playing/Muting notes during note input/selection on page 308
Changing the allocated string for notes on tablature on page 811
Inputting rests on page 182
Disabling MIDI input devices on page 200
Bracketed noteheads on page 640

## Register selection during note input

Dorico Elements automatically selects the register of pitches during note input, but you can override this and select the register manually.

During note input, Dorico Elements automatically selects the note whose register is the smallest interval away from the previously input note. For example, if you input an F and then press **A**, an A is input a third above the F, rather than a sixth below.

You can override this automatic register selection in the following ways:

- To input a note above the previously input note, press **Shift-Alt/Opt** as well as the letter for the note, for example, **Shift-Alt/Opt-A**.
- To input a note below the previously input note, press **Ctrl-Alt (Windows) or Ctrl (macOS)** as well as the letter for the note, for example, **Ctrl-Alt-A (Windows) or Ctrl-A (macOS)**.

### Register selection when inputting chords

During chord input, Dorico Elements automatically inputs notes above the highest note at the caret position. For example, if you press **A** then **E** then **A**, a chord of A-E-A is input at the caret position.

You can input notes below the lowest note at the caret position instead by pressing **Ctrl-Alt (Windows) or Ctrl (macOS)** as well as the letter for the note name, for example, **Ctrl-Alt-A (Windows) or Ctrl-A (macOS)**.

RELATED LINKS

Inputting notes on page 164
Inputting chords on page 185
Changing the pitch of individual notes on page 191

## Changing the input pitch setting

You can input and record notes at either sounding pitch or written pitch according to the current layout, for example, if you want to record notes at their sounding pitch in transposing part layouts.

In concert pitch layouts, written pitch and sounding pitch are the same.

PROCEDURE

- Choose one of the following input pitch settings:
  - To input/record notes at their written pitch, choose **Write** > **Input Pitch** > **Written Pitch**.

- To input/record notes at their sounding pitch, choose **Write** > **Input Pitch** > **Sounding Pitch**.

RESULT

The resulting pitch notated or recorded is changed. For example, if you input a C in a Horn in F transposing part layout with the input pitch set to **Sounding Pitch**, the note is written as a G.

RELATED LINKS

Inputting notes on page 164
Inputting notes using MIDI recording on page 196
Making layouts transposing/concert pitch on page 133

## Activating/Deactivating mouse input

You can activate/deactivate mouse input, for example, if you only want to input notes using your computer keyboard or MIDI device. Deactivating mouse input also allows you to click other items to stop note input.

PROCEDURE

- In the Notes toolbox, activate/deactivate **Select**.

RESULT

Mouse input is activated in the current project when **Select** is deactivated. Mouse input is deactivated in the current project when **Select** is activated.

TIP

You can change the default setting for whether mouse input is activated/deactivated by activating/deactivating **Enable note input using the mouse** on the **Note Input and Editing** page in **Preferences**.

EXAMPLE

**Select** when deactivated

**Select** when activated

RELATED LINKS

Preferences dialog on page 58

# Selecting note/rest durations

You can select different durations for notes/rests either from the Notes panel or by using one of the assigned key commands, both during note input and for existing notes/rests.

PROCEDURE

1. Optional: If you want to select a note duration not shown in the Notes panel, click the **Show/Hide All Notes** disclosure arrows at the top and bottom of the notes list to show more note durations.
2. Select a note/rest duration in any of the following ways:

- Press the number on your computer keyboard that corresponds to the duration you want.

  For example, press **6** for quarter notes (crotchets). Press smaller numbers for smaller durations, such as **5** for eighth notes (quavers) or **4** for 16th notes (semiquavers). Press larger numbers for larger durations, such as **7** for half notes (minims).
- Click the duration you want in the Notes panel on the left of the window.

RELATED LINKS
Notes panel on page 151
Key commands in Dorico Elements on page 14
Inputting notes on page 164

## Changing the duration of notes

You can lengthen/shorten the duration of notes after they have been input.

PROCEDURE

1. Select the notes whose duration you want to change.

   NOTE

   If you want to extend a note to the end of the current selection, select both that note and an item at the rhythmic position to which you want to extend the note.

2. Change the duration in any of the following ways:
   - Press the key command of the duration you want. For example, press **4** for a 16th note (semiquaver).
   - Click the duration you want in the Notes panel on the left of the window.
   - To lengthen notes by the current rhythmic grid resolution, press **Shift-Alt/Opt-Right Arrow**.
   - To shorten notes by the current rhythmic grid resolution, press **Shift-Alt/Opt-Left Arrow**.
   - To double the length of notes, press **Ctrl/Cmd-Shift-Alt/Opt-Right Arrow**.
   - To halve the length of notes, press **Ctrl/Cmd-Shift-Alt/Opt-Left Arrow**.
   - To lengthen notes by the current rhythmic grid resolution, choose **Write** > **Edit Duration** > **Lengthen Duration by Grid Value**.
   - To shorten notes by the current rhythmic grid resolution, choose **Write** > **Edit Duration** > **Shorten Duration by Grid Value**.
   - To double the length of notes, choose **Write** > **Edit Duration** > **Lengthen Duration**.
   - To halve the length of notes, choose **Write** > **Edit Duration** > **Shorten Duration**.
   - To lengthen notes up to the next existing note in their voice, choose **Write** > **Edit Duration** > **Extend to Next Note**.

     NOTE

     This does not apply to grace notes.

   - To lengthen a single note up to the rhythmic position of the end of the current selection, choose **Write** > **Edit Duration** > **Extend to End of Selection**.
   - To shorten overlapping notes in the same voice so that they no longer overlap, choose **Write** > **Edit Duration** > **Shorten to Next Note**.

RESULT

The duration of the selected notes is changed. Dorico Elements automatically notates and beams the notes appropriately according to their new duration, the current time signature, and their position in the bar.

When extending notes, their duration fills in any intervening rests. Extending notes to the end of the current selection does not delete any intervening notes, instead they combine with the extended note to create chords where necessary.

TIP

You can assign your own key commands to lengthen/shorten notes by specific durations and to extend them. You can find these by searching for **Shorten duration by**, **Lengthen duration by**, and **Extend to** on the **Key Commands** page in **Preferences**.

## Forcing the duration of notes/rests

Dorico Elements automatically notates and beams notes/rests appropriately according to the current time signature and their position in the bar. You can force the duration of notes/rests to specify their notation.

For example, if you input a half note at the start of a 6/8 bar, it is notated as a dotted quarter note (crotchet) tied to an eighth note (quaver). This is because, according to convention, 6/8 bars are subdivided into two groups of three eighth notes. To reflect this for a half note (four eighth notes), Dorico Elements automatically divides the note to show the correct grouping but you can force the note duration to show a half note instead.

TIP

If you want to force the duration of all notes on a staff to imply a different meter, for example, to show three quarter note groups in 6/8 to indicate a hemiola, you can also input a time signature only on those staves to group notes according to that meter. You can then hide the time signatures if required.

PROCEDURE

1. In Write mode, do one of the following:
   - Start note input.
   - Selecting existing notes whose duration you want to force.
2. Optional: If you want input rests with forced durations, press **,** (comma) to start rest input.
3. Press **O** to activate **Force Duration**.
4. Select the duration you want.

   TIP

   When forcing the duration of existing notes notated as tie chains, you must reduce their duration first, then increase it to the duration you want.
5. Optional: During note or rest input, input the notes or rests you want.

RESULT

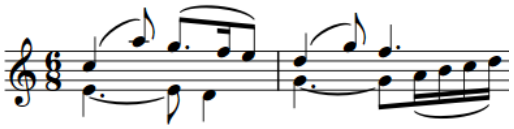
During note or rest input, any notes you input are notated with their whole rhythmic value, whatever their position in the bar. If you move them later, they keep the same notation. Rests are input as explicit rests. Notes that cross barlines are notated as tied notes.

Forcing the duration of existing notes or rests preserves their current duration or any duration to which you subsequently change them.

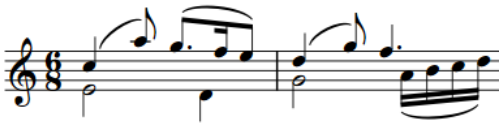
TIP

**Force position and duration** in the **Notes and Rests** group of the Properties panel is activated automatically for rests input with forced durations. You can also use this property to force the duration and position of rests.

EXAMPLE



Default notation of notes in 6/8



Notes in the down-stem voice input with forced durations

RELATED LINKS
Implicit vs. explicit rests on page 773
Inputting notes on page 164
Inputting rests on page 182
Selecting note/rest durations on page 167
Beam grouping according to meters on page 510
Creating custom beat groupings for meters on page 524
Turning explicit rests into implicit rests on page 774

# Inputting notes with rhythm dots

The **Dotted Notes** tool allows you to input notes with rhythm dots and add rhythm dots to existing notes. You can input notes with up to four rhythm dots.

PROCEDURE

1. In Write mode, do one of the following:
   - Start note input.
   - Select existing notes to which you want to add rhythm dots.
2. Optional: If you want to input notes with rhythm dots onto multiple staves at once, extend the caret to those staves.
3. Press the number on your computer keyboard that corresponds to the note value you want to input.

   For example, press **5** for eighth notes (quavers), **6** for quarter notes (crotchets), **7** for half notes (minims), and so on.
4. Press **.** (period) to activate **Dotted Notes**.
5. Optional: Press **Alt/Opt-.** (period) to change the number of rhythm dots.

   **Dotted Notes** in the Notes toolbox updates to indicate the current number of rhythm dots. You can input notes with up to four rhythm dots.
6. Optional: Press **O** to activate **Force Duration**.

   If **Force Duration** is not activated, the notes you input might be shown as tied notes rather than dotted notes, depending on their position in the bar and the prevailing meter.
7. Input the dotted notes you want.

   **Dotted Notes** remains activated until you either select a different note duration or deactivate it.

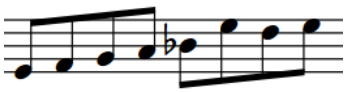
8. Press **.** again to deactivate **Dotted Notes**.
9. Press **Esc** or **Return** to stop note input.

RESULT

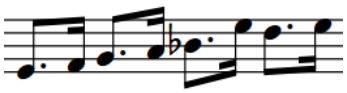
During note input, notes are input as dotted notes until you deactivate **Dotted Notes** or change the note duration.

If you add rhythm dots to multiple existing notes that would then overlap, Dorico Elements adjusts the duration of notes in the selection to avoid deleting notes at the end of the selection.

EXAMPLE



A phrase containing eighth notes



After adding rhythm dots to the whole selection

RELATED LINKS

Note and rest grouping on page 524
Activating/Deactivating the caret on page 162
Extending the caret to multiple staves on page 163
Inputting notes in Insert mode on page 175

## Inputting notes into multiple voices

By default, notes are input into the first up-stem voice, as indicated by the symbol of an up-stem quarter note beside the caret. You can input notes directly into other voices during note input, and switch between voices as required.

You can also create new voices on staves with existing notes and input notes into those voices anywhere else on those staves.

PROCEDURE

1. In Write mode, select an item on the staff and at the rhythmic position where you want to input multiple voices.
2. Press **Shift-N** to start note input.
3. Press **Shift-V** to create a new voice.

   When a new voice is added, a + sign appears beside the symbol of a quarter note beside the caret. The quarter note symbol indicates the stem direction, and the number beside the quarter note indicates the voice number if applicable.


Caret when adding the first down-stem voice


Caret when adding the second up-stem voice

4. Optional: Repeat step 3 as many times as you require.

For example, on a staff containing no notes, creating one new voice allows you to input notes into the first down-stem voice, but you can also create another new voice immediately if you want to input notes into the second up-stem voice on the staff.

5. Input the notes you want.
6. Optional: Press **V** to cycle between all the active voices on the staff.
7. Press **Esc** or **Return** to stop note input.

RESULT

Notes are input into new voices, as indicated by the caret symbol. They are input at the caret position or where you click. If you are inputting notes into a new voice on a staff that already contains notes in another voice, the stem directions of existing notes at the same rhythmic position change automatically as necessary.

The quarter note symbol beside the caret changes to indicate which voice is currently selected. Any notes input are input into the voice indicated by this symbol.

You can switch between voices as often as you like.

NOTE

- If you have three or more voices on a single staff, you can only cycle through all the voices in a set order. For example, if you have two up-stem voices and two down-stem voices, the order is: first up-stem voice, first down-stem voice, second down-stem voice, second up-stem voice.
- You can show voice colors to check which notes are in which voice. You can also identify voices by selecting individual notes and looking at the display in the status bar.

EXAMPLE

Caret when inputting notes into the first up-stem voice

Caret when inputting notes into the first down-stem voice


Caret when inputting notes into a new, second up-stem voice

RELATED LINKS

Caret on page 159
Rhythmic grid on page 158
Inputting notes on page 164
Adding notes above/below existing notes on page 189
Voices on page 886
Inputting bar rests into specific voices on page 182
Status bar on page 48
Hiding/Showing voice colors on page 887

## Inputting notes into slash voices

You can input notes into multiple slash voices, for example, if you want to indicate a precise rhythm without specifying pitches. By default, the first slash voice is up-stem, but you can add extra slash voices both with and without stems, and switch between them as often as you want.

You can also input notes into new slash voices on a staff with existing notes. Once you have created a slash voice somewhere on a staff, you can input notes into that slash voice anywhere else on the same staff.

PROCEDURE

1. In Write mode, select an item on the staff and at the rhythmic position where you want to input slash voices.
2. Press **Shift-N** to start note input.
3. Press **Shift-Alt/Opt-V** to create a new slash voice.

   When a new slash voice is added, a + sign appears beside the symbol of a note beside the caret, which now appears as a slash note. The slash note symbol indicates the stem direction, and the number beside the slash note symbol indicates the voice number if applicable.

Caret when adding the first down-stem slash voice

Caret when adding the first stemless slash voice


Caret when adding the second up-stem slash voice

4. Optional: Repeat step 3 as many times as you require.

   For example, on a staff containing no notes in slash voices, creating one new slash voice allows you to input notes into the first up-stem slash voice. You can also create a second new slash voice immediately if you want to input notes into a down-stem slash voice, or a third new slash voice if you want to input notes into a stemless slash voice.
5. Input the notes you want.

   Notes in slash voices appear at the same staff position, regardless of their pitch. By default, this is the middle line of the staff, but this changes in multiple-slash-voice contexts.
6. Optional: Press **V** to cycle between all the active voices on the staff.
7. Press **Esc** or **Return** to stop note input.

RESULT

Notes are input into new slash voices, as indicated by the caret symbol. The slash note symbol beside the caret changes to indicate which voice is currently selected and into which notes are input.

You can switch between voices as often as you like.

NOTE

- If you are inputting notes into a new slash voice on a staff that already contains notes in other voices/slash voices, the stem directions of existing notes and the staff positions of slash voices at the same rhythmic position change automatically as necessary.
- If you have three or more voices of any type on a single staff, you must cycle through all the voices in a set order. For example, if you have two up-stem voices, two down-stem voices,

and a slash voice, the order is: first up-stem voice, first down-stem voice, second down-stem voice, second up-stem voice, slash voice.

EXAMPLE

Caret when inputting notes into the first up-stem slash voice

Caret when inputting notes into the first down-stem slash voice


Caret when inputting notes into a new, second up-stem slash voice

RELATED LINKS
Slash voices on page 890
Rhythm slashes on page 763
Inputting slash regions on page 297

## Inputting notes and notations onto multiple staves

You can input notes and notations onto multiple staves simultaneously, including automatically exploding the notes in chords that you play on a MIDI keyboard onto the appropriate staves. For example, if you want to input notes onto both piano staves or input the same dynamics for multiple instruments.

Inputting notes and notations onto multiple staves is most useful for multiple adjacent pitched instruments whose music is only a single voice.

PREREQUISITE

If you want to explode individual notes in chords onto multiple staves during note input, you have connected a MIDI keyboard. You can only input the different notes in chords onto separate staves when using a MIDI keyboard.

PROCEDURE

1. In Write mode, select an item at the rhythmic position where you want to input notes/ notations onto multiple staves.
2. Press **Shift-N** to start note input.
3. Extend the caret to another staff in any of the following ways:
   - To extend to the staff above, press **Shift-Up Arrow**.
   - To extend to the staff below, press **Shift-Down Arrow**.
4. Optional: Repeat step 3 for as many staves as you require.
5. Input the notes and notations you want.

   NOTE

   You must input notes using a computer keyboard or MIDI keyboard. If you use the mouse, notes are only input on the staff you click. Similarly, you must use the corresponding popover to input notations on multiple staves. When inputting notations using the corresponding panel, they are only input on the top staff.

6. Press **Esc** or **Return** to stop note input.

RESULT

The notes and notations you input are input at the caret position on all staves across which the caret extends. If the caret extends across both staves of a piano, notes are input on either the top or bottom staff according to their pitch and your set split point on the **Play** page in **Preferences**.

When inputting notes using a MIDI keyboard, the individual notes in any chords you input are automatically exploded across the staves.

RELATED LINKS

Caret on page 159
Inputting notes on page 164
Inputting chords on page 185
Notations input on page 201
Preferences dialog on page 58

## Inputting notes in Insert mode

In Insert mode, you can input notes before existing notes without overriding them. This allows you to push existing notes ahead at the same time as inputting new notes at their previous positions.

NOTE

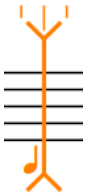
You cannot input chords in Insert mode.

PROCEDURE

1. In Write mode, start note input.
2. Optional: If you want to input notes in Insert mode onto multiple staves at once, extend the caret to those staves.
3. Press the number on your computer keyboard that corresponds to the note value you want to input.

   For example, press **5** for eighth notes (quavers), **6** for quarter notes (crotchets), **7** for half notes (minims), and so on.
4. Press **I** to activate Insert mode.

   In Insert mode, the caret shows V and inverted V shapes at the top and bottom.



5. Input the pitches you want in any of the following ways:
   - Press the corresponding letters on your keyboard.
   - Click the staff at the rhythmic positions where you want to input notes.

     A shadow notehead appears when inputting with the mouse to indicate where the note will be input.
   - Play the notes on a MIDI keyboard.
6. Optional: Press **I** again to deactivate Insert mode and return to normal note input.

7. Press **Esc** or **Return** to stop note input.

RESULT

Notes are inserted before existing notes at the caret position or where you click, without overriding any existing notes at rhythmic positions after the caret. Any existing notes after the caret are pushed ahead to subsequent rhythmic positions.

RELATED LINKS

Caret on page 159
Rhythmic grid on page 158
Inputting chords on page 185

## Inputting notes in percussion kits

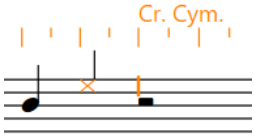
You can input notes on all percussion instruments in percussion kits using any presentation type. When inputting notes in percussion kits, the caret is smaller than when inputting notes on pitched instrument staves.

Instead of occupying the whole height of the staff, the caret in percussion kits is positioned at a particular staff position.

The name of the percussion instrument or slash voice currently selected by the caret, and any applicable playing technique, is shown directly above the rhythmic grid display.

NOTE

You can only input notes into slash voices in percussion kits when using the five-line staff presentation.




Inputting notes on instruments with five-line staff kit presentation

PREREQUISITE

If you want to use additional playing techniques for instruments in the kit, you have defined these in the **Percussion Instrument Playing Techniques** dialog.

PROCEDURE

1. In Write mode, select an item in the percussion kit and at the rhythmic position where you want to input notes.
2. Press **Shift-N** to start note input.
3. Move the caret up/down to input notes on different instruments in any of the following ways:
   - Press **Up Arrow** to move it up.
   - Press **Down Arrow** to move it down.
4. Select an appropriate playing technique for the instrument currently selected by the caret before inputting notes.
   - Press **Shift-Alt/Opt-Up Arrow** to cycle upwards through playing techniques.
   - Press **Shift-Alt/Opt-Down Arrow** to cycle downwards through playing techniques.
   - Play the pitch for the playing technique you want on a MIDI keyboard.

NOTE

You can define MIDI pitches for playing techniques on the **Note Input and Editing** page in **Preferences**.

5. Input notes in one of the following ways:
   - Five-line staff presentation type: Press letters on a computer keyboard or play notes on a MIDI keyboard, corresponding to staff positions for the clef set in **Preferences**. For example, press **B** to input notes for the instrument assigned to the middle line of a five-line staff when **Treble G clef** is set.
   - Grid and single-line instruments presentation types: Press the letter of any note name **A** to **G** on a computer keyboard or play any note on a MIDI keyboard to input notes for the instrument on whose line the caret is currently positioned.

     NOTE

     Notes played on MIDI keyboards are interpreted differently, depending on whether **Use percussion map** or **Use staff position** is set for the different kit presentation types in the **Note Input** section of the **Note Input and Editing** page in **Preferences**.

   - Any kit presentation type: Press **Y** to input notes for the instrument and playing technique shown above the rhythmic grid.
   - Any kit presentation type: Click on the staff where you want to input notes, and at the rhythmic positions where you want them.
6. Press **Esc** or **Return** to stop note input.

RELATED LINKS
Caret on page 159
Percussion kits and drum sets on page 869
Note input setup for percussion kits on page 177
Percussion Instrument Playing Techniques dialog on page 876
Changing the playing techniques of notes on percussion kit staves on page 870
Preferences dialog on page 58

## Note input setup for percussion kits

Inputting music for unpitched percussion instruments works differently than for pitched instruments. You can use any of the usual methods for unpitched percussion input, but using a MIDI keyboard or a computer keyboard is most efficient.

- You can find options relating to note input for percussion in the **Note Input** section of the **Note Input and Editing** page in **Preferences**.

There is one set of options for input onto five-line staves, and another set of options for input onto grids and individual instruments.

The main choice affects input via MIDI keyboards and computer keyboards.

**Use percussion map**

A percussion map defines which MIDI notes produce which sound for a particular patch in a sound library. For example, in General MIDI percussion, C2 (note 36) produces bass drum, and D2 (note 38) produces snare drum, and so on.

If you know a particular mapping well, you may find it helpful to use the mapping directly for input.

**Use staff position**

This option uses the staff position defined in the **Edit Percussion Kit** dialog. For example, on a drum set, the bass drum is normally positioned in the bottom space of the staff, while the snare drum is positioned in the third space from the bottom.

You can think of staff positions relative to what they would be when using a treble G clef (F4 and C5 respectively) or using a bass F clef (A2 and E3 respectively).

You can choose which clef is used to interpret staff positions for five-line staves:

- **Treble G clef**
- **Bass F clef**

When you select **Use staff position**, you can designate one octave of your MIDI keyboard to input playing techniques.

By default, the **Input techniques from MIDI key** option is set to MIDI note 48, which is C3, the C one octave below middle C (C4 = MIDI note 60). You can click the MIDI learn button and then play a note on your MIDI keyboard to change the starting pitch. Assuming a starting pitch of C3, ascending notes operate as follows:

- C3 (48): Previous playing technique
- C♯3 (49): Next playing technique
- D3 (50): First mapped playing technique
- E♭3 (51): Second mapped playing technique
- E3 (52): Third mapped playing technique

And so on, up to:

- B3 (59): Tenth mapped playing technique

In general, we recommend that you set **Use staff position** for percussion input. **Use percussion map** is normally only useful when you are inputting notes onto a drum set and you have already memorized the General MIDI percussion map.

RELATED LINKS
Preferences dialog on page 58
Edit Percussion Kit dialog on page 115
Inputting notes in percussion kits on page 176
Changing the playing techniques of notes on percussion kit staves on page 870

## Default note selection during note input for percussion kits

During note input in percussion kits, you can press the letters on a computer keyboard that correspond to staff positions for kits using the five-line staff presentation type. For example, you can press **F** to input a note on the F space or line.

In **Preferences**, you can set options for inputting notes into percussion kits in the **Note Input** section of the **Note Input and Editing** page. For example, if you want to use staff positions to determine notes, choose **Use staff position** for **Input onto kit or grid**.

If you have the staff positions set relative to **Treble G clef**, then F could mean either the bottom space on the staff or the top line on the staff. In a standard drum set, this means either the kick drum in the bottom space, or the ride cymbal on the top line.

When inputting notes in pitched instruments, Dorico Elements chooses the lower or upper possible staff position based on which is closer to the current position of the caret.

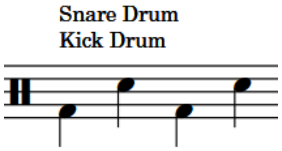
However, when inputting notes in percussion kits, Dorico Elements chooses the staff position of the note with the same stem direction as the last input note, rather than the staff position that is closest to the current position of the caret. This makes it easier to input common note patterns used in percussion kits.

For example, inputting kick drum and snare drum notes on a standard drum set is a common pattern. The kick drum is in the bottom space, and the snare drum is two spaces above: five staff positions away from the bottom space, and four staff positions away from the top line.

You can press **F** for the kick drum and **C** for the snare drum.

The default stem direction behavior for inputting notes in kits in Dorico Elements means that you can alternate pressing **F** and **C**, and the notes are input at the positions of the kick drum and snare drum, even though the top line is the closer position after inputting a snare drum note.

This is because the kick drum uses the same stem direction, and therefore voice, as the snare drum.




NOTE

Dorico Elements automatically changes the directions of stems according to the positions of notes on the staff when only one voice on the staff contains notes, regardless of their voice.

RELATED LINKS
Preferences dialog on page 58
Stem direction on page 814

## Inputting notes on tablature

You can input notes directly into tablature in the same ways as inputting normal notes. When inputting notes on tablature, the caret is smaller than when inputting notes on standard five-line staves and behaves as if chord input is always active, meaning you must advance the caret manually to input notes at other rhythmic positions.

PROCEDURE

1. In Write mode, select an item on the tablature and at the rhythmic position where you want to input notes.

   NOTE

   If both notation staves and tablature are shown in the current layout, you must select an item on the notation staff and then move the caret to the tablature after starting note input.

2. Press **Shift-N** to start note input.
3. Select a note value in any of the following ways:
   - To select the next longer note value, press **=**.
   - To select the next shorter note value, press **-**.
   - Click the note value you want in the Notes panel on the left of the window.
4. Input the pitch you want for the current string in any of the following ways:
   - Press the number on your computer keyboard or numeric keypad that corresponds to the fret number you want. For example, press **6** for fret 6.

     For fret numbers 10 and above, press the two digits quickly.
   - Press the corresponding letters on your computer keyboard.

NOTE

When using letters, Dorico Elements automatically chooses the octave closest to the nut on the corresponding string.

- Play the note on a MIDI keyboard.

5. Move the caret up/down to input notes on different strings at the same rhythmic position in any of the following ways:
   - Press **Up Arrow** to move it up.
   - Press **Down Arrow** to move it down.
6. Move the caret to other rhythmic positions in any of the following ways:
   - To move the caret according to the current rhythmic grid resolution, press **Right Arrow** / **Left Arrow**.
   - To advance the caret according to the note value currently selected, press **Space**.
   - To move the caret to the next/previous bar, press **Ctrl/Cmd-Right Arrow** / **Ctrl/Cmd-Left Arrow**.

RESULT

Notes are input at the caret position with the selected duration on the string indicated by the caret and are played back as you input them by default. Notes continue to be input at the caret position until you move the caret manually and overwrite any previous note on the same string. If you attempt to input a note that is impossible on the current string, it is input on the closest available string in addition to any existing notes.

If you have input two or more notes on the same string at the same rhythmic position, they are shown next to each other on tablature and are colored green. You can then select them individually and change their string allocation.

RELATED LINKS

Caret on page 159
Moving the caret manually on page 163
Tablature on page 809
Hiding/Showing notation staves and tablature on page 810
Changing the allocated string for notes on tablature on page 811

# Inputting accidentals

You can input accidentals during note input and by adding them to existing notes. You can also change the accidentals of existing notes.

NOTE

Accidentals that are part of the prevailing key signature are input automatically. For example, if you press **F** in G major, an F♯ is input automatically. You would only need to specify an accidental if you want to input an F♮, for example.

This also applies if you are using a MIDI keyboard, though you can respell notes if the accidentals chosen automatically are not the ones that you expected.

PROCEDURE

1. In Write mode, do one of the following:
   - Start note input.

- Select the existing notes to which you want to add accidentals or whose accidentals you want to change.

2. Select the accidental you want to input in one of the following ways:
   - Press **-** for flat.
   - Press **=** for sharp.
   - Press **0** for natural.
   - Click the accidental you want in the Notes panel.

   TIP

   You can find uncommon accidentals, such as double sharps and flats, or microtonal accidentals, in the **Accidentals** section of the Key Signatures, Tonality Systems, and Accidentals panel on the right of the window.

3. Optional: During note input, enter the note you want with your selected accidental.

RESULT

The accidental is added to the selected existing notes. If you selected existing notes with different accidentals, they are changed to have the accidental you selected.

During note input, the selected accidental is only input on the next note you input. You must reselect the accidental for each subsequent note.

NOTE

- Subsequent accidentals for the same note in the same register do not appear in the same bar.
- If you input notes using a MIDI device, Dorico Elements automatically shows an accidental if necessary. It selects a sharp, flat, or natural based on key signature and context. You can later respell notes so they are shown as their enharmonic equivalents with different accidentals.

RELATED LINKS

Accidentals on page 479
Inputting notes on page 164
Changing the pitch of individual notes on page 191
Respelling notes on page 192

## Accidental selection during MIDI input

Dorico Elements interprets MIDI data to create accidentals, and automatically determines the spelling of notes according to preset rules.

Dorico Elements automatically displays an accidental if one is required. It selects a sharp or flat based on key signature and context.

The algorithm for this takes into account the key signature and the intervals between successive notes and chords. Therefore Dorico Elements prefers sharp accidentals in a key with sharps, and flats in a key with flats. If you change the spelling of an accidental, Dorico Elements follows your spelling preference whenever that note is used again in the score.

If you input notes with accidentals outside the key signature, Dorico Elements uses sharps if the figure is rising, and flats if it is falling. The spelling is also calculated vertically, meaning a simpler interval is produced where possible, such as a major third rather than a diminished fourth.

By default, Dorico Elements makes retrospective changes to how it has spelled accidentals, depending on how your music develops. For example, in C major, if you input a sequence of pitches C-E-G♯, but then input a G♭, the G♯ is respelled as an A♭.

RELATED LINKS
Respelling notes on page 192

## Inputting rests

Dorico Elements automatically shows rests as appropriate in the gaps between the notes you input. However, you can also input rests manually, for example, to show fermatas on specific beats for players without notes in that bar.

PROCEDURE

1. Select an item on the staff and at the rhythmic position where you want to input rests.
2. Press **Shift-N** to start note input.
3. Optional: If you want to input rests onto multiple staves at once, extend the caret to those staves.
4. Press **,** (comma) to start rest input.
5. Select the duration you want.
6. Press **O** to activate **Force Duration**.
7. Input rests in any of the following ways:
   - Press **Y** or any of the letters from **A** to **G**.
   - Play notes on a MIDI keyboard.
8. Optional: Press **,** (comma) again to stop rest input.
9. Press **Esc** or **Return** to stop note input.

RESULT

Rests of the selected duration are input. If **Force Duration** is not activated, Dorico Elements automatically combines adjacent rests as appropriate for their position in relation to notes and according to the current meter.

RELATED LINKS
Rests on page 772
Implicit vs. explicit rests on page 773
Extending the caret to multiple staves on page 163
Selecting note/rest durations on page 167
Forcing the duration of notes/rests on page 169
Inputting notes on page 164

### Inputting bar rests into specific voices

When inputting music in multiple voices, rests are normally created automatically when there is a gap in the secondary voice. However, if you want secondary voices to begin with explicit bar rests in strict contrapuntal music, you can input a bar rest into those voices.

For music in a single voice, you do not have to input bar rests as they appear in each new bar automatically when you advance the care. You can also hide/show bar rests in all empty bars in each layout independently.

PROCEDURE

1. In Write mode, start note input.

2. Select the appropriate secondary voice by pressing **V** until the voice direction indicator shows the correct voice.

   Alternatively, if you want to input bar rests into a new voice, press **Shift-V** until the voice direction indicator shows the correct voice.
3. Press **Shift-B** to open the bars and barlines popover.
4. Enter **rest** into the popover to add a bar rest.
5. Press **Return** to close the popover.
6. Press **Ctrl/Cmd-Right Arrow** to advance the caret to the start of the next bar after the bar rest.
7. Optional: If you want to show bar rests in multiple bars for the selected voice, repeat steps 3 to 6 as many times as required.

RESULT

Bar rests are input into the selected voice at the caret position. If the caret position is within a bar that contains notes for the selected voice, these notes are replaced by the bar rest.

NOTE

Alternatively, you can click **Insert Bar Rest** in the **Insert Bar Rest** section of the Bars and Barlines panel to input bar rests during note input.

RELATED LINKS

Bars on page 490
Rests on page 772
Bars and barlines popover on page 222
Inputting notes into multiple voices on page 171
Caret on page 159
Hiding/Showing bar rests in empty bars on page 776

# Inputting ties

Dorico Elements automatically creates ties as required for note durations in each meter. However, you can input ties manually to join two notes of the same pitch, both during note input and by joining two existing notes with a tie.

For example, if you want to input a tie between two quarter notes across a barline, you can input a half note at the rhythmic position where you want to input the first quarter note. Dorico Elements automatically splits the half note into two quarter notes, one on each side of the barline, and joins them with a tie.

NOTE

These steps do not apply to inputting ties between non-adjacent notes or notes in different voices, for example, between two notes of the same pitch on different staves, or between a grace note and a normal note.

PREREQUISITE

If you want to preserve the durations of existing notes, you have forced their duration. For example, if you want to specify subdivisions within a tie chain that are different than the prevailing meter.

PROCEDURE

1. In Write mode, do one of the following:

- Start note input.
- Select the note from which you want the tie to start.

2. Optional: During note input, input the note that you want at the start of the tie.
3. Press **T** to input ties.
4. Optional: During note input, input the note that you want at the end of the tie.

NOTE

The second note must be the same pitch as the first note.

RESULT

During note input, the two notes input are joined by a tie.

When inputting ties between existing notes, the selected note is joined by a tie to the next note of the same pitch in the same voice and staff.

NOTE

- During note input, Dorico Elements ties the first note you input after inputting the tie to the previous note of the same pitch in the same voice and staff, even if there are other notes of other pitches between them.
- Depending on the current time signature and the position of the start of the note in the bar, inputting a tie between two notes can instead create a single note of a different duration, such as a half note instead of two tied quarter notes. You can override your note grouping settings and fix your notated rhythm by forcing their duration. Dorico Elements then notates your input notes with the rhythmic durations specified, as long as they can fit inside the bar.

RELATED LINKS

Forcing the duration of notes/rests on page 169
Ties on page 831
Note and rest grouping on page 524
Beam grouping according to meters on page 510
Ties vs. slurs on page 833
Inputting ties between non-adjacent notes on page 836

## Inputting grace notes

You input grace notes in the same ways as normal notes, and they can have any rhythmic note value, accidental, and articulation. You can only input grace notes during note input.

PROCEDURE

1. Select an item on the staff and at the rhythmic position where you want to input grace notes.
2. Press **Shift-N** to start note input.
3. Optional: If you want to input grace notes onto multiple staves at once, extend the caret to those staves.
4. Press **/** to start grace note input.
5. Press the number for the rhythmic duration you want. For example, press **5** for eighth grace notes.
6. Optional: Press **Alt/Opt-/** to switch between inputting slashed/unslashed grace notes.

The **Grace Notes** toolbox button when inputting unslashed grace notes.

7. Input the grace notes you want.
8. Press **/** again to stop grace note input and return to normal note input.

RESULT

The pitches you enter are input as grace notes at the caret position.

If you are inputting grace notes after previously inputting normal notes, the rhythmic duration of the grace notes is the same as the last input normal note. You can change the rhythmic duration in the same way as for normal notes.

There is no limit to the number of grace notes that can exist at the same rhythmic position.

TIP

You can also change the type of grace notes after they have been input.

RELATED LINKS

Grace notes on page 596
Extending the caret to multiple staves on page 163
Inputting notes on page 164
Inputting accidentals on page 180
Inputting articulations on page 201
Changing the type of grace notes on page 599

# Inputting chords

You can input chords during note input when both note input and **Chords** are activated. You can input notes with a computer keyboard, with the mouse, or by playing notes with a MIDI keyboard.

NOTE

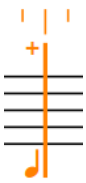
You cannot input chords in Insert mode.

PROCEDURE

1. Select an item on the staff and at the rhythmic position where you want to input chords.
2. Press **Shift-N** to start note input.
3. Optional: If you want to input chords onto multiple staves at once, extend the caret to those staves.
4. Press the number on your computer keyboard that corresponds to the note value you want to input.

   For example, press **5** for eighth notes (quavers), **6** for quarter notes (crotchets), **7** for half notes (minims), and so on.
5. Press **Q** to start chord input.

   In chord input, a + sign appears at the top of the caret. This allows you to input multiple notes at the caret position.



6. Input the pitches you want in any of the following ways:

- Press the corresponding letters on your keyboard.

  TIP

  Dorico Elements automatically inputs notes above the highest note at the caret position when **Chords** is activated.

  You can input notes below the lowest note at the caret position instead by pressing **Ctrl-Alt (Windows) or Ctrl (macOS)** as well as the letter for the note name, for example, **Ctrl-Alt-A (Windows) or Ctrl-A (macOS)**.

- Click the staff at the rhythmic positions where you want to input notes.

  A shadow notehead appears when inputting with the mouse to indicate where the note will be input.

- Play the notes on a MIDI keyboard.

7. Optional: Advance the caret to input chords at other rhythmic positions.

   During chord input, notes are input at the same rhythmic position and above the previous note until you advance the caret manually.

8. Press **Q** again to stop chord input.

RESULT

Multiple notes are input at the caret position.

- If entering pitches by clicking with the mouse, you can put the same pitch into the chord twice by clicking again on the same line.
- If entering pitches with the keyboard, repeated notes are automatically input an octave above. You can change the register of notes by forcing the register selection during note input, or by transposing them after they have been input.

NOTE

- You can stop chord input and immediately continue inputting notes as before, with a single note at each rhythmic position and the caret advancing automatically to the next rhythmic position.
- When chords contain two pitches in the same register but with different accidentals, that is known as an altered unison. Altered unisons are shown as split stems by default in Dorico Elements.

RELATED LINKS

Register selection during note input on page 166
Extending the caret to multiple staves on page 163
Moving the caret manually on page 163
Altered unisons on page 482

## Inputting tuplets

You can input all types of tuplets using the tuplets popover. Tuplets are input like normal notes, and so can only be input during note input.

You can also input triplets by clicking **Tuplets** in the Notes toolbox. However, you can only input one triplet at a time this way.

PROCEDURE

1. Select an item on the staff and at the rhythmic position where you want to input tuplets.
2. Press **Shift-N** to start note input.

3. Optional: If you want to input tuplets onto multiple staves at once, extend the caret to those staves.
4. Press the number on your computer keyboard that corresponds to the note value on which you want to base your tuplet.

   For example, press **5** for eighth notes (quavers), **6** for quarter notes (crotchets), **7** for half notes (minims), and so on.
5. Press **;** to open the tuplets popover.
6. Enter the tuplet you want into the popover as a ratio. For example, enter **3:2** to input triplets.
7. Press **Return** to close the popover.

   The tuplet is entered.
8. Optional: Change the selected note duration.

   For example, you can input a tuplet based on eighth notes but input a quarter note within that tuplet.
9. Enter or play in the pitches you want.
10. Optional: Press **Space** to advance the caret to continue inputting tuplets of the same ratio at later rhythmic positions.
11. Stop tuplet input in any of the following ways:
    - To return to inputting normal notes, press **:** or move the caret with the arrow keys.
    - To stop note input completely, press **Esc**.

RESULT

The pitches you enter or play in are input as tuplets, starting from the caret position.

If you want to input a different type of tuplet immediately after inputting tuplets, you must stop the first type of tuplet before inputting the second type. If you do not stop the first type, the second type is input as a nested tuplet.

RELATED LINKS

Tuplets on page 858
Nested tuplets on page 859
Inputting notes on page 164
Extending the caret to multiple staves on page 163

## Tuplets popover

The table contains examples of what you can enter into the tuplets popover to input different types of tuplets. The tuplets popover can only be opened during note input.

You can open the tuplets popover during note input in Write mode in any of the following ways:

- Press **;**.

  As tuplets are often described in ratios, such as 3:2, the tuplets popover uses the semicolon key to be memorable.
- Choose **Write** > **Create Tuplet**.

The icon on the left-hand side of the popover matches the corresponding button in the Notes toolbox on the right of the window.


Tuplets popover with an example entry

**Tuplets** button in the Notes toolbox

NOTE

Clicking **Tuplets** in the Notes toolbox only inputs a single triplet. It does not open the tuplets popover.

When inputting tuplets with the keyboard, Dorico Elements continues inputting notes as the specified tuplet until any of the following happens:

- You press **:** to return to inputting normal notes.
- You move the caret with the arrow keys.
- You stop note input.

| Type of tuplet | Popover entry |
|---|---|
| Triplet, three notes in the space of two. | **3** or **3:2** |
| Triplet, three notes in the space of four. | **3:4** |
| Quintuplet, five notes in the space of four. | **5:4** |
| Quintuplet, five notes in the space of two. | **5:2** |
| Septuplet, seven notes in the space of four. | **7:4** |
| Septuplet, seven notes in the space of two. | **7:2** |
| Duplet, two notes in the space of three. Often used in compound meters. | **2:3** |
| Quintuplet, five notes in the space of six. Often used in compound meters. | **5:6** |
| 64th note beat unit in tuplet | **z** or **2** |
| 32nd note beat unit in tuplet | **y** or **3** |
| 16th note beat unit in tuplet | **x** or **4** |
| Eighth note beat unit in tuplet | **e** or **5** |
| Quarter note beat unit in tuplet | **q** or **6** |
| Half note beat unit in tuplet | **h** or **7** |
| Whole note beat unit in tuplet | **w** or **8** |
| Double whole note beat unit in tuplet | **2w** or **9** |
| Dotted eighth note beat unit in tuplet | **e.** or **5.** |
| Dotted quarter note beat unit in tuplet | **q.** or **6.** |

| Type of tuplet | Popover entry |
| --- | --- |
| Quintuplet, five dotted quarter notes in the space of four.<br>NOTE<br>You must separate the tuplet ratio from the beat unit using a space or hyphen when using a number to specify the beat unit. | **5:4q.** or **5:4-6.** |

NOTE

Unless you specify a beat unit in your entry, the total duration of the tuplet depends on the note value selected when you open the popover. For example, if a quarter note is selected when you input a triplet, the triplet input is three quarter notes in the space of two.

This list is not comprehensive. It is intended to illustrate how you can structure your entry to input different tuplets.

RELATED LINKS
Inputting tuplets on page 186
Tuplets on page 858
Turning existing notes into tuplets on page 860
Selecting note/rest durations on page 167

# Adding notes above/below existing notes

You can add notes above/below existing notes. You can add multiple notes at the same time, according to their intervals relative to the existing notes.

PROCEDURE

1. Select the notes to which you want to add notes.
2. Press **Shift-I** to open the add intervals popover.
3. Enter the intervals of the notes you want, relative to your selected notes. For example, enter **-m3,4** to add notes a minor third below and a fourth above the selected notes.
4. Press **Return** to close the popover.

RESULT

Notes are added to the selected notes according to the intervals you entered into the add intervals popover.

RELATED LINKS
Changing the pitch of individual notes on page 191

## Add intervals popover

The add intervals popover allows you to add notes above and below existing notes, and also transpose existing notes. It makes much of the functionality provided by the **Add Notes Above or Below** and **Transpose** dialogs accessible directly via the keyboard.

You can open the add intervals popover in Write mode in any of the following ways when notes are selected, including during note input:

- Press **Shift-I**.
- Choose **Write** > **Add Intervals Popover**.

The table contains examples of what you can enter into the add intervals popover to transpose notes or add notes to existing notes.

| Example action | Popover entry |
|---|---|
| Transpose notes upwards by a third. | **t3** |
| Transpose notes downwards by a sixth. | **t-6** |
| Add notes a third above. | **3** or **3rd** |
| Add notes a fourth below. | **-4** or **-4th** |
| Add multiple notes<br>NOTE<br>Separate notes with commas, not with spaces. | **3,6** or **-3,3,4** |
| Add notes above and/or below all notes in selected chords.<br>NOTE<br>Separate notes with commas, not with spaces. | **3 all** or **-M2,m3 to all** |
| Add notes only to the top notes in chords. | **-3 top** or **dim5 top** |
| Add notes only to the bottom notes in chords. | **aug4 bottom** or **-2 bottom** |
| Specify perfect interval. | **p**, **per**, or **perf** |
| Specify major interval. | **M**, **maj**, or **major** |
| Specify minor interval. | **m**, **min**, or **minor** |
| Specify diminished interval. | **d**, **dim**, or **diminished** |
| Specify augmented interval. | **a**, **aug**, or **augmented** |
| Specify diatonic interval. | **diat** or **diatonic** |
| Transpose notes by microtonal intervals.<br>NOTE<br>The first number is the interval degree.<br>The second number is the number of quarter tones. | **t 3 8 qt** |

If you do not otherwise specify it, the interval is calculated by adding or transposing notes by the number of staff positions specified. For example, in C major, if the selected note is a D♮ and you specify 3 to add a third above, the added note is an F♮. You can specify the quality of the interval by including it before the interval.

If the selected material already includes chords, notes are added above the top note in the chord, and added below the bottom note in the chord. You can add notes to all notes in selected chords by including **all** or **to all** at the end of your entry.

For microtonal transpositions, the first number is the interval degree, and the second number is the number of quarter tones. For example, if you have a C natural and you enter **T 3 8 qt**, it changes to an E natural.

RELATED LINKS
Transposing existing notes with the add intervals popover on page 192

## Changing the pitch of individual notes

You can change the pitch and register of individual notes, including grace notes, after they have been input by octave divisions, by staff position, and by octaves.

PROCEDURE

1. In Write mode, select the notes whose pitches you want to change.
2. Raise/Lower the pitches of the selected notes in any of the following ways:
   - To move notes up one staff position, such as from C to D, press **Alt/Opt-Up Arrow**.
   - To move notes down one staff position, such as from D to C, press **Alt/Opt-Down Arrow**.
   - To transpose notes up a single octave division, such as a semitone in 12-EDO or a quarter tone in 24-EDO, press **Shift-Alt/Opt-Up Arrow**.
   - To transpose notes down a single octave division, such as a semitone in 12-EDO or a quarter tone in 24-EDO, press **Shift-Alt/Opt-Down Arrow**.
   - To transpose notes up an octave, press **Ctrl/Cmd-Alt/Opt-Up Arrow**.
   - To transpose notes down an octave, press **Ctrl/Cmd-Alt/Opt-Down Arrow**.

RESULT

The pitch or register of the selected notes is changed.

If the pitch is now impossible to play on a fretted instrument, such as if a note would have to be played below the nut on the lowest string, it appears on tablature as a question mark.

NOTE

You can press **Alt/Opt-Up Arrow** and **Alt/Opt-Down Arrow** to change the staff positions of notes in percussion kits using grid and five-line staff presentation types. However, this also changes the instrument playing the note.

RELATED LINKS
Equal Division of the Octave (EDO) on page 614
Adding notes above/below existing notes on page 189
Add intervals popover on page 189
Inputting accidentals on page 180

## Respelling notes

You can change the enharmonic spelling of notes so they are shown as their enharmonic equivalents, for example, to show the stepwise movement in a phrase clearly, or to avoid altered unisons in a chord. You can do this for all layouts or just for part layouts.

Dorico Elements uses an algorithm that automatically decides the spelling of pitches, based on key signature and context.

There are always at least three options for every pitch, as Dorico Elements allows enharmonic spellings to show up to two accidental glyphs. This means the same note can be spelled four ways if the original pitch can be spelled with the note name either two notes below or two notes above, using a maximum of two accidental glyphs. For example, B𝄫 is a possible enharmonic spelling of G♯ because a triple-flat uses a single accidental glyph, whereas an F𝄪 uses two accidental glyphs.

PROCEDURE

1. In the music area, open the layout in which you want to respell accidentals.

   NOTE

   If you respell accidentals in a full score layout, this also affects their spelling in part layouts. However, if you respell accidentals in part layouts, this only affects their spelling in that part layout.

2. Select the notes you want to respell.
3. Respell the selected notes in any of the following ways:
   - Press **Alt/Opt-=** to respell upwards.
   - Press **Alt/Opt--** to respell downwards.

RESULT

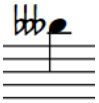
The enharmonic spelling of the selected notes is changed.

EXAMPLE

A G sharp

When respelled downwards, the G sharp becomes an F triple-sharp

When respelled upwards, the G sharp becomes an A flat



When respelled upwards again, the G sharp becomes a B triple-flat

RELATED LINKS

Accidentals on page 479
Inputting accidentals on page 180

## Transposing existing notes with the add intervals popover

You can change the pitch of notes after they have been input using the add intervals popover.

PROCEDURE

1. Select the notes you want to transpose.

2. Press **Shift-I** to open the add intervals popover.
3. Enter the transposition interval you want into the popover.

   For example, enter **t3** to transpose the notes up a third, or **t-min6** to transpose the notes down a minor sixth.
4. Press **Return** to close the popover.

RESULT

The selected notes are transposed by the degree specified.

RELATED LINKS

Add intervals popover on page 189

## Repitching notes without changing their rhythm

You can repitch notes after you have input them while keeping their durations the same, for example, if you want to duplicate the rhythm but have different pitches.

PROCEDURE

1. Select the first note you want to repitch.
2. Press **Shift-N** to start note input.
3. Optional: If you want to repitch notes on multiple staves at once, extend the caret to those staves.
4. Press **L** to activate **Lock to Duration**.
5. Enter the pitches you want.
6. Optional: Press **L** again to deactivate **Lock to Duration**.

   NOTE

   **Lock to Duration** automatically deactivates when you reach the last existing note on the staff. By default, normal note input continues using the previous note value selected before you activated **Lock to Duration**.

RESULT

Existing notes on the selected staff are repitched without their rhythms being changed. The caret automatically advances from note to note, even if there are large rests between notes on the staff.

RELATED LINKS

Caret on page 159
Extending the caret to multiple staves on page 163

## Transposing selections

You can transpose whole selections together, including key signatures within selections, using the **Transpose** dialog.

PROCEDURE

1. In Write mode, make a selection in the music area.
2. Choose **Write** > **Transpose** to open the **Transpose** dialog.
3. Adjust the parameters required for your transposition, such as interval and quality.

TIP

- We recommend using the **Calculate interval** section to determine your required settings, for example, if you want to transpose from G♭ major to G major.
- Different intervals have different possible qualities. For example, you can specify a major third but not a major octave. Therefore, if you want to set your transposition parameters manually, we recommend selecting the interval before the quality.

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

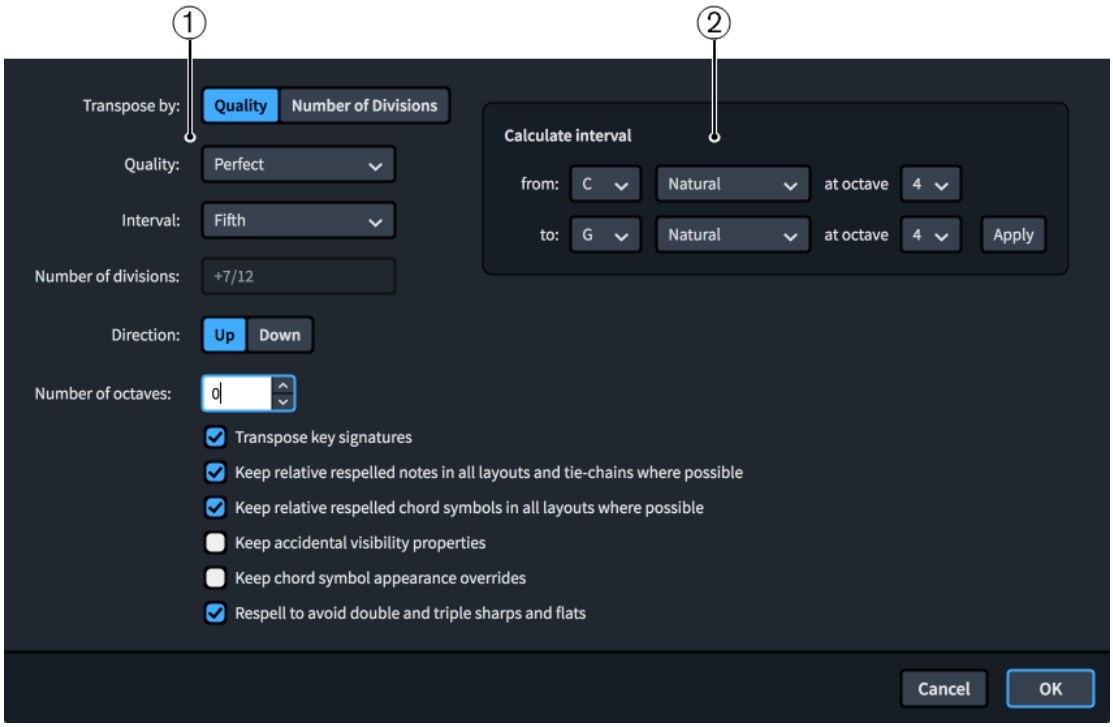
RESULT

All notes in your selection are transposed according to the interval or number of divisions of the octave specified in the **Transpose** dialog. If your selection included key signatures and you activated **Transpose key signatures**, all key signatures in the selection are also transposed.

## Transpose dialog

The **Transpose** dialog allows you to transpose selections of notes simultaneously, including key signatures. You can transpose according to an interval and quality or by a set number of octave divisions.

- You can open the **Transpose** dialog in Write mode by making a selection in the music area and choosing **Write** > **Transpose**.




**Transpose** dialog

The **Transpose** dialog contains the following sections:

1 **Transposition options**

Contains options that allow you to specify the transposition you want. For example, you can choose to transpose by an interval quality, such as a major third, or by a set number of divisions of the octave. You can choose the direction of the transposition, whether it includes octaves, and the interval and quality or number of divisions by which you want to transpose your selection.

According to convention, different intervals have different possible qualities. For example, you can specify a major third but not a major octave. Therefore, we recommend selecting the interval before the quality.

Additional options also allow you to transpose any key signatures included in your selection, keep relative respelled notes and chord symbols where possible, and avoid double and triple accidentals.

NOTE

You can only use **Respell to avoid double and triple sharps and flats** when transposing music in tonality systems that are compatible with 12-EDO.

2 **Calculate interval**

Allows you to set transposition options according to a starting note and the resulting note you want. For example, if you want to transpose a selection relative to a C natural becoming a G♯ but you are not certain of the interval and quality required, you can enter those two notes in the **Calculate interval** section, click **Apply**, and Dorico Elements automatically sets the required transposition options for you.

NOTE

The **Transpose** dialog does not allow transpositions that would result in impossible notations, such as sharper than a triple sharp, or that require a microtonal accidental that does not exist in the tonality system in place at the position of your selection.

RELATED LINKS
Add intervals popover on page 189
Equal Division of the Octave (EDO) on page 614
Tonality systems on page 613

# MIDI recording

MIDI recording is a way of inputting notes into Dorico Elements by playing them in real time on a MIDI device. This can be particularly useful if, for example, you prefer to improvise your music rather than plan pitches and note durations in advance.

In Dorico Elements, you can record MIDI notes using any MIDI device. However, you must connect the device to your computer before starting Dorico Elements.

Outside of note input, Dorico Elements uses the instrument sounds of your most recent selection for the notes you play on your MIDI device. In Play mode, this is the most recent track header you clicked, while in Write mode, this is the last instrument staff on which you selected an item, started note input, or into which you recorded MIDI. During note input, Dorico Elements always uses the instrument sounds of the instrument into which you are recording notes.

TIP

You can enable/disable MIDI thru on the **Play** page in **Preferences**, for example, if you do not want to hear sounds in Dorico Elements when playing on your MIDI keyboard.

As you play notes on your MIDI device, Dorico Elements uses an algorithm to produce the correct enharmonic spelling for those notes.

RELATED LINKS
Optimization for MIDI recording on page 198
Preferences dialog on page 58

# Inputting notes using MIDI recording

You can input notes by recording what you play on a MIDI device in real time. You can record notes in both concert and transposed pitch.

PREREQUISITE

- You have connected the MIDI device you want to use.
- You have set the quantization options in the **MIDI Quantize Options** dialog as appropriate for the music you intend to record.
- You have set the options in the **Recording** section of the **Play** page in **Preferences** as appropriate for the music you intend to record.
- You have input enough bars or empty rhythmic space for the amount of music you want to record. Dorico Elements does not automatically add extra bars or rhythmic space.
- If you want to hear a click during your recording, you have input a time signature. There is no click in open meter or when there is no time signature.
- You have chosen the appropriate input pitch setting.

PROCEDURE

1. Select a note or rest on the staff/instrument track into which you want to record notes, at the position from which you want to record. You can do this in Write mode and Play mode.

   NOTE

   - In Play mode you cannot select rests, meaning you can only record into instrument tracks that already contain at least one note.
   - You can also record MIDI during note input, but this prevents Dorico Elements from using both staves in grand staff instruments.

2. Optional: If you want to record notes without overwriting any existing notes on the staff, press **Q** to activate **Chords**.
3. Optional: If you want to record into a specific voice on the staff, press **Shift-N** to start note input and then do one of the following:
   - If the voice you want already exists on the staff, press **V** until the note symbol beside the caret indicates the correct voice.
   - If the voice you want does not exist on the staff yet, press **Shift-V** until the note symbol beside the caret indicates the correct voice.
4. Press **Ctrl/Cmd-R** to start recording.

   During recording, the playhead appears red and moves along in time. By default, there is one bar of count-in before the playhead reaches the rhythmic position of either your original selection or the caret.
5. Play the notes you want on your MIDI device.

   In Write mode, no music appears on the staff until you stop recording. In Play mode, notes appear in the piano roll in real time.
6. Press **Space or Enter** or **Ctrl/Cmd-R** to stop recording.

RESULT

The notes you played on the MIDI device are input onto the selected staff. If you did not specify the voice, notes are recorded into the first available voice on the staff, which is usually the first up-stem voice. If you activated **Chords**, the notes you played are merged into the first available voice on the staff without overwriting any existing notes.

The notated duration of the notes follows your quantization settings, but their played durations are retained for playback.

AFTER COMPLETING THIS TASK

If the notes you played in are not notated as you intended, you can requantize them.

RELATED LINKS

Disabling MIDI input devices on page 200
Changing the input pitch setting on page 166
Changing the sustain pedal controller settings for MIDI recording/import on page 200
Repeats in MIDI recording on page 197
Input methods for bars and barlines on page 222
Input methods for time signatures on page 210
Inputting notes into multiple voices on page 171
MIDI Quantize Options dialog on page 79

## Retrieving played notes that you did not record

During playback, you can play notes on your MIDI keyboard and hear them without recording them into the score. You can use retrospective recording to retrieve these notes and input them into the project without previously explicitly recording them.

PREREQUISITE

You have started playback, played notes on a MIDI device alongside playback, then stopped playback.

PROCEDURE

1. Select a note or rest on the staff where you want to input the retrieved notes.
2. Optional: If you want to input retrieved notes without overwriting any existing notes on the staff, press **Q** to activate **Chords**.
3. Press **Ctrl/Cmd-Alt/Opt-R**.

RESULT

All the notes you played on your MIDI device during the previous playback are input on the selected staff, starting from the selected rhythmic position. They are input into the first available voice on the staff and overwrite any existing notes in that voice by default. If you activated **Chords**, the retrieved notes are merged into the first available voice on the staff without overwriting any existing notes.

NOTE

The retrospective recording buffer is cleared each time you start playback, meaning you cannot retrieve music you played before the most recent playback.

RELATED LINKS

Playing back music on page 412

## Repeats in MIDI recording

When recording MIDI into flows that contain repeat structures, such as repeat barlines, Dorico Elements records the notes you play during each playthrough and merges them together into the same voice.

Any differences in rhythms between the recordings are notated according to the current meter.

# Requantizing notes

You can requantize notes using different quantization settings, for example, if you want to change notated rhythms after importing MIDI or recording notes using a MIDI device. This does not affect the played duration of notes in playback.

PROCEDURE

1. Select all the notes you want to requantize. You can do this in Write mode and Play mode.
2. Choose **Edit** > **Requantize** to open the **MIDI Quantize Options** dialog.
3. Change the quantization settings as appropriate for your selection.
4. Click **OK** to save your changes and close the dialog.

RESULT

The notated durations of all selected notes are changed according to the quantization options you set. This does not affect their played duration in playback.

RELATED LINKS

MIDI Quantize Options dialog on page 79

# Optimization for MIDI recording

Depending on your operating system and the MIDI devices you use for recording, you might find that the notes you record are not notated with the durations or at the rhythmic positions you expected. Optimizing the settings related to MIDI recording can help you achieve better results.

Because there can be a time latency between you pressing keys on a MIDI device and the notes being picked up by Dorico Elements, we recommend that you check the latency by inputting a simple rhythm against the click, for example, recording quarter notes in a 4/4 time signature.

Depending on the results, there are different settings you can change:

- If your notes are notated with incorrect durations, such as sixteenth notes notated as eighth notes, we recommend that you change your quantization settings in the **MIDI Quantize Options** dialog.
- If your notes are notated ahead of the beat, we recommend that you increase the latency compensation value.
- If your notes are notated behind the beat, we recommend that you reduce the buffer size for your audio device to the lowest possible value that still produces stable playback with no drop-outs.

  NOTE

  The built-in audio device on Windows computers cannot always achieve a low enough latency for reliable input in real time. In such cases, we recommend that you use an external USB audio interface with ASIO support.

RELATED LINKS

MIDI Quantize Options dialog on page 79
Changing the sustain pedal controller settings for MIDI recording/import on page 200

## Changing the MIDI latency compensation value

You can change the MIDI latency compensation value to correct any discrepancy between when you press keys during MIDI recording and where the corresponding notes are notated relative to the beat.

PROCEDURE

1. Press **Ctrl/Cmd-,** (comma) to open **Preferences**.
2. Click **Play** in the page list.
3. In the **Recording** subsection, change the value for **MIDI input latency compensation**.
4. Click **Apply**, then **Close**.

RESULT

Increasing the latency compensation value increases the time between pressing the key and the note being notated. This is useful if the notes you record were previously notated ahead of the beat.

Decreasing the latency compensation value decreases the time between pressing the key and the note being notated. This is useful if the notes you record were previously notated behind the beat.

## Changing the audio device buffer size

You can change the audio buffer size, for example, if the current buffer size is causing notes input using MIDI recording appear significantly after the beat.

NOTE

- If the notes you play when recording MIDI are notated behind the beat, we recommend that you reduce the buffer size for your audio device to the lowest possible value that still produces stable playback with no drop-outs.
- The built-in audio device on Windows computers cannot always achieve a low enough latency for reliable input in real time. In such cases, we recommend that you use an external USB audio interface with ASIO support.

PROCEDURE

1. Choose **Edit** > **Device Setup** to open the **Device Setup** dialog.
2. In the **Device Setup** dialog, select the audio device whose buffer size you want to change from the **ASIO Driver** menu.
3. Click **Device Control Panel** to open the device settings dialog for the selected audio device.
4. In the audio device settings dialog, change the buffer size in one of the following ways, as appropriate for your operating system:
   - For Windows systems, in the **Audio buffer size** section, either drag the slider to a different position or activate **User definable** and change the value in the **Selected buffer size** field.
   - For macOS systems, select a sample rate from the **Buffer Size** menu.
5. Click **OK** (Windows)/**Close** (macOS) to close the audio device settings dialog.
6. Click **Close** to close the **Device Setup** dialog.

# Changing the sustain pedal controller settings for MIDI recording/import

You can change your default setting for whether Dorico Elements interprets sustain pedal controllers as pedal lines when recording MIDI and importing MIDI files.

NOTE

These options are also available in the **MIDI Import Options** dialog, and your settings are linked between this dialog and **Preferences**.

PROCEDURE

1. Press **Ctrl/Cmd-,** (comma) to open **Preferences**.
2. Click **Play** in the page list.
3. In the **Recording** subsection, activate/deactivate **Import CC64 as pedal lines**.
4. Optional: If you activated **Import CC64 as pedal lines**, activate/deactivate **Snap pedal lines to previous beat**.
5. Click **Apply**, then **Close**.

RESULT

When **Import CC64 as pedal lines** is activated, the MIDI controller CC64 is interpreted as pedal lines.

When **Snap pedal lines to previous beat** is activated, the start of pedal lines is automatically moved back to the start of the beat.

RELATED LINKS

MIDI Import Options dialog on page 78

# Disabling MIDI input devices

By default, Dorico Elements accepts MIDI input from all connected MIDI devices, including virtual MIDI cables and inter-application buses. You can disable MIDI devices individually, for example, if you are using devices that continuously output MIDI data or if you want particular devices to remain routed exclusively to another application.

PROCEDURE

1. Press **Ctrl/Cmd-,** (comma) to open **Preferences**.
2. Click **Play** in the page list.
3. In the **Recording** subsection, click **MIDI Input Devices**.
4. In the **MIDI Input Devices** dialog, deactivate the checkbox for each MIDI input device you want to disable.
5. Click **OK** to save your changes and close the dialog.
6. Click **Apply**, then **Close**.

# Notations input

You can input many types of notations, both during note input and by adding them to existing notes. In Dorico Elements, “notation” is a broad term that includes many different items, including articulations, slurs, dynamics, and more.

## Inputting articulations

You can input notes with articulations during note input, and you can add articulations to notes after they have been input.

PROCEDURE

1. In Write mode, do one of the following:
   - Start note input.
   - Select the existing notes to which you want to add articulations.
2. Optional: If you want to input notes with articulations onto multiple staves at once, extend the caret to those staves.
3. Select the articulations you want to input in any of the following ways:
   - Press the key commands for the articulations you want.
   - Click the articulations you want in the Notes panel.
4. Optional: Enter the notes or chords you want with your selected articulations.

RESULT

The selected articulations are added to the selected notes. They are positioned between noteheads or stems and tuplet brackets, so they are closer to the notes than tuplet brackets or tuplet numbers/ratios.

During note input, the selected articulations are added to all notes that are input until the articulations are deactivated.

NOTE

Some combinations of articulations on the same notes are not possible. For example, you cannot have both staccato and staccatissimo marks on the same notes, as both articulations indicate that notes are played shorter.

AFTER COMPLETING THIS TASK

You can enable independent voice playback for individual instruments, for example, if you have slurs in one voice and staccatos in another voice.

RELATED LINKS

Articulations on page 485
Note input on page 159
Extending the caret to multiple staves on page 163
Enabling independent voice playback on page 413

## Key commands for articulations

In addition to clicking them in the Notes panel, you can input common articulations by pressing key commands on your computer keyboard.

You can use the following key commands to input articulations with the keyboard:

| Type of articulation | Key command |
|---|---|
| Accent: > | **[** |
| Marcato: ^ | **'** |
| Stressed: ´ | **{** |
| Unstressed: ˘ | **@ (Windows) or " (macOS)** |
| Staccato: · | **]** |
| Tenuto: - | **# (Windows) or \ (macOS)** |
| Staccatissimo: ', ', or ' | **}** |
| Combined tenuto and staccato: ‾ | **~ (Windows) or \| (macOS)** |

RELATED LINKS
Articulations on page 485

## Inputting slurs

You can input slurs, both during note input and by adding them to existing notes. You can also add slurs to existing notes on multiple staves at the same time.

PROCEDURE

1. In Write mode, do one of the following:
   - Start note input.
   - Select the notes to which you want to add slurs.

     TIP

     - You can select notes on multiple staves and input slurs on them at the same time.
     - If you only select a single note, the slur connects that note to the next note on the staff.
2. Optional: If you want to input slurs onto multiple staves at once, extend the caret to those staves.
3. Press **S**.

   TIP

   Alternatively, click **Slur** in the Notes panel, and then click and drag to input a slur and extend it to your preferred length.
4. Optional: During note input, input the notes you want.
   The slur extends automatically, even if there are rests between the notes you input.
5. Optional: During note input, press **Shift-S** to end the slur on the currently selected note.

RESULT

During note input, slurs begin from the currently selected note on all staves across which the caret extends, not from the caret position. Slurs extend automatically as you input notes, and end on the currently selected note.

When adding slurs to existing notes, the selected notes are connected by slurs. For example, if you select two notes in one staff and two notes in another staff, two slurs are input. They connect the notes on each selected staff.

AFTER COMPLETING THIS TASK

You can enable independent voice playback for individual instruments, for example, if you have slurs in one voice and staccatos in another voice.

RELATED LINKS

Slurs on page 780
Inputting notes on page 164
Extending the caret to multiple staves on page 163
Slurs in playback on page 791
Enabling independent voice playback on page 413

# Inputting fingerings

You can input fingerings on existing notes using the fingerings popover, both during note input and by adding them to existing notes.

NOTE

- You can only add fingerings to notes at one rhythmic position at a time, and you can only input as many fingerings as there are notes at each rhythmic position. For example, you can input three fingerings at the rhythmic position of a chord containing three notes, but only one fingering at the rhythmic position of a single note.
- If you select notes in multiple voices, fingerings are only input into the top voice.
- Although they contain two numbers, substitution fingerings are considered one fingering, meaning you can add substitution fingerings to single notes.

PROCEDURE

1. In Write mode, do one of the following:
   - Start note input.
   - Select the existing notes to which you want to add fingering.

     If you want to add fingerings to all notes in a chord, select all the notes in the chord.
2. Press **Shift-F** to open the fingerings popover.
3. Optional: If you are inputting fingerings for fretted instruments, change the hand in one of the following ways:
   - To switch to the right hand, press **Down Arrow**.
   - To switch to the left hand, press **Up Arrow**.

   The popover icon updates to show the current hand.


Fingerings popover when inputting right-hand fingerings


Fingerings popover when inputting left-hand fingerings

4. Enter the fingerings you want into the popover.
   For example, enter:
   - **3-2** for a substitution fingering from the third finger to the second finger.
   - **1,3,5** for a chord.
   - **12** to show the first two valves should be depressed on a valved brass instrument.
   - **p** for a right-hand thumb fingering or **t** for a left-hand thumb fingering.
5. Optional: When adding fingerings to existing notes, move the popover in one of the following ways:
   - To advance the popover to the next note/chord in the current voice, press **Space**.
   - To move the popover back to the previous note/chord in the current voice, press **Shift-Space**.
   - To advance the popover to the first note/chord in the current voice in the next bar, press **Tab**.
   - To move the popover back to the first note/chord in the current voice in the previous bar, press **Shift-Tab**.
   - To move the cursor and popover to the right/left and to the next/previous note/fingering in the current voice, press **Right Arrow** / **Left Arrow**.
6. Press **Return** to close the popover.

RESULT

The fingerings are input on the selected notes, including during note input. The popover advances through notes in the voice as indicated by the caret or in the same voice as your initial selection.

RELATED LINKS

Fingering on page 577
Changing the rhythmic position of substitution fingerings on page 578
Fingerings for valved brass instruments on page 587
Deleting fingerings on page 581

## Fingerings popover

The following tables contain examples of what you can enter into the fingerings popover to input the different types of fingerings available. The fingerings popover behaves differently for fretted instruments compared to other instruments, so there is a separate table for fretted instrument fingerings.

You can open the fingerings popover in Write mode in any of the following ways when either a note is selected or the caret is active:

- Press **Shift-F**.
- Choose **Write** > **Create Fingerings**.
- Click **Fingerings** in the Notations toolbox.

When inputting fingerings for non-fretted instruments, the icon on the left-hand side of the popover matches the corresponding button in the Notations toolbox. When inputting fingerings for fretted instruments, the icon on the left-hand side of the popover indicates whether you are inputting left-hand or right-hand fingerings.


Fingerings popover with an example entry for inputting a non-fretted instrument fingering


Fingerings popover with an example entry for a left-hand fretted instrument fingering

**Fingering** button in the Notations toolbox


Fingerings popover with an example entry for a right-hand fretted instrument fingering

### Keyboard and string instruments

| Type of fingering | Example popover entry |
|---|---|
| Single fingerings for individual notes, including for brass valve numbers and trombone slide positions | **1**, **2**, **3**, and so on |
| Valved brass instruments | **12** |
| Single fingerings for each note in chords<br>For keyboard instruments, Dorico Elements automatically orders numbers appropriately according to the hand playing the notes. The default is:<br>• Right hand for the upper staff<br>• Left hand for the lower staff | **1,3,5** |
| Left-hand fingerings (non-fretted instruments) | **L2**, **G2**, **S5**, **I2**, or **H2** |
| Right-hand fingerings (non-fretted instruments) | **R5**, **D5**, or **M5** |
| Thumb indicator (non-fretted instruments) | **T** |
| Multiple fingerings for individual notes, for example, for ornaments such as mordents or turns | **2343** |
| Single fingerings for multiple notes: enter the same fingering number for two adjacent notes.<br>For example, in keyboard music the thumb may depress two keys simultaneously. | **1,1** |
| Alternative fingerings | **2(3)** |
| Editorial fingerings | **[4]** |

| Type of fingering | Example popover entry |
|---|---|
| Finger substitutions | **1-3** |

**Fretted instruments**

| Type of fingering | Example popover entries |
|---|---|
| Left-hand fingerings | **0**, **1**, **2**, **3**, **4**, **5** |
| Left-hand thumb | **t** |
| Right-hand fingerings | **1**, **2**, **3**, **4**, **5**<br>**p**, **i**, **m**, **a**, **e** |
| Right-hand thumb | **p**, **t**, or **1** |
| Right-hand pinky finger | **e**, **x**, **c**, **o**, or **5** |

These lists are not comprehensive as there are many possible fingerings. It is intended to illustrate how you can structure your entries to input different types of fingerings.

NOTE

Finger substitutions are shown as immediate by default, but you can change the rhythmic position of the substitution by changing the deferral duration.

RELATED LINKS
Fingering on page 577
Changing the rhythmic position of substitution fingerings on page 578
Fingerings for valved brass instruments on page 587

# Input methods for key signatures

You can input key signatures with the keyboard by using the key signatures popover, and with the mouse by using the Key Signatures, Tonality Systems, and Accidentals panel.

RELATED LINKS
Key signatures on page 607

## Key signatures popover

The table contains the entries for the key signatures popover that you can use to input the different key signatures available.

You can open the key signatures popover in Write mode in any of the following ways when either an item is selected or the caret is active:

- Press **Shift-K**.
- Select an existing key signature and press **Return**.
- Choose **Write** > **Create Key Signature**.

The icon on the left-hand side of the popover matches the corresponding button in the Notations toolbox on the right of the window.


Key signatures popover with an example entry

**Key Signatures, Tonality Systems, and Accidentals** button in the Notations toolbox

| Type of key signature | Popover entry |
|---|---|
| Open or atonal key signature | **open** or **atonal** |
| Major keys (capital letters) | **C**, **D** or **G#**, **Ab**, and so on |
| Minor keys (lowercase letters) | **g**, **d**, **f#**, **bb**, and so on |
| Number of sharps<br>NOTE<br>Assumes the major key for that many sharps. | **3s**, **2#**, and so on |
| Number of flats<br>NOTE<br>Assumes the major key for that many flats. | **4f**, **5b**, and so on |

This list is not comprehensive as you can input every possible key signature. It is intended to illustrate how you can structure your entry to input different types of key signatures.

RELATED LINKS
Key signatures on page 607

## Key Signatures, Tonality Systems, and Accidentals panel

The Key Signatures, Tonality Systems, and Accidentals panel allows you to create and input common key signatures.

- You can hide/show the Key Signatures, Tonality Systems, and Accidentals panel by clicking **Key Signatures, Tonality Systems, and Accidentals** in the Notations toolbox on the right of the window in Write mode.

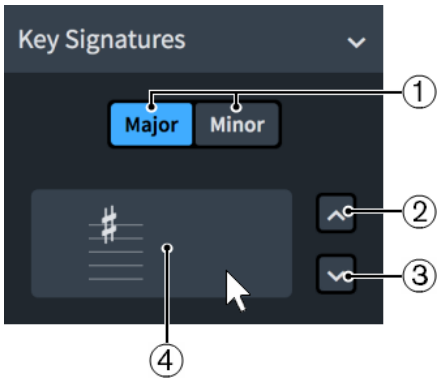
  

  You can also hide/show the panel whose icon is currently selected in the Notations toolbox by pressing **Ctrl/Cmd-9** or clicking the disclosure arrow on the right of the window.

The Key Signatures, Tonality Systems, and Accidentals panel contains the following sections:

**Used in This Flow**
Contains all the key signatures currently used in the flow.

**Key Signatures**
Allows you to create key signatures.




The **Key Signatures** section of the Key Signatures, Tonality Systems, and Accidentals panel.

The **Key Signatures** section contains the following parts:

1 **Major/Minor**

Allow you to choose whether your key signature is **Major** or **Minor**.

2 **More Sharps/Fewer Flats**

Each time you click, you add one sharp accidental to the key signature, or remove one flat accidental from the key signature.

3 **Fewer Sharps/More Flats**

Each time you click, you remove one sharp accidental from the key signature, or add one flat accidental to the key signature.

4 **Input key signature**

Shows how the key signature looks on a staff. Clicking this button inputs the displayed key signature. If nothing in the project is selected, the key signature is loaded onto the mouse pointer.

**Accidentals**

Contains all accidentals available in the currently selected tonality system.

RELATED LINKS
Key signatures on page 607

## Inputting key signatures with the popover

You can input key signatures using the key signatures popover, both during note input and by adding them to existing music. You can also input key signatures only on single staves.

NOTE

It is not necessary to input different key signatures for transposing instruments, as Dorico Elements automatically shows the appropriate key signatures for transposing instruments in transposing layouts.

PROCEDURE

1. In Write mode, do one of the following:
   - Start note input.
   - Select an item at the rhythmic position where you want to input a key signature. If you want to input a key signature on a single staff, select an item that belongs to that staff only.
2. Optional: If you want to input key signatures onto multiple specific staves at once, extend the caret to those staves.

3. Press **Shift-K** to open the key signatures popover.
4. Enter the key signature you want into the popover.
   For example, enter **g** for G minor or **3s** for 3 sharps.

   NOTE

   Entering **3s** creates a key signature of A major, rather than F♯ minor.

5. Input the key signature and close the popover in one of the following ways:
   - To input a key signature on all staves, press **Return**.
   - To input a key signature only on the selected staff or staves across which the caret extends, press **Alt/Opt-Return**.

RESULT

During note input, key signatures are input at the caret position, even if this is in the middle of a bar. However, it is preferable to input key signature changes at barlines.

All subsequently input notes follow the input key signature, until the next existing key signature or the end of the flow, whichever comes first. If playing in notes using a MIDI keyboard, accidentals are spelled according to the key signature.

When adding key signatures to existing music, they are added at the rhythmic position of the earliest selected item. They appear to the right of barlines and clefs, and to the left of other items, even if this is in the middle of an existing bar. If you selected an existing key signature, the new key signature directly replaces the existing one.

NOTE

An individual key signature on a single staff is not intended for transposing instruments. Transpositions of notes and key signatures are done automatically for transposing instruments.

RELATED LINKS

Extending the caret to multiple staves on page 163
Key signatures popover on page 206
Accidental selection during MIDI input on page 181
Key signatures on page 607
Moving key signatures rhythmically on page 611
Transposing instruments on page 111
Making layouts transposing/concert pitch on page 133

## Inputting key signatures with the panel

You can input key signatures using the Key Signatures, Tonality Systems, and Accidentals panel, both during note input and by adding them to existing music. You can also input key signatures only on single staves.

NOTE

- These steps describe inputting with the default mouse input preference **Create item at selection**.
- It is not necessary to input different key signatures for transposing instruments, as Dorico Elements automatically shows the appropriate key signatures for transposing instruments in transposing layouts.

PROCEDURE

1. In Write mode, do one of the following:

- Start note input.
- Select an item at the rhythmic position where you want to input a key signature. If you want to input a key signature on a single staff, select an item that belongs to that staff only.

2. In the Notations toolbox, click **Key Signatures, Tonality Systems, and Accidentals** to show the Key Signatures, Tonality Systems, and Accidentals panel.

3. Optional: If you have not already used the key signature you want in the current flow, create the key signature you want using the **Key Signatures** editor in the Key Signatures, Tonality Systems, and Accidentals panel.
4. Input the key signature you want in one of the following ways:
   - To input a key signature on all staves, click it in the Key Signatures, Tonality Systems, and Accidentals panel.
   - To input a key signature on the selected staff only, **Alt/Opt**-click it in the Key Signatures, Tonality Systems, and Accidentals panel.

RESULT

During note input, key signatures are input at the caret position, even if this is in the middle of a bar. However, it is preferable to input key signature changes at barlines.

All subsequently input notes follow the input key signature, until the next existing key signature or the end of the flow, whichever comes first. If playing in notes using a MIDI keyboard, accidentals are spelled according to the key signature.

When adding key signatures to existing music, they are added at the rhythmic position of the earliest selected item. They appear to the right of barlines and clefs, and to the left of other items, even if this is in the middle of an existing bar. If you selected an existing key signature, the new key signature directly replaces the existing one.

NOTE

An individual key signature on a single staff is not intended for transposing instruments. Transpositions of notes and key signatures are done automatically for transposing instruments.

RELATED LINKS

Key signatures on page 607
Key Signatures, Tonality Systems, and Accidentals panel on page 207
Accidental selection during MIDI input on page 181
Moving key signatures rhythmically on page 611
Mouse input settings on page 156
Transposing instruments on page 111
Making layouts transposing/concert pitch on page 133

# Input methods for time signatures

You can input time signatures with the keyboard by using the time signatures popover, and with the mouse by using the Time Signatures (Meter) panel.

NOTE

You can create most types of custom time signatures using the **Create Time Signature** section of the Time Signatures (Meter) panel, but certain time signatures are only possible using the time signatures popover. For example, you can only specify beat subdivisions with the time signatures popover.

RELATED LINKS
Preferences dialog on page 58
Time signatures on page 841
Types of time signatures on page 843

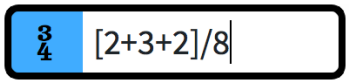
## Time signatures popover

The table contains the entries for the time signatures popover that you can use to input the different types of time signatures available.

You can open the time signatures popover in Write mode in any of the following ways when either an item is selected or the caret is active:

- Press **Shift-M**.
- Select an existing time signature and press **Return**.
- Choose **Write** > **Create Time Signature**.

The icon on the left-hand side of the popover matches the corresponding button in the Notations toolbox on the right of the window.




Time signatures popover with an example entry

**Time Signatures (Meter)** button in the Notations toolbox

| Type of time signature | Popover entry |
|---|---|
| Simple time signatures<br>For example, 2/4, 6/8, 3/4, 5/4 and so on | **2/4**, **6/8**, **3/4**, **5/4**, and so on |
| Time signatures with a pick-up<br>For example, a 4/4 bar with a dotted quarter note pick-up, or a 6/8 bar with a pick-up of two eighth notes (quavers). | **4/4,1.5**, **6/8,2**, and so on |
| Alternating time signatures, such as 6/8+3/4<br>NOTE<br>You must include spaces either side of the plus sign. | **6/8 + 3/4** |
| Common time, the equivalent of 4/4 | **c** |
| Cut common time, the equivalent of 2/2 | **cutc** or **¢** |
| Open meter indicated by X | **X** or **x** |

| Type of time signature | Popover entry |
|---|---|
| Open meter with no indication<br>NOTE<br>A time signature signpost is shown at the position of the open meter. | **open** |
| Additive time signature with explicit beat grouping | **3+2+2/8**, **3+2/4**, and so on |
| Beat grouping specified but not shown in the time signature<br>For example, a time signature of 7/8 is shown but beams are subdivided into 2+3+2 eighth notes. | **[2+3+2]/8** |
| Aggregate time signature with dashed barlines shown in each bar, indicating the divisions between the different meters | **2/4\|6/8** |
| Aggregate time signature without dashed barlines shown in each bar | **2/4:6/8** |
| Interchangeable time signature with different styles: parenthesized, slash, equals sign, and dashed<br>NOTE<br>You must include spaces either side of the slashes, equals signs, or dashes, and before opening parentheses. | **2/4 (6/8)**, **2/4 / 6/8**, **2/4 = 6/8**, or **2/4 – 6/8** |

This list is not comprehensive, as there are many possible time signatures. It is intended to illustrate how you can structure your entry to input different time signatures.

RELATED LINKS
Time signatures on page 841

## Time Signatures (Meter) panel

The Time Signatures (Meter) panel allows you to input different time signatures. In the **Create Time Signature** section of the panel, you can create uncommon time signatures.

- You can hide/show the Time Signatures (Meter) panel by clicking **Time Signatures (Meter)** in the Notations toolbox on the right of the window in Write mode.

  You can also hide/show the panel whose icon is currently selected in the Notations toolbox by pressing **Ctrl/Cmd-9** or clicking the disclosure arrow on the right of the window.

The Time Signatures (Meter) panel contains the following sections:

**Used in This Flow**

Contains any time signatures already used in the current flow.

**Common**

Contains common time signatures, such as 4/4, 3/4, 6/8, and 7/8.

**Create Time Signature**

Allows you to design your own time signatures, including alternating time signatures and aggregate time signatures.


The **Create Time Signature** section of the Time Signatures (Meter) panel

The **Create Time Signature** section contains the following parts:

1 **Time signature type menu**

Allows you to select one of the following types of time signatures:

- **Regular**
- **Interchangeable**
- **Aggregate**
- **Alternating**

2 **Time signature spaces**

Allows you to combine up to four time signatures. For example, you can specify only one time signature for a regular time signature, but for an alternating time signature, you might want to include three time signatures.

3 **Pick-up bar of**

Allows you to include a pick-up bar before the time signature. A pick-up bar is not a complete bar, and so allows you to include only a few beats before the first complete bar.

You can select one of the following options for the number of beats in a pick-up bar:

- **1/2 beat**
- **1 beat**
- **2 beats**

4 **Input time signature button**

Click the button that displays the time signature to input it. If nothing in the project is selected, the time signature is loaded onto the mouse pointer.

RELATED LINKS
Time signatures on page 841

## Inputting time signatures with the popover

You can input time signatures, including time signatures with pick-up bars, using the time signatures popover, both during note input and by adding them to existing music. You can also input time signatures only on single staves.

NOTE

- In order to input an upbeat or pick-up bar, you must input a new time signature that includes the upbeat you want. For example, entering **4/4,1** into the time signatures popover creates a 4/4 time signature with one quarter note upbeat.

  The number after the comma indicates multiples of the rhythmic unit specified by the denominator of the time signature. For example, **4/4,0.75** creates a dotted eighth note (dotted quaver) upbeat, whereas **6/8,2** creates an upbeat of two eighth notes.
- Dorico Elements does not automatically add beats to fill bars according to the new time signature unless Insert mode is activated.

PROCEDURE

1. In Write mode, do one of the following:
   - Start note input.
   - Select an item at the rhythmic position where you want to input a time signature. If you want to input a time signature on a single staff, select an item that belongs to that staff only.
2. Optional: If you want to input time signatures onto multiple specific staves at once, extend the caret to those staves.
3. Optional: If you want Dorico Elements to add beats at the end of the region affected by the new time signature if required, press **I** to activate Insert mode.
4. Press **Shift-M** to open the time signatures popover.
5. Enter the time signature you want into the popover.

   For example, enter **[2+2+3]/8** for a 7/8 time signature with a custom beat grouping, or **4/4,1** for a 4/4 time signature with one quarter note upbeat.
6. Input the time signature and close the popover in one of the following ways:
   - To input a time signature on all staves, press **Return**.
   - To input a time signature only on the selected staff or staves across which the caret extends, press **Alt/Opt-Return**.

RESULT

During note input, time signatures are added at the caret position, even if this is in the middle of an existing bar.

When adding time signatures to existing music, they are added at the rhythmic position of the earliest selected item. They appear to the right of barlines, key signatures, and clefs, and to the left of other items, even if this is in the middle of an existing bar. If you selected an existing time signature, the new time signature directly replaces the existing one.

All subsequent bars follow the input time signature, until the next existing time signature or the end of the flow, whichever comes first. Dorico Elements automatically inputs and moves barlines as required so that subsequent music is barred correctly.

RELATED LINKS
Time signatures on page 841

Time signatures popover on page 211
Extending the caret to multiple staves on page 163

## Inputting time signatures with the panel

You can input time signatures, including time signatures with pick-up bars, using the Time Signatures (Meter) panel, both during note input and by adding them to existing music. You can also input time signatures only on single staves.

NOTE

- These steps describe inputting with the default mouse input preference **Create item at selection**.
- Dorico Elements does not automatically add beats to fill bars according to the new time signature unless Insert mode is activated.

PREREQUISITE

If necessary, you have created the time signature you want in the **Create Time Signature** section of the Time Signatures (Meter) panel.

PROCEDURE

1. In Write mode, do one of the following:
   - Start note input.
   - Select an item at the rhythmic position where you want to input a time signature. If you want to input a time signature on a single staff, select an item that belongs to that staff only.
2. Optional: If you want Dorico Elements to add beats at the end of the region affected by the new time signature if required, press **I** to activate Insert mode.
3. In the Notations toolbox, click **Time Signatures (Meter)** to show the Time Signatures (Meter) panel.

   
4. Optional: For pick-up bars, activate **Pick-up bar of** in the **Create Time Signature** section of the Time Signatures (Meter) panel and select one of the following options:
   - **1/2 beat**
   - **1 beat**
   - **2 beats**

     NOTE

     Not all pick-up bar lengths are possible using this method. For example, a single eighth note upbeat in 6/8 cannot be produced by any of these three options. In such cases, you must use the time signatures popover.
5. Input the time signature you want in one of the following ways:
   - To input a time signature on all staves, click it in the Time Signatures (Meter) panel.
   - To input a time signature on the selected staff only, **Alt/Opt**-click it in the Time Signatures (Meter) panel.

RESULT

During note input, time signatures are added at the caret position, even if this is in the middle of an existing bar.

When adding time signatures to existing music, they are added at the rhythmic position of the earliest selected item. They appear to the right of barlines, key signatures, and clefs, and to the left of other items, even if this is in the middle of an existing bar. If you selected an existing time signature, the new time signature directly replaces the existing one.

All subsequent bars follow the input time signature, until the next existing time signature or the end of the flow, whichever comes first. Dorico Elements automatically inputs and moves barlines as required so that subsequent music is barred correctly.

RELATED LINKS
Time signatures on page 841
Inputting notes on page 164
Time Signatures (Meter) panel on page 212
Mouse input settings on page 156

# Input methods for tempo marks

You can input tempo marks with the keyboard by using the tempo popover, with the mouse by using the Tempo panel, and in the **Time** track in Play mode. You can input a tempo mark containing just a text instruction, just a metronome mark, or a combination of the two.

RELATED LINKS
Tempo marks on page 819
Time track on page 400
Inputting tempo changes in the Time track on page 402

## Tempo popover

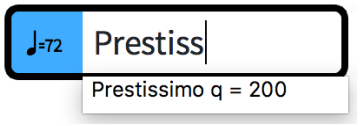
The following tables contain examples of what you can enter into the tempo popover to input tempo marks, tempo equations, and rhythmic feels for swing playback.

When you start entering a tempo into the tempo popover, a menu appears with suggestions containing the letters/words you enter. You can select one of these suggestions to input, or enter your own tempo into the popover.

You can open the tempo popover in Write mode in any of the following ways when either an item is selected or the caret is active:

- Press **Shift-T**.
- Select an existing tempo mark and press **Return**.
- Choose **Write** > **Create Tempo**.

The icon on the left-hand side of the popover matches the corresponding button in the Notations toolbox on the right of the window.




Tempo popover with an example entry


**Tempo** button in the Notations toolbox

**Tempo marks**

| Example tempo mark | Popover entry |
|---|---|
| *Adagio* | **Adagio** |
| *Presto* ♩ = 176 | **Presto q = 176** or **Presto q=176** |
| *Largo* (𝅗𝅥 = 52) | **Largo (q = 52)** or **Largo (q=52)** |
| ♩ = 96-112 | **q = 96-112**, **q=96-112**, **6 = 96-112**, or **6=96-112** |
| ♩. = 84 | **q. = 84**, **q.=84**, **6. = 84**, or **6.=84** |
| 𝅝 = 30 | **w = 30**, **w=30**, **8 = 30**, or **8=30** |
| 𝅗𝅥 = 60 | **h = 60**, **h=60**, **7 = 60**, or **7=60** |
| ♪ = 120 | **e = 120**, **e=120**, **5 = 120**, or **5=120** |
| ♪. = 90 | **e. = 90**, **e.=90**, **5. = 90**, or **5.=90** |
| 𝅘𝅥𝅯 = 240 | **x=240**, **x = 240**, **4=240** or **4 = 240** |
| *rit.* | **rit.** or **rit** |
| *accel.* | **accel.** or **accel** |
| *più* | **più** or **piu** |
| *meno* | **meno** |
| Faster, with energy | **Faster, with energy** |

**Tempo equations**

| Tempo equation | Popover entry |
|---|---|
| ♪ = ♪. | **e = e.**, **e=e.**, **5 = 5.**, or **5=5.** |
| ♩ = ♪ | **q = e**, **q=e**, **6 = 5**, or **6=5** |

This list is not comprehensive as you can enter tempos freely and there are many possible metronome marks, tempo marks, and tempo equations. It is intended to illustrate how you can structure your entry to input different types of tempo marks and metronome marks.

NOTE

The tempo popover is case-sensitive. If you want your tempo mark to start with a capital letter, you must enter a capital letter into the popover.

**Rhythmic feels for swing playback**

| Rhythmic feel | Popover entry |
|---|---|
| Light 16th note swing rhythmic feel | **light swing 16ths** |
| Light eighth note swing rhythmic feel | **light swing 8ths** |
| Medium 16th note swing rhythmic feel | **medium swing 16ths** |
| Medium eighth note swing rhythmic feel | **medium swing 8ths** |
| Heavy 16th note swing rhythmic feel | **heavy swing 16ths** |
| Heavy eighth note swing rhythmic feel | **heavy swing 8ths** |
| Straight rhythmic feel | **straight (no swing)** |
| Triplet 16th fixed rhythmic feel | **2:1 swing 16ths (fixed)** |
| Triplet 8th fixed rhythmic feel | **2:1 swing 8ths (fixed)** |
| Dotted 16th-32nd fixed rhythmic feel | **3:1 swing 16ths (fixed)** |
| Dotted 8th-16th fixed rhythmic feel | **3:1 swing 8ths (fixed)** |

RELATED LINKS
Tempo marks on page 819
Types of tempo marks on page 820
Swing playback on page 417
Enabling swing playback on page 419

## Tempo panel

The Tempo panel contains the different types of tempo marks available in Dorico Elements, organized into sections. It is located on the right of the window in Write mode.

- You can hide/show the Tempo panel by clicking **Tempo** in the Notations toolbox on the right of the window in Write mode.

  You can also hide/show the panel whose icon is currently selected in the Notations toolbox by pressing **Ctrl/Cmd-9** or clicking the disclosure arrow on the right of the window.

**Used in This Flow**

Contains any tempo marks already used in the flow, including custom tempo marks added using the tempo popover.

**Tap Tempo**

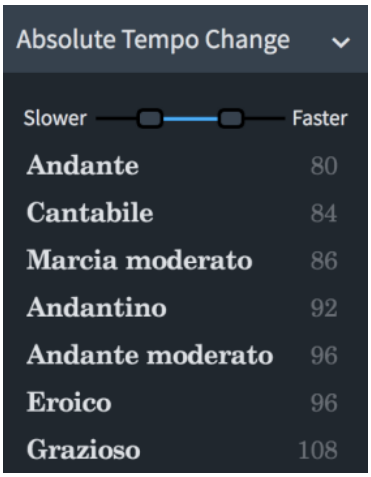
Allows you to create an absolute tempo change based on the speed with which you click the **Tap** button. It appears as a metronome mark with no text by default. The metronome mark value is always rounded to the nearest integer.

You can use the available options to set the beat unit on which you want to base the tempo.


**Absolute Tempo Change**

Contains a range of tempos with both an Italian tempo indication and a metronome mark. You can later choose to show or hide the metronome mark for individual tempo marks.

You can change the range shown in the list by adjusting the slider at the top.




**Gradual Tempo Change**

Contains tempo marks that indicate a change in tempo over a defined period of time, such as *rallentando* or *accelerando*.

You can add modifiers to gradual tempo changes. Available modifiers are shown at the top of the section.

**Relative Tempo Change**

Contains tempo marks that indicate a change in tempo that is relative to the previous tempo, such as *mosso* (movement, or with movement). They often include modifiers that qualify the change, such as *poco meno mosso* (a little less movement), and are not defined by a metronome mark.

You can add modifiers to relative tempo changes. Available modifiers are shown at the top of the section.

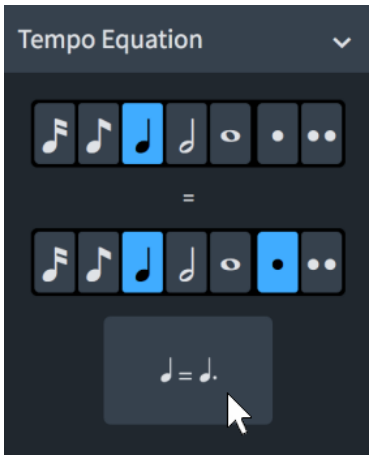
You can later set a relative metronome mark change as a percentage of the previous metronome mark for individual tempo marks.

**Reset Tempo**

Contains tempo marks that indicate a return to the previous tempo, such as *A tempo*, or a previously defined tempo, such as *Tempo primo*.

**Tempo Equation**

Allows you to input a tempo equation, using beat units from 16th notes to whole notes and up to two rhythm dots.




RELATED LINKS
Tempo marks on page 819
Types of tempo marks on page 820
Changing the metronome mark value on page 826

## Inputting tempo marks with the popover

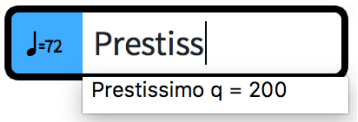
You can input tempo marks using the tempo popover, both during note input and by adding them to existing music.

PROCEDURE

1. In Write mode, do one of the following:
   - Start note input.
   - Select an item at the rhythmic position where you want to input a tempo mark. If you want to input a gradual tempo change across a duration, select items that span that duration.
2. Press **Shift-T** to open the tempo popover.
3. Enter the tempo you want into the popover.

   For example, enter **q=72** or **Allegretto**.

   When you start entering a tempo into the tempo popover, a menu appears that shows suggested tempos containing the letters/words you enter. You can select one of these suggestions or you can enter your own tempo into the popover.

   NOTE

   If you want to show gradual tempo changes separated into syllables spread across their duration, such as *rit-e-nu-to*, we recommend selecting a suggested entry from the menu. Only gradual tempo changes with valid full text appear separated into syllables.

4. Press **Return** to close the popover.

RESULT

During note input, tempo marks are input at the caret position. Gradual tempo changes, such as *rallentando*, are also input at the caret position with a default duration of a quarter note. Gradual tempo changes do not extend as you input notes.

When adding tempo marks to existing music, they are added at the rhythmic position of the earliest selected item. Gradual tempo changes span the duration of the selected items.

NOTE

Metronome mark values appear as integers without decimal places, even if you input decimal places. However, the exact metronome mark value you input is always reflected in playback.

AFTER COMPLETING THIS TASK

You can lengthen/shorten gradual tempo changes.

RELATED LINKS

Tempo marks on page 819
Time track on page 400
Tempo mark components on page 823
Gradual tempo changes on page 828
Metronome marks on page 825
Lengthening/Shortening gradual tempo changes on page 828
Changing the style of gradual tempo changes on page 829

## Inputting tempo marks with the panel

You can input tempo marks using the Tempo panel, both during note input and by adding them to existing music.

NOTE

- These steps describe inputting with the default mouse input preference **Create item at selection**.
- You cannot specify decimal places for metronome marks using the panel. You can specify decimal places using the popover or by changing the metronome mark value of existing tempo marks.

PROCEDURE

1. In Write mode, do one of the following:
   - Start note input.
   - Select an item at the rhythmic position where you want to input a tempo mark. If you want to input a gradual tempo change across a duration, select items that span that duration.
2. In the Notations toolbox, click **Tempo** to show the Tempo panel.

   
   
3. In the Tempo panel, click the tempo mark you want.

   TIP

   If you want Dorico Elements to calculate the metronome mark for you, you can click **Tap** in the **Tap Tempo** section multiple times at the required speed.
4. Optional: Select a modifier from the available options.

   NOTE

   You can only add modifiers to a **Gradual Tempo Change** or a **Relative Tempo Change**.

RESULT

During note input, tempo marks are input at the caret position. Gradual tempo changes, such as *rallentando*, are also input at the caret position with a default duration of a quarter note. Gradual tempo changes do not extend as you input notes.

When adding tempo marks to existing music, they are added at the rhythmic position of the earliest selected item. Gradual tempo changes span the duration of the selected items.

AFTER COMPLETING THIS TASK

You can lengthen/shorten gradual tempo changes.

RELATED LINKS

Tempo marks on page 819
Lengthening/Shortening gradual tempo changes on page 828
Mouse input settings on page 156
Changing the metronome mark value on page 826
Changing the style of gradual tempo changes on page 829

# Input methods for bars and barlines

You can input both bars and barlines with the keyboard by using the bars and barlines popover, and also with the mouse by using the available options in the Bars and Barlines panel. Additionally, you can input bars using the system track, which allows you to input other rhythmic durations, that is, a specified beat region.

Normally you do not need to create bars in Dorico Elements, as they are created automatically as needed when you input music. However, you can add bars in advance if, for example, you are copying or arranging an existing piece of music.

RELATED LINKS

Bars on page 490
Barlines on page 495
System track on page 304
Inputting bar rests into specific voices on page 182

## Bars and barlines popover

The following tables contain examples of what you can enter into the bars and barlines popover to add and delete bars and beats, and the entries you can use to input the different barlines available.

You can open the bars and barlines popover in Write mode in any of the following ways when either an item is selected or the caret is active:

- Press **Shift-B**.
- Choose **Write** > **Create Bar or Barline**.

The icon on the left-hand side of the popover matches the corresponding button in the Notations toolbox on the right of the window.


Bars and barlines popover with an example entry for inputting bars


Bars and barlines popover with an example entry for a barline

**Bars and Barlines** button in the Notations toolbox

**Bars**

| Example action | Popover entry |
|---|---|
| Add two bars | **2** or **+2** |
| Add fourteen bars | **14** or **+14** |
| Delete one bar | **–1** |
| Delete six bars | **–6** |
| Add a bar rest | **rest** |
| Delete empty bars at the end of the flow | **trim** |

You can specify a number of beats that you want to add/delete by entering the number of beats you want followed by either the number that corresponds to the beat unit, such as **5** for eighth notes, or the letter that corresponds to the beat unit, such as **h** for half notes. When using numbers for both the number of beats and the beat unit, you must separate them with a space or hyphen. You can also specify beats in the form of a time signature, such as 3/4 for three quarter note beats.

**Beats**

| Example action | Popover entry |
|---|---|
| Add two quarter note beats | **2q**, **2-6**, **2 6**, or **2/4** |
| Add two half note beats | **2h**, **2-7**, **2 7**, **2/2**, or **4/4** |
| Add one whole note beat | **1w**, **1-8**, **1 8**, or **4/4** |
| Add four eighth note beats | **4e**, **4-5**, **4 5**, **4/8**, or **2/4** |
| Add two 16th note beats | **2x**, **2-4**, **2 4**, **2/16**, or **1/8** |
| Delete two quarter note beats | **–2q**, **-2-6**, **-2 6**, or **-2/4** |

These lists are not comprehensive, as you can add and delete any number of bars and beats using the popover, including specifying beat units using the numbers one to nine as you would to specify durations when inputting notes. These tables are intended to illustrate how you can structure your entry to input and delete bars and beats, and input bar rests.

**Barlines**

| Type of barline | Popover entry |
|---|---|
| Normal (Single) | **\|**, **single**, or **normal** |
| Double | **\|\|** or **double** |
| Final | **\|]** or **final** |

| Type of barline | Popover entry |
|---|---|
| Triple | **triple** |
| Start repeat | **\|:** or **start** |
| End repeat | **:\|** or **end** |
| End/Start repeat | **:\|:**, **:\|\|:**, **end-start**, or **endstart** |

RELATED LINKS
Inputting bar rests into specific voices on page 182
Bars on page 490
Barlines on page 495
Deleting bars/beats on page 490

## Bars and Barlines panel

The Bars and Barlines panel allows you to input bars, bar rests, and different types of barlines. It is located on the right of the window in Write mode.

- You can hide/show the Bars and Barlines panel by clicking **Bars and Barlines** in the Notations toolbox on the right of the window in Write mode.

  You can also hide/show the panel whose icon is currently selected in the Notations toolbox by pressing **Ctrl/Cmd-9** or clicking the disclosure arrow on the right of the window.

The panel contains the following sections:

**Insert Bars**
: Allows you to determine how many bars you want to insert and where to insert them, such as at the end of the flow.

**Insert Bar Rest**
: Allows you to insert a bar rest.

**Create Barline**
: Contains the different barlines you can input.

RELATED LINKS
Hiding/Showing panels on page 21

## Inputting bars/beats with the popover

You can input bars/beats using the bars and barlines popover, both during note input and by adding them to or inserting them into existing music.

PREREQUISITE
If you want to input bars, you have input a time signature.

PROCEDURE
1. In Write mode, do one of the following:
   - Start note input.
   - Select an existing barline after which you want to add bars/beats.

- Select an existing item before which you want to add bars/beats.

2. Press **Shift-B** to open the bars and barlines popover.
3. Enter the number of bars/beats you want to input.
   For example, enter **2** to input two bars or **2q** to input two quarter note beats.
4. Press **Return** to close the popover.

RESULT

The number of bars or beats specified is input.

During note input, bars/beats are input from the caret position. If the caret is in the middle of the bar when inputting bars, sufficient beats are added to ensure that the final bar created has the correct number of beats. The caret position stays at its previous position so you can continue inputting music from the same position.

When you add bars/beats to existing music, they are added after a selected barline and before a selected item, including time signatures.

TIP

Another way to add bars is by choosing a note value, such as a whole note when in a 4/4 time signature, and pressing **Space** repeatedly during note input.

RELATED LINKS

Bars and barlines popover on page 222
Bars on page 490
Inputting time signatures with the popover on page 214

## Inputting bars with the panel

You can input bars using the Bars and Barlines panel, both during note input and by adding them to existing music.

PREREQUISITE

You have input a time signature.

PROCEDURE

1. In Write mode, do one of the following:
   - Start note input.
   - Select an existing barline after which you want to input bars.
   - Select an existing item before which you want to input bars.
2. In the Notations toolbox, click **Bars and Barlines** to show the Bars and Barlines panel.

   
3. In the **Insert Bars** section of the Bars and Barlines panel, change the number of bars you want to input by changing the value in the value field.
4. Select one of the following options for where you want to input bars:
   - **Start of Flow**: Bars are input at the beginning of the flow.
   - **Start of Selection**: Bars are input from the selected note or rest.
   - **End of Flow**: Bars are input at the end of the flow.

NOTE

If you want to input bars from the caret position, make sure that you have selected **Start of Selection** from the menu.

5. Click **Insert Bars**.

RESULT

The number of bars specified is input.

During note input, bars are input from the caret position.

If you selected **Start of Selection**, bars are input directly after a selected barline, and directly before a selected note, bar, or time signature.

TIP

Another way to add bars is by choosing a note value, such as a whole note when in a 4/4 time signature, and pressing **Space** repeatedly during note input.

RELATED LINKS

Bars on page 490
Inputting time signatures with the panel on page 215

## Inputting bars/beats with the system track

You can add bars/beats within existing music, for example, if you decide you want to repeat several bars before the next section. You can add whole bars and you can add just a few beats.

NOTE

You cannot use the system track during note input.

PREREQUISITE

The system track is shown.

PROCEDURE

1. In the system track, select the region whose duration you want to insert.

   For example, if you want to insert two bars, select two bars in the system track immediately before where you want the two new bars to be input.

2. Click **Add** above the system track.

**Add** button above the system track

The **Add** button is highlighted when you hover over it

RESULT

The rhythmic duration selected in the system track is added immediately after the end of the selection. Existing music after the selection is pushed back after the inserted bars/beats.

RELATED LINKS

System track on page 304

## Inputting barlines with the popover

You can input barlines using the bars and barlines popover, both during note input and by adding them to existing music. You can also change the type of existing barlines.

PREREQUISITE

If you want to input barlines onto single staves only, you have input an independent key signature on those staves.

PROCEDURE

1. In Write mode, do one of the following:
   - Start note input.
   - Select an item at the rhythmic position where you want to input a barline. If you want to input a barline on a single staff, select an item that belongs to that staff only.
2. Optional: If you want to input barlines onto multiple specific staves at once, extend the caret to those staves.
3. Press **Shift-B** to open the bars and barlines popover.
4. Enter the barline you want into the popover.
   For example, enter **||** for a double barline.
5. Input the barline and close the popover in one of the following ways:
   - To input a barline on all staves, press **Return**.
   - To input a barline only on the selected staff or staves across which the caret extends, press **Alt/Opt-Return**.

     NOTE

     You can only input barlines onto single staves that already have an independent time signature.
6. Press **Return** to close the popover.

RESULT

During note input, barlines are input at the caret position.

When you add barlines to existing music, they are added at the rhythmic position of the earliest selected item. They appear to the right of clefs and to the left of other items. If you selected an existing barline, the new barline directly replaces the existing one.

Surrounding music automatically adjusts to accommodate the barline. For example, note grouping, rests, and tied notes all adjust if necessary.

NOTE

Normal barlines that you have input directly, such as to replace an existing double barline, are still considered explicit barlines and break multi-bar rests. Deleting barlines resets them completely.

RELATED LINKS

Bars and barlines popover on page 222
Barlines on page 495
Inputting notes on page 164
Inputting time signatures with the popover on page 214
Extending the caret to multiple staves on page 163
Deleting barlines on page 496

## Inputting barlines with the panel

You can input barlines using the Bars and Barlines panel, both during note input and by adding them to existing music. You can also change the type of existing barlines.

NOTE

These steps describe inputting with the default mouse input preference **Create item at selection**.

PREREQUISITE

If you want to input barlines onto single staves only, you have input an independent key signature on those staves.

PROCEDURE

1. In Write mode, do one of the following:
   - Start note input.
   - Select an item at the rhythmic position where you want to input a barline. If you want to input a barline on a single staff, select an item that belongs to that staff only.
2. In the Notations toolbox, click **Bars and Barlines** to show the Bars and Barlines panel.

   
3. Input the barline you want in one of the following ways:
   - To input a barline on all staves, click it in the Bars and Barlines panel.
   - To input a barline on the selected staff only, **Alt/Opt**-click it in the Bars and Barlines panel.

     NOTE

     You can only input barlines onto single staves that already have an independent time signature.

RESULT

During note input, barlines are input at the caret position.

When you add barlines to existing music, they are added at the rhythmic position of the earliest selected item. They appear to the right of clefs and to the left of other items. If you selected an existing barline, the new barline directly replaces the existing one.

Surrounding music automatically adjusts to accommodate the barline. For example, note grouping, rests, and tied notes all adjust if necessary.

NOTE

Normal barlines that you have input directly, such as to replace an existing double barline, are still considered explicit barlines and break multi-bar rests. Deleting barlines resets them completely.

RELATED LINKS

Barlines on page 495
Bars and barlines popover on page 222
Inputting notes on page 164
Mouse input settings on page 156

# Input methods for dynamics

You can input dynamics with the keyboard by using the dynamics popover, and with the mouse by using the Dynamics panel.

RELATED LINKS
Dynamics on page 558
Inputting dynamics with the popover on page 231
Inputting dynamics with the panel on page 233
Niente hairpins on page 564
Adding modifiers to existing dynamics on page 566

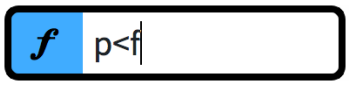
## Dynamics popover

The table contains examples of what you can enter into the dynamics popover to input the different dynamics available.

You can open the dynamics popover in Write mode in any of the following ways when either an item is selected or the caret is active:

- Press **Shift-D**.
- Select an existing dynamic and press **Return**.
- Choose **Write** > **Create Dynamic**.

The icon on the left-hand side of the popover matches the corresponding button in the Notations toolbox on the right of the window.




Dynamics popover with an example entry

**Dynamics** button in the Notations toolbox

| Dynamic or modifier | Popover entry |
|---|---|
| *pianissimo*: ***pp*** | **pp** |
| *piano*: ***p*** | **p** |
| *mezzo piano*: ***mp*** | **mp** |
| *mezzo forte*: ***mf*** | **mf** |
| *forte*: ***f*** | **f** |
| *fortissimo*: ***ff*** | **ff** |
| *subito* | **subito**, **sub**, or **sub.** |
| *possibile* | **possibile**, **poss**, or **poss.** |
| *poco* | **poco** |

| Dynamic or modifier | Popover entry |
|---|---|
| *molto* | **molto** |
| *più* | **piu** or **più** |
| *meno* | **meno** |
| *mosso* | **mosso** |
| *crescendo*: ≺ | **<** |
| *cresc.* (text) | **cresc** |
| *diminuendo*: ≻ | **>** |
| *dim.* (text) | **dim** |
| *crescendo* then *diminuendo messa di voce*: ≺≻ | **<>** |
| *diminuendo* then *crescendo messa di voce*: ≻≺ | **><** |
| *niente* hairpins that start/end with a small circle | **o<** or **>o** |
| *niente* hairpins that start/end with the letter "n" | **n<** or **>n** |
| *sforzando*: *sfz* | **sfz** |
| *rinforzando*: *rfz* | **rfz** |

This list is not comprehensive as you can enter anything as a dynamic modifier. It is intended to illustrate how you can structure your entry to input different types of dynamics.

TIP

You can input hairpins directly into the score without the popover by pressing **<** for a crescendo hairpin and **>** for a diminuendo hairpin.

You can change the appearance of gradual dynamics individually by activating **Gradual style** in the **Dynamics** group of the Properties panel, and selecting one of the available options.

## Inputting modifiers into the dynamics popover

You can enter modifiers into the dynamics popover, such as *poco*, *molto*, *subito*, *espressivo*, or *dolce*. It appears in the correct italic font beside the dynamic. However, you must also enter an accompanying immediate dynamic, such as **p** or **f**, and separate the two with a space, for example, **f molto** or **p espressivo**.

You can hide immediate dynamics if you only want to show the modifier.

RELATED LINKS
Dynamics on page 558
Dynamic modifiers on page 565
Niente hairpins on page 564

Hiding immediate dynamics on page 566

## Dynamics panel

The Dynamics panel contains the different dynamics available in Dorico Elements, including gradual dynamics and dynamic modifiers, such as *poco* and *possibile*.

- You can hide/show the Dynamics panel by clicking **Dynamics** in the Notations toolbox on the right of the window in Write mode.

  You can also hide/show the panel whose icon is currently selected in the Notations toolbox by pressing **Ctrl/Cmd-9** or clicking the disclosure arrow on the right of the window.

The Dynamics panel contains the following sections:

**Immediate Dynamics**

Contains dynamics such as *pp* and *f*, and modifiers, such as *subito* and *possibile*. Available modifiers are shown at the top of the section in boxes.

You can only input modifiers alongside a dynamic.

**Gradual Dynamics**

Contains dynamics such as < and >, and modifiers, such as *poco* and *niente*. Available modifiers are shown at the top of the section in boxes.

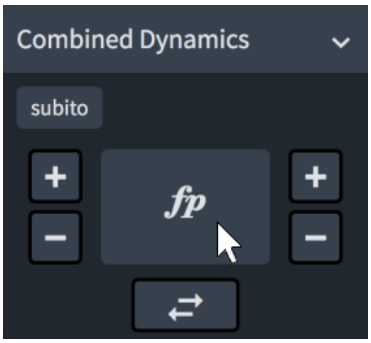
You can only input modifiers alongside a dynamic.

**Force/Intensity of Attack**

Contains dynamics such as *sfz* and *fz*.

**Combined Dynamics**

Allows you to create your own combinations of dynamics, such as *fff pp*. The controls allow you to increase and decrease the dynamic on each side, and to swap their order.




**Combined Dynamics** section of the Dynamics panel

## Inputting dynamics with the popover

You can input dynamics and modifiers using the dynamics popover, both during note input and by adding them to existing notes. You can also input different dynamics into each voice independently in multiple-voice contexts.

TIP

You can also change dynamics during note input by following these steps when the caret is at the rhythmic position of the dynamic you want to change.

PROCEDURE

1. In Write mode, do one of the following:
   - Start note input.

     NOTE

     If you want to input voice-specific dynamics, the caret must be active.

   - Select an item at the rhythmic position where you want to input dynamics. If you want to input dynamics across a duration, select items that span that duration.
2. Optional: If you want to input dynamics onto multiple staves at once, extend the caret to those staves.
3. Press **Shift-D** to open the dynamics popover.
4. Enter the dynamic you want into the popover.

   For example, **p**, **p<f>p**, or **f>**.
5. Input the dynamics and close the popover in one of the following ways:
   - To input the dynamics for all voices on the staff, press **Return**.
   - During note input, input the dynamics only into the voice indicated by the caret indicator by pressing **Alt/Opt-Return**.

   Open-ended dynamics, such as **p<**, automatically extend during note input as you continue inputting notes, or if you advance the caret by pressing **Space**.
6. Optional: During note input, stop open-ended dynamics by pressing **?** or by opening the dynamics popover again and inputting another immediate dynamic, such as **f**.

RESULT

The specified dynamics are input. Voice-specific dynamics are placed below the staff by default, even if they are input into an up-stem voice.

Adjoining dynamics, or dynamics that were input together or in sequence, are automatically grouped together, both during note input and when adding dynamics to existing notes.

During note input, dynamics are input at the caret position, and extend automatically if you included an open-ended gradual dynamic. Voice-specific dynamics are input in the voice indicated by the quarter note symbol beside the caret.

When you add dynamics to existing notes, immediate dynamics are added to the first note in the selection while gradual dynamics are added across the selection.

NOTE

- If you entered a dynamic phrase into the popover during note input, such as **p<f>p**, each dynamic and hairpin lasts a quarter note (crotchet) by default. You can lengthen/shorten gradual dynamics and groups of dynamics later.
- Some modifiers, such as *molto*, appear before immediate dynamics rather than after them, even if you do not enter them in that order. This follows the generally accepted practice for the placement of that text.

  You can add modifiers before and after existing dynamics. You can also hide immediate dynamics later if you only want to show the modifier.

AFTER COMPLETING THIS TASK

You can move dynamics within dynamic phrases and change the placement of dynamics relative to the staff.

RELATED LINKS

Extending the caret to multiple staves on page 163

Dynamics on page 558
Dynamics lanes on page 383
Groups of dynamics on page 573
Voice-specific dynamics on page 564
Dynamic modifiers on page 565
Moving dynamics rhythmically on page 560
Lengthening/Shortening gradual dynamics and groups of dynamics on page 567
Hiding immediate dynamics on page 566
Changing the staff-relative placement of items on page 310

## Inputting dynamics with the panel

You can input dynamics and modifiers using the Dynamics panel, both during note input and by adding them to existing notes. You can also input different dynamics into each voice independently in multiple-voice contexts.

NOTE

- You can also change dynamics during note input by following these steps when the caret is at the rhythmic position of the dynamic you want to change.
- These steps describe inputting with the default mouse input preference **Create item at selection**.

PROCEDURE

1. In Write mode, do one of the following:
   - Start note input.

     NOTE

     If you want to input voice-specific dynamics, the caret must be active.

   - Select an item at the rhythmic position where you want to input dynamics. If you want to input dynamics across a duration, select items that span that duration.
2. In the Notations toolbox, click **Dynamics** to show the Dynamics panel.

   
3. Input the dynamics you want in one of the following ways:
   - To input dynamics for all voices on the staff, click them in the Dynamics panel.
   - During note input, input the dynamics only into the voice indicated by the caret indicator by **Alt**-clicking them in the Dynamics panel.

   NOTE

   - If you want to add expressive or qualifying text to the dynamics, do not deselect them.
   - When inputting voice-specific dynamics, you can release **Alt** once you have input the dynamic level, such as *f*.
   - Gradual dynamics have a default duration of a quarter note. You can lengthen/shorten gradual dynamics later.
4. Optional: In the Dynamics panel, click the expressive/qualifying texts you want in the **Immediate Dynamics** and **Gradual Dynamics** sections.

RESULT

The specified dynamics are input. Voice-specific dynamics are placed below the staff by default, even if they are input into an up-stem voice.

Adjoining dynamics, or dynamics that were input together or in sequence, are automatically grouped together, both during note input and when adding dynamics to existing notes.

During note input, dynamics are input at the caret position. Voice-specific dynamics are input in the voice indicated by the quarter note symbol beside the caret.

When you add dynamics to existing notes, immediate dynamics are added to the first note in the selection while gradual dynamics are added across the selection.

NOTE

- Some modifiers, such as *molto*, appear before immediate dynamics rather than after them, even if you do not enter them in that order. This follows the generally accepted practice for the placement of that text.

  You can add modifiers before and after existing dynamics. You can also hide immediate dynamics later if you only want to show the modifier.
- You can also input gradual dynamics by clicking the gradual dynamic you want in the Dynamics panel when nothing is selected in the music area. Then click and drag to input the gradual dynamic and extend it to the length you want.

AFTER COMPLETING THIS TASK

You can move dynamics within dynamic phrases and change the placement of dynamics relative to the staff.

RELATED LINKS

Dynamics on page 558
Hiding immediate dynamics on page 566
Mouse input settings on page 156

# Input methods for chord symbols

You can input chord symbols in Dorico Elements with the computer keyboard and any connected MIDI keyboard.

RELATED LINKS

Chord symbols on page 532
Inputting chord symbols on page 238
Navigation during chord symbol input on page 238

## Chord symbols popover

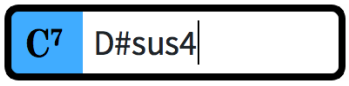
The following tables contain examples of what you can enter into the chord symbols popover to input the different possible chord symbol components. You can enter them in any combination.

You can open the chord symbols popover in Write mode in any of the following ways when either an item is selected or the caret is active:

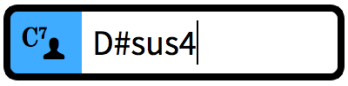
- Press **Shift-Q**.
- Select an existing chord symbol and press **Return**.
- Choose **Write** > **Create Chord Symbol**.
- Click **Chord Symbols** in the Notations toolbox.

The icon on the left-hand side of the popover matches the corresponding button in the Notations toolbox on the right of the window.

When inputting global chord symbols, the icon on the left-hand side of the popover matches the corresponding button in the Notations toolbox. When inputting local chord symbols, the icon on the left-hand side of the popover appears smaller and includes the icon for a solo player.




Chord symbols popover with an example entry for a global chord symbol




Chord symbols popover with an example entry for a local chord symbol


**Chord Symbols** button in the Notations toolbox

NOTE

You can combine multiple types of entries to create more complex chord symbols if you enter them one after another into the chord symbols popover without spaces between them. For example, enter **Eblocrian** for the following chord symbol:


**Chord symbol roots**

| Type of chord symbol root | Popover entry |
|---|---|
| English note names<br>C, D♭, F♯, B, and so on | **C**, **Db**, **F#**, **B**, and so on |
| German note names<br>C, D♭, F♯, H, and so on | **C**, **Des**, **Fis**, **H**, and so on |
| Fixed-do solfège<br>C, D♭, F, F♯, B, and so on | **do**, **reb**, **fa**, **fa#**, **ti**, and so on |
| Nashville numbers representing scale degrees<br>Assuming C major:<br>C, D♭, F♯, B, and so on | **1**, **2b**, **4#**, **7**, and so on |

**Chord symbol qualities**

| Chord symbol quality | Popover entry |
|---|---|
| Major | **maj**, **M**, **ma**, or nothing after entering the root. |
| Minor | **m**, **min**, or **mi** |
| Diminished | **dim**, **di**, or **o** |
| Augmented | **aug**, **au**, **ag**, or **+** |

| Chord symbol quality | Popover entry |
|---|---|
| Half-diminished | **half-dim**, **halfdim**, or **hd** |
| 6/9 | **6/9**, **69**, or **%** |

**Chord symbol intervals**

| Interval | Popover entry |
|---|---|
| Major 7th | **^7** or **^** |
| Major 9th | **^9**, **maj9**, or **9maj7** |

**Chord symbol alterations**

| Type of chord symbol alteration | Popover entry |
|---|---|
| Alterations | **b5**, **#9**, and so on |
| Added notes | **add#11**, **addF#**, **addBb**, and so on |
| Suspensions | **sus4**, **sus9**, and so on |
| Omissions | **omit3**, **no7**, and so on |

**Chord symbols with altered bass notes**

| Example altered bass note chord symbols | Popover entry |
|---|---|
| G7/D | **G7,D** or **Gmaj7,D** |
| C(♭5)/E♭ | **CMb5/Eb** or **Cmajb5/Eb** |
| Fm/D♯ | **Fm/D#** or **Fmi/D#** |

**Polychord chord symbols**

| Example polychord chord symbols | Popover entry |
|---|---|
| G/E | **G;E** or **Gmaj;E** |
| Cmaj7/D | **CM7\|D** or **Cmaj7\|D** |
| Fm/D♯ | **Fm\|D# Fmi\|D#** |

**No chord symbols**

| No chord symbol | Popover entry |
|---|---|
| No chord | **N.C.**, **NC**, **no chord**, or **none** |

**Modal chord symbols**

| Modal chord symbol | Popover entry |
|---|---|
| Ionian | **ionian** |
| Dorian | **dorian** |
| Phrygian | **phrygian** |
| Lydian | **lydian** |
| Mixolydian | **mixolydian** |
| Aeolian | **aeolian** |
| Locrian | **locrian** |
| Melodic minor | **melodicminor** |
| Harmonic minor | **harmonicminor** |
| Whole tone | **wholetone** |
| Octatonic or diminished half-whole | **diminishedhalfwhole**, **diminishedsemitonetone**, **octatonichalfwhole**, or **octatonicsemitonetone** |
| Octatonic or diminished whole-half | **diminishedwholehalf**, **diminishedtonesemitone**, **octatonicwholehalf**, or **octatonictonesemitone** |

This list is not comprehensive, as there are many possible chord symbols. It is intended to illustrate the different components you can use to input different chord symbols.

NOTE

The appearance of the resulting chord symbols is determined by Dorico Elements's default settings. The structure of your entry in the chord symbols popover is not considered. For example, entering a C major chord as **C**, **Cmaj**, or **CM** results in the same chord symbol.

RELATED LINKS
Chord symbols on page 532

## Navigation during chord symbol input

You can input multiple chord symbols without re-opening the popover each time by manually advancing it to other positions.

### Navigating with a computer keyboard

You can move the chord symbols popover to input chord symbols on other notes without having to close and reopen the popover on each note.

| Popover navigation | Key command |
|---|---|
| Advance the popover to the next beat. | **Space** |
| Move the popover back to the previous beat. | **Shift-Space** |
| Advance the popover to the start of the next bar. | **Tab** |
| Move the popover back to the start of the previous bar. | **Shift-Tab** |
| Move the cursor and popover to one of the following positions, whichever is closest:<br>• Next/Previous note<br>• Next/Previous rest<br>• Next/Previous rhythmic grid position | **Right Arrow** / **Left Arrow** |
| Move the popover to the next/previous chord symbol. | **Ctrl/Cmd-Right Arrow** / **Ctrl/Cmd-Left Arrow** |

### Navigating with a MIDI keyboard

When inputting chord symbols using a MIDI keyboard, by default the popover advances automatically to the next beat after you play a chord.

You can define specific keys or buttons on your MIDI keyboard to trigger different navigation behaviors. Use the **MIDI Learn** button on the **Key Commands** page in **Preferences** to assign specific keys to the **Note Input** > **Advance Chord Symbol Input** commands.

RELATED LINKS
Key Commands page in the Preferences dialog on page 59
Assigning MIDI commands on page 63
Assigning key commands on page 62

## Inputting chord symbols

You can input chord symbols using the chord symbols popover, both for all instruments or only for individual instruments. You can also open the chord symbols popover during note input; however, inputting a chord symbol stops note input.

PREREQUISITE
If you want to input chord symbols using a MIDI device, you have connected the MIDI device you want to use.

PROCEDURE

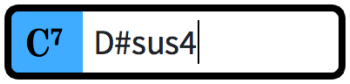
1. In Write mode, select an item at the rhythmic position where you want to input a chord symbol.
2. Press **Shift-Q** to open the chord symbols popover.

   NOTE

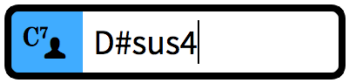
   If you selected an item on a staff that has local chord symbols at earlier rhythmic positions, the chord symbols popover is automatically set to input local chord symbols when it opens.

3. Optional: Change the type of chord symbol you want to enter in one of the following ways:
   - To input local chord symbols, press **Alt/Opt-L**.
   - To input global chord symbols, press **Alt/Opt**-**G**.

   The popover icon updates to show the current type.




Chord symbols popover when inputting a global chord symbol




Chord symbols popover when inputting a local chord symbol

4. Enter the chord symbol you want into the chord symbols popover in any of the following ways:
   - Enter the appropriate letters and numbers using the computer keyboard.
   - Play the chord using a MIDI keyboard.
5. Optional: Press **Space** to advance the popover to the next beat according to the current time signature.

   You can also navigate the popover forwards and backwards by different amounts.
6. Press **Return** to close the popover.

RESULT

The chord symbol specified is input. If you selected an item on a staff that was not already set to show chord symbols, it is automatically updated to show them.

Global chord symbols apply to all instruments in the project and appear on all staves set to show chord symbols. Local chord symbols only apply to the selected staff. Local chord symbols always appear, even if global chord symbols exist at the same rhythmic positions.

NOTE

The chord symbol may look different to what you entered into the popover because Dorico Elements provides a single default chord symbol appearance preset that applies to all chord symbols.

AFTER COMPLETING THIS TASK

You can hide/show chord symbols above specific staves and hide/show chord diagrams alongside them.

RELATED LINKS

Chord symbols on page 532
Enabling chord symbol playback on page 406
Hiding/Showing chord symbols on page 534
Hiding/Showing chord diagrams on page 542

Disabling MIDI input devices on page 200

## Inputting polychord chord symbols

Polychord chord symbols indicate that multiple different chords, commonly two, are played simultaneously. You can input polychords when inputting chord symbols with a MIDI keyboard.

PROCEDURE

1. In Write mode, open the chord symbols popover.
2. Play the first chord of the polychord with one hand.
   Keep the keys of the first chord depressed.
3. Play the second chord with the other hand.

RESULT

The two chords you played are input as a polychord chord symbol.

TIP

You can also input polychords by entering the two chords separated by a semicolon or pipe character into the chord symbols popover.

RELATED LINKS

Chord symbols popover on page 234

## Indicating root notes in chord symbols

You can indicate the root note of chord symbols when inputting chord symbols with a MIDI keyboard.

PROCEDURE

1. In Write mode, open the chord symbols popover.
2. Indicate the root note of a chord symbol in any of the following ways when using a MIDI keyboard:
   - First play the root with one finger, and then play the remaining notes of the chord while still holding down the root.
   - Play all the notes of the chord together, then release them all, then replay the root note.

     TIP

     To input a chord symbol that consists only of the root note, just play a single note.

RELATED LINKS

Chord symbols popover on page 234

## Indicating altered bass notes in chord symbols

You can indicate that chords have altered bass notes when inputting chord symbols with a MIDI keyboard.

PROCEDURE

1. In Write mode, open the chord symbols popover.

2. Indicate which note is the altered bass note of a chord in any of the following ways on your MIDI keyboard:
   - Play all notes of the chord together with the altered bass note at the bottom.
   - Play the chord and its altered bass note separately: Hold down the keys for the chord, then play the altered bass note while keeping the rest of the keys of the chord depressed.

RELATED LINKS
Chord symbols popover on page 234

## Inputting chord symbol regions

You can input specific regions in which you want to show chord symbols, for example, if an instrument that does not need chord symbols for most of the project has an improvisation section that requires chord symbols to be shown.

PROCEDURE

1. In Write mode, do one of the following:
   - Start note input.
   - Select the region in which you want to show chord symbols.
2. Choose **Write** > **Create Chord Symbol Region**.

RESULT

During note input, chord symbol regions are input spanning the duration of the selected note or item, which is usually the last input note. When adding chord symbol regions to existing music, they span the selected duration.

The player holding the corresponding instrument is automatically set to show chord symbols in chord symbol regions and slash regions, even if it was set to hide all chord symbols before.

RELATED LINKS
Chord symbol regions on page 535
Hiding/Showing chord symbols on page 534

# Input methods for clefs and octave lines

You can input clefs and octave lines with the keyboard by using the clefs and octave lines popover, and also with the mouse by using the Clefs panel.

Clefs and octave lines share the same popover and panel as both affect the pitch and register of notes.

RELATED LINKS
Clefs on page 547
Octave lines on page 552

## Clefs and octave lines popover

The following tables contain the entries for the clefs and octave lines popover that you can use to input the different clefs and octave lines available.

You can open the clefs and octave lines popover in Write mode in any of the following ways when either an item is selected or the caret is active:

- Press **Shift-C**.

- Select an existing clef or octave line and press **Return**.
- Choose **Write** > **Create Clef**.

The icon on the left-hand side of the popover matches the corresponding button in the Notations toolbox on the right of the window.


Clefs and octave lines popover with an example entry for a clef


Clefs and octave lines popover with an example entry for an octave line

**Clefs** button in the Notations toolbox

**Clefs**

| Type of clef | Popover entry |
|---|---|
| Treble G clef | **g**, **G**, **sol**, or **treble** |
| Bass F clef | **f**, **F**, **fa**, or **bass** |
| Tenor C clef | **ct**, **CT**, **ut4**, or **tenor** |
| Alto C clef | **ca**, **CA**, **ut3**, or **alto** |
| Treble G clef, octave below | **g8ba**, **G8ba**, **g8d**, **G8d**, **treble8ba**, or **treble8d** |
| Unpitched percussion | **perc** |
| 4-string tablature | **tab4** |
| 6-string tablature | **tab6** |

NOTE

The rectangular percussion clef is available in the Clefs panel.

**Octave lines**

| Function of octave line | Popover entry |
|---|---|
| Shifts notes up by 1 octave. | **8va**, **8**, **8u**, or **1u** |
| Shifts notes up by 2 octaves. | **15ma**, **15**, **15u**, or **2u** |
| Shifts notes up by 3 octaves. | **22ma**, **22**, **22u**, or **3u** |
| Shifts notes down by 1 octave. | **8ba**, **8vb**, **8d**, or **1d** |
| Shifts notes down by 2 octaves. | **15ba**, **15vb**, **15d**, or **2d** |
| Shifts notes down by 3 octaves. | **22ba**, **22vb**, **22d**, or **3d** |

| Function of octave line | Popover entry |
|---|---|
| *Loco* indication | **loco** |
| End of octave line<br>For example, enter **stop** to specify where an octave line ends during note input. | \| or **stop** |

RELATED LINKS
Clefs on page 547
Octave lines on page 552

## Clefs panel

The Clefs panel contains the different types of clefs and octave lines available in Dorico Elements.

- You can hide/show the Clefs panel by clicking **Clefs** in the Notations toolbox on the right of the window in Write mode.

  You can also hide/show the panel whose icon is currently selected in the Notations toolbox by pressing **Ctrl/Cmd-9** or clicking the disclosure arrow on the right of the window.

The Clefs panel contains the following sections:

**Common Clefs**
Contains the clefs you are most likely to need, including treble clef and bass clef.

**Octave Lines**
Contains octave lines, indicating up to three octaves above and below, and a *loco* line.

## Inputting clefs with the popover

You can input clefs using the clefs and octave lines popover, both during note input and by adding them to existing music. You can also use the popover to change the type of existing clefs.

NOTE

- In Dorico Elements, you cannot hide clefs. Therefore, if you do not want to show any clef, you must input an invisible clef.
- Many instruments in Dorico Elements have different types that show alternative clefs by default. You can select the appropriate instrument type from the instrument picker when adding or changing instruments.

PROCEDURE

1. In Write mode, do one of the following:
   - Start note input.
   - Select an item at the rhythmic position where you want to input a clef.
2. Optional: If you want to input clefs onto multiple staves at once, extend the caret to those staves.
3. Press **Shift-C** to open the clefs and octave lines popover.
4. Enter the appropriate entry for the clef you want into the popover.
   For example, enter **bass** or **G8ba**.

5. Press **Return** to close the popover.

RESULT

During note input, clefs are input at the caret position. Note input continues after inputting the clef, so you can continue inputting notes and clefs as required.

When you add clefs to existing music, clefs are added directly before a selected notehead, and apply to all notes on that staff until the next clef, or the end of the flow.

Clefs apply to all notes on the staff until the next clef or the end of the flow, whichever comes first.

RELATED LINKS

Clefs on page 547
Extending the caret to multiple staves on page 163
Setting different clefs for concert/transposed pitch on page 550
Hiding/Showing clefs according to layout transpositions on page 550
Changing instruments on page 113
Adding instruments to players on page 112

## Inputting clefs with the panel

You can input clefs using the Clefs panel, both during note input and by adding them to existing music.

NOTE

- In Dorico Elements, you cannot hide clefs. Therefore, if you do not want to show any clef, you must input an invisible clef.
- These steps describe inputting with the default mouse input preference **Create item at selection**.
- Many instruments in Dorico Elements have different types that show alternative clefs by default. You can select the appropriate instrument type from the instrument picker when adding or changing instruments.

PROCEDURE

1. In Write mode, do one of the following:
   - Start note input.
   - Select an item at the rhythmic position where you want to input a clef.
2. In the Notations toolbox, click **Clefs** to show the Clefs panel.

3. In the Clefs panel, click the clef you want.

RESULT

During note input, clefs are input at the caret position. Note input continues after inputting the clef, so you can continue inputting notes and clefs as required.

When you add clefs to existing music, clefs are added directly before a selected notehead, and apply to all notes on that staff until the next clef, or the end of the flow.

Clefs apply to all notes on the staff until the next clef or the end of the flow, whichever comes first.

RELATED LINKS

Clefs on page 547

Mouse input settings on page 156

## Inputting octave lines with the popover

You can input octave lines using the clefs and octave lines popover, both during note input and by adding them to existing music. You can also input octave lines only into specific voices in multiple-voice contexts.

PROCEDURE

1. In Write mode, do one of the following:
   - Start note input.
   - Select the notes to which you want to add an octave line. If you want to add an octave line for a single voice, only select notes in that voice.
2. Optional: If you want to input octave lines onto multiple staves at once, extend the caret to those staves.
3. Press **Shift-C** to open the clefs and octave lines popover.
4. Enter the appropriate entry for the octave line you want into the popover.
   For example, enter **8va** for an octave line that shifts notes up one octave.
5. Input the octave line and close the popover in one of the following ways:
   - To input an octave line for all voices on the staff, press **Return**.
   - To input an octave line only for the currently selected voice, press **Alt/Opt-Return**.
6. Optional: During note input, press **Space** to advance the caret and extend the octave line.
   The octave line also extends automatically as you continue inputting notes.
7. Optional: During note input, stop any octave line by opening the clefs and octave lines popover again and entering **|** or **stop**.

RESULT

During note input, octave lines are input from the caret position. When you stop octave lines, they end at the caret position.

When you add octave lines to existing notes, they are added either above or below your selection, depending on whether the octave line indicates that notes are played higher or lower than notated.

TIP

You can also lengthen/shorten octave lines after they have been input.

RELATED LINKS

Clefs and octave lines popover on page 241
Octave lines on page 552
Lengthening/Shortening octave lines on page 553
Extending the caret to multiple staves on page 163

## Inputting octave lines with the panel

You can input octave lines using the Clefs panel, both during note input and by adding them to existing music. You can also input octave lines only into specific voices in multiple-voice contexts.

NOTE

These steps describe inputting with the default mouse input preference **Create item at selection**.

PROCEDURE

1. In Write mode, do one of the following:
   - Start note input.
   - Select the notes to which you want to add an octave line. If you want to add an octave line for a single voice, only select notes in that voice.
2. In the Notations toolbox, click **Clefs** to show the Clefs panel.

   
3. Input the octave line you want in one of the following ways:
   - To input an octave line for all voices on the staff, click it in the Clefs panel.
   - To input an octave line only for the currently selected voice, **Alt**-click it in the Clefs panel.

   Alternatively, when adding octave lines to existing notes, you can click the octave line you want in the Clefs panel first, and then click and drag it to the length you want.

RESULT

During note input, octave lines are input at the caret position. However, if you input notes using the mouse, octave lines do not automatically extend as you continue inputting notes.

When you add octave lines to existing notes, they are added either above or below your selection, depending on whether the octave line indicates that notes are played higher or lower than notated.

TIP

You can also lengthen/shorten octave lines after they have been input.

RELATED LINKS

Octave lines on page 552
Lengthening/Shortening octave lines on page 553
Mouse input settings on page 156

# Input methods for holds and pauses

You can input holds and pauses with the keyboard by using the holds and pauses popover in Write mode, and with the mouse by using the Holds and Pauses panel.

RELATED LINKS

Holds and pauses on page 601
Correct positioning for caesura input on page 250

## Holds and pauses popover

The table contains the entries for the holds and pauses popover that you can use to input the different holds and pauses available.

You can open the holds and pauses popover in Write mode in any of the following ways when either an item is selected or the caret is active:

- Press **Shift-H**.
- Select an existing hold or pause and press **Return**.
- Choose **Write** > **Create Hold or Pause**.

The icon on the left-hand side of the popover matches the corresponding button in the Notations toolbox on the right of the window.


Holds and pauses popover with an example entry

**Holds and Pauses** button in the Notations toolbox

| **Type of hold or pause** | **Popover entry** |
|---|---|
| Fermata  | **fer** or **fermata** |
| Very long fermata  | **fermataverylong** |
| Long fermata  | **fermatalong** |
| Short fermata  | **fermatashort** |
| Very short fermata  | **fermataveryshort** |
| Short fermata (Henze)  | **fermatashorthenze** |
| Long fermata (Henze)  | **fermatalonghenze** |
| Curlew (Britten)  | **curlew** |
| Caesura  | **caesura** or **//** |
| Thick caesura  | **caesurathick** |

| Type of hold or pause | Popover entry |
|---|---|
| Curved caesura  | **caesuracurved** |
| Short caesura  | **caesurashort** |
| Breath mark (Comma-like)  | **breathmarkcomma**, **comma**, or **,** (comma) |
| Breath mark (Tick-like)  | **breathmarktick** |
| Breath mark (Upbow-like)  | **breathmarkupbow** |
| Breath mark (Salzedo)  | **breathmarksalzedo** |

NOTE

The Curlew mark was originally devised by Benjamin Britten for “Curlew River”, a parable for church performance inspired by Japanese Noh theater. It indicates that a player should hold a note or a rest until a synchronization point in asynchronous music.

RELATED LINKS
Holds and pauses on page 601
Types of fermatas on page 601
Types of caesuras on page 603
Types of breath marks on page 603

## Holds and Pauses panel

The Holds and Pauses panel allows you to input all the different types of holds and pauses available in Dorico Elements, including alternative versions of fermatas.

- You can hide/show the Holds and Pauses panel by clicking **Holds and Pauses** in the Notations toolbox on the right of the window in Write mode.

  You can also hide/show the panel whose icon is currently selected in the Notations toolbox by pressing **Ctrl/Cmd-9** or clicking the disclosure arrow on the right of the window.

The Holds and Pauses panel contains the following sections:

- **Fermatas**
- **Breath Marks**

- **Caesuras**

NOTE

Holds and pauses do not currently have an effect in playback, but this is planned for future versions.

## Inputting holds and pauses with the popover

You can input holds and pauses using the holds and pauses popover, both during note input and by adding them to existing music.

PROCEDURE

1. In Write mode, do one of the following:
   - Start note input.
   - Select an item at the rhythmic position where you want to input a hold or pause.

     NOTE

     You can only input one hold or pause at a time.
2. Optional: If you want to input breath marks onto multiple staves at once, extend the caret to those staves.
3. Press **Shift-H** to open the holds and pauses popover.
4. Enter the hold or pause you want into the popover.
   For example, enter **fermata** for a pause or **caesura** for a caesura.
5. Press **Return** to close the popover.

RESULT

During note input, the specified hold or pause is input at the caret position. When adding holds or pauses to existing music, they are input at the rhythmic position of the earliest selected item.

- Fermatas appear on all staves at the rhythmic position of the note, chord, or rest that corresponds with the end of the fermata.
- Breath marks appear to the right of the caret or selected note.
- Caesuras appear on all staves to the left of the caret or selected note.

RELATED LINKS

Extending the caret to multiple staves on page 163
Holds and pauses on page 601

## Inputting holds and pauses with the panel

You can input holds and pauses using the Holds and Pauses panel, both during note input and by adding them to existing music.

NOTE

These steps describe inputting with the default mouse input preference **Create item at selection**.

PROCEDURE

1. In Write mode, do one of the following:
   - Start note input.

- Select an item at the rhythmic position where you want to input a hold or pause.

  NOTE

  You can only input one hold or pause at a time.

2. In the Notations toolbox, click **Holds and Pauses** to show the Holds and Pauses panel.

3. In the Holds and Pauses panel, click the hold or pause you want.

RESULT

During note input, the specified hold or pause is input at the caret position. When adding holds or pauses to existing music, they are input at the rhythmic position of the earliest selected item.

- Fermatas appear on all staves at the rhythmic position of the note, chord, or rest that corresponds with the end of the fermata.
- Breath marks appear to the right of the caret or selected note.
- Caesuras appear on all staves to the left of the caret or selected note.

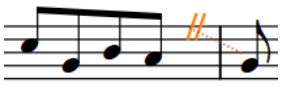
RELATED LINKS

Holds and pauses on page 601
Mouse input settings on page 156

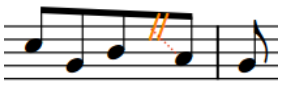
## Correct positioning for caesura input

Caesuras are commonly placed at the end of a bar, before a barline. In Dorico Elements, caesuras must be attached to the note immediately after the position where you want it to appear, as then Dorico Elements can automatically position them correctly.

If you input caesuras with your mouse input preference set to **Load pointer with item**, you must click the first note in the next bar for a caesura to appear to the left of the barline. You can also click directly on the barline.



A correctly input caesura. The dotted attachment lines are attached to the notehead after the barline, meaning the caesura is correctly positioned before the barline.



An incorrectly input caesura. By clicking to the left of the barline, the caesura is attached to the last eighth note in the bar.

When input correctly, the dotted attachment lines link the caesura to the notehead immediately after the barline.

If your dotted attachment lines do not link the caesura to the notehead immediately after the barline, delete the caesura and re-input it. Caesuras can cause spacing issues when input incorrectly.

RELATED LINKS

Holds and pauses on page 601
Types of caesuras on page 603

# Input methods for ornaments, arpeggio signs, glissando lines, guitar bends, and jazz articulations

You can input ornaments, including arpeggio signs, glissando lines, guitar bends, and jazz articulations, with the keyboard by using the ornaments popover, and with the mouse by using the Ornaments panel.

You can input ornaments and arpeggio signs during note input and by adding them to existing notes, but you cannot input glissando lines or guitar bends during note input. You can only input glissando lines and guitar bends by adding them to existing notes.

You can specify the type/length of jazz articulations when using the Ornaments panel but not when using the ornaments popover.

RELATED LINKS
Ornaments on page 653
Arpeggio signs on page 666
Glissando lines on page 672
Guitar bends on page 676
Jazz articulations on page 682
Jazz ornaments on page 683
Lines on page 719
Input methods for lines on page 275

## Ornaments popover

The following tables contain the entries for the ornaments popover that you can use to input the different ornaments, arpeggio signs, glissando lines, and jazz articulations available.

You can open the ornaments popover in Write mode in any of the following ways when either an item is selected or the caret is active:

- Press **Shift-O**.
- Select an existing ornament and press **Return**.
- Choose **Write** > **Create Ornament**.

The icon on the left-hand side of the popover matches the corresponding button in the Notations toolbox on the right of the window.


Ornaments popover with an example entry

**Ornaments** button in the Notations toolbox

**Ornaments**

| Type of ornament | Popover entry |
|---|---|
| Trill: | **tr** or **trill** |
| Short trill: | **shorttr** |
| Mordent: | **mor** or **mordent** |

| Type of ornament | Popover entry |
|---|---|
| Turn: ∞ | **turn** |
| Inverted turn: ∞ | **invturn** or **invertedturn** |

**Trill intervals**

| Trill interval | Popover entry |
|---|---|
| Major second | **tr 2** or **tr M2** |
| Minor third | **tr m3** |
| Perfect fifth | **tr p5** |
| Augmented fourth | **tr aug4** |
| Diminished fifth | **tr dim5** |

This list is not comprehensive, as there are many possible trill intervals. It is intended to illustrate how you can structure your entry to input different trill intervals.

**Jazz ornaments**

| Type of jazz ornament | Popover entry |
|---|---|
| Flip  | **flip** |
| Smear  | **smear** |
| Jazz turn  | **jazz** or **shake** |
| Bend  | **brassbend** |

**Arpeggio signs**

| Type of arpeggio sign | Popover entry |
|---|---|
| Up arpeggio sign | **arp**, **arpup**, or **arpeggioup** |
| Down arpeggio sign | **arpdown** or **arpeggiodown** |
| Non arpeggio sign | **nonarp** or **nonarpeggio** |

| Type of arpeggio sign | Popover entry |
|---|---|
| Curved arpeggio sign | **slurarp** |

**Glissando lines**

| Type of glissando line/guitar bend | Popover entry |
|---|---|
| Straight glissando line | **gliss** |
| Wavy glissando line | **glisswavy** |
| Guitar bend | **bend** |

**Jazz articulations**

| Type of jazz articulation | Popover entry |
|---|---|
| Plop (bend) | **plop** |
| Plop (smooth) | **plopsmooth** |
| Scoop | **scoop** |
| Doit (bend) | **doit** |
| Doit (smooth) | **doitsmooth** |
| Fall (bend) | **fall** |
| Fall (smooth) | **fallsmooth** |

TIP

Other ornaments are available in the Ornaments panel on the right of the window in Write mode.

You can specify the type/length of jazz articulations when using the Ornaments panel but not when using the ornaments popover.

RELATED LINKS

Inputting arpeggio signs with the popover on page 256
Inputting glissando lines with the popover on page 257
Inputting jazz articulations with the popover on page 259
Inputting guitar bends with the popover on page 261
Ornaments on page 653
Trill intervals on page 659
Arpeggio signs on page 666
Glissando lines on page 672
Guitar bends on page 676
Jazz articulations on page 682
Jazz ornaments on page 683

## Ornaments panel

The Ornaments panel allows you to input all the different types of ornaments, including jazz articulations, as well as arpeggio signs, guitar bends, and glissando lines.

- You can hide/show the Ornaments panel by clicking **Ornaments** in the Notations toolbox on the right of the window in Write mode.

  You can also hide/show the panel whose icon is currently selected in the Notations toolbox by pressing **Ctrl/Cmd-9** or clicking the disclosure arrow on the right of the window.

The Ornaments panel contains the following sections:

**Jazz**

Contains ornaments and pitch alterations commonly used in jazz music, such as bends, scoops, and falls.

**Baroque and Classical**

Contains ornaments commonly used in Baroque and Classical music, such as mordents, turns, and trills.

**Arpeggiation**

Contains the different types of arpeggio signs.

NOTE

You cannot input arpeggio signs with the mouse during note input.

**Glissandi**

Contains the different types of glissando lines.

**Guitar**

Contains techniques and pitch alterations commonly associated with guitars, such as guitar bends and the vibrato bar.

## Inputting ornaments with the popover

You can input ornaments and jazz ornaments using the ornaments popover, both during note input and by adding them to existing notes.

PROCEDURE

1. In Write mode, do one of the following:
   - Start note input.
   - Select a single existing note to which you want to add an ornament.
   - Select existing notes across which you want to add a trill.

     NOTE

     You can only add one ornament to one note at a time.
2. Optional: If you want to input ornaments onto multiple staves at once, extend the caret to those staves.
3. Press **Shift-O** to open the ornaments popover.
4. Enter the appropriate entry for the ornament you want into the popover.
   For example, enter **tr m3** for a trill with a minor third interval or **mor** for a mordent.

5. Press **Return** to close the popover.

RESULT

During note input, ornaments are input at the caret position. Trills last the duration of the rhythmic value of the note input at the caret position and have a default interval of a second, either major or minor depending on the context. If you specified an interval for your trill, the interval applies only to the first note in the selection, but you can also change the interval partway through trills.

When adding ornaments to existing notes, they are input above the selected note. Trills are input above the first selected note, with an extender line across any subsequent selected notes.

RELATED LINKS

Ornaments on page 653
Trills on page 656
Trill interval appearance on page 662
Jazz ornaments on page 683
Inputting notes on page 164
Changing intervals partway through trills on page 661
Extending the caret to multiple staves on page 163

## Inputting ornaments with the panel

You can input ornaments and jazz ornaments using the Ornaments panel, both during note input and by adding them to existing notes.

NOTE

These steps describe inputting with the default mouse input preference **Create item at selection**.

PROCEDURE

1. In Write mode, do one of the following:
   - Start note input.
   - Select a single existing note to which you want to add an ornament.
   - Select existing notes across which you want to add a trill.

     NOTE

     You can only add one ornament to one note at a time.
2. In the Notations toolbox, click **Ornaments** to show the Ornaments panel.

   
3. In the Ornaments panel, click the ornament you want.

RESULT

During note input, ornaments are input at the caret position. Trills are input with a default duration of a quarter note.

When adding ornaments to existing notes, they are input above the selected note. Trills are input above the first selected note, with an extender line across any subsequent selected notes.

RELATED LINKS

Mouse input settings on page 156

## Inputting arpeggio signs with the popover

You can input arpeggio signs using the ornaments popover, both during note input and by adding them to existing notes. You can also input arpeggio signs across notes in multiple voices and on different staves that belong to the same instrument, such as piano or harp.

NOTE

You can only input one arpeggio sign at a time.

PROCEDURE

1. In Write mode, do one of the following:
   - Start note input.
   - Select at least one note in each voice to which you want to add an arpeggio sign.

     NOTE

     - For instruments with multiple staves, such as piano and harp, you can select existing notes on multiple staves to create cross-staff arpeggio signs. However, you cannot create cross-staff arpeggio signs between different instruments.
     - Arpeggio signs are added to all notes in the selected voices at the selected rhythmic position.
2. If you started note input, press **Q** to start chord input.

   NOTE

   You can only input arpeggio signs during chord input.
3. Press **Shift-O** to open the ornaments popover.
4. Enter the appropriate entry for the arpeggio sign you want into the popover.

   For example, enter **arpup** for an up arpeggio sign or enter **arpdown** for a down arpeggio sign.
5. Press **Return** to close the popover.
6. Optional: During chord input, input the notes you want.

RESULT

During chord input, arpeggio signs are input at the caret position.

When adding arpeggio signs to existing notes, they are input to the left of the selected notes.

Arpeggio signs automatically span the pitch range of all notes at that rhythmic position in the current voice during chord input, and all notes in the selected voices/staves when adding arpeggio signs to existing notes.

RELATED LINKS

Ornaments popover on page 251
Arpeggio signs on page 666
Inputting notes on page 164
Inputting chords on page 185

## Inputting arpeggio signs with the panel

You can input arpeggio signs on existing notes using the Ornaments panel. You can also input arpeggio signs across notes in multiple voices and on different staves that belong to the same instrument, such as piano or harp.

NOTE

- You can only input one arpeggio sign at a time, and you cannot input arpeggio signs with the mouse during note input.
- These steps describe inputting with the default mouse input preference **Create item at selection**.

  You cannot create cross-staff and cross-voice arpeggio signs if your preference is set to **Load pointer with item**.

PROCEDURE

1. In Write mode, select at least one note in each voice to which you want to add an arpeggio sign.

   NOTE

   - For instruments with multiple staves, such as piano and harp, you can select existing notes on multiple staves to create cross-staff arpeggio signs. However, you cannot create cross-staff arpeggio signs between different instruments.
   - Arpeggio signs are added to all notes in the selected voices at the selected rhythmic position.

2. In the Notations toolbox, click **Ornaments** to show the Ornaments panel.

3. In the Ornaments panel, click the arpeggio sign you want in the **Arpeggiation** section.

RESULT

The arpeggio sign specified is input to the left of the selected note or chord. Arpeggio signs automatically span the pitch range of all notes in the selected voices/staves at that rhythmic position.

RELATED LINKS

Arpeggio signs on page 666
Mouse input settings on page 156

## Inputting glissando lines with the popover

You can input glissando lines between existing notes using the ornaments popover. You can input glissando lines between both adjacent and non-adjacent notes.

NOTE

You cannot input glissando lines during note input.

PROCEDURE

1. In Write mode, select one of the following:
   - The note from which you want a glissando line to start.
   - Any two notes that you want to join with a glissando line.

TIP

The two notes can be in different voices.

2. Press **Shift-O** to open the ornaments popover.
3. Enter the appropriate entry for the glissando line you want into the popover.
   - Enter **gliss** for a straight glissando line.
   - Enter **glisswavy** for a wavy glissando line.
4. Press **Return** to close the popover.

RESULT

If you selected two notes, the glissando line specified is input between the selected notes.

If you selected a single note, the glissando line specified starts from the selected note and ends at the next note in the same voice on the staff, even if this crosses rests.

NOTE

- You cannot input a glissando line on the last note on a staff.
- Glissando lines do not automatically adjust around any notes or rests between the selected notes. If glissando text is shown, the text can collide with notes or rests, in which case we recommend that you make further adjustments, such as not showing glissando text for that glissando line.

RELATED LINKS

Ornaments popover on page 251
Glissando lines on page 672
Changing glissando line text on page 674
Changing when glissando line text is shown on page 674

## Inputting glissando lines with the panel

You can input glissando lines between existing notes using the Ornaments panel. You can input glissando lines between both adjacent and non-adjacent notes.

NOTE

- These steps describe inputting with the default mouse input preference **Create item at selection**.

  If your preference is set to **Load pointer with item**, you can only input glissando lines between the note you click on and the note immediately following it.
- You cannot input glissando lines during note input.

PROCEDURE

1. In Write mode, select one of the following:
   - The note from which you want a glissando line to start.
   - Any two notes that you want to join with a glissando line.

     TIP

     The two notes can be in different voices.
2. In the Notations toolbox, click **Ornaments** to show the Ornaments panel.

3. In the Ornaments panel, click the style of glissando line you want.
   - **Glissando (Straight)**

     
   - **Glissando (Wavy)**

RESULT

If you selected two notes, the glissando line specified is input between the selected notes.

If you selected a single note, the glissando line specified starts from the selected note and ends at the next note in the same voice on the staff, even if this crosses rests.

NOTE

- You cannot input a glissando line on the last note on a staff.
- Glissando lines do not automatically adjust around any notes or rests between the selected notes. If glissando text is shown, the text can collide with notes or rests, in which case we recommend that you make further adjustments, such as not showing glissando text for that glissando line.

RELATED LINKS

Glissando lines on page 672
Mouse input settings on page 156

## Inputting jazz articulations with the popover

You can input jazz articulations using the ornaments popover, both during note input and by adding them to existing notes.

NOTE

You can input jazz ornaments, such as flips or jazz turns, in the same ways as inputting ornaments.

PROCEDURE

1. In Write mode, do one of the following:
   - Start note input.
   - Select the notes to which you want to add jazz articulations.
2. Optional: During note input, input at least one note.
3. Optional: If you want to input jazz articulations onto multiple staves at once, extend the caret to those staves.
4. Press **Shift-O** to open the ornaments popover.
5. Enter the appropriate entry for the jazz articulation you want into the popover.

   For example, enter **scoop** for a scoop or **fall** for a fall.
6. Press **Return** to close the popover.

RESULT

The jazz articulation you specify is input on all selected notes. During note input, this is usually the previous note you input.

NOTE

When using the popover, all jazz articulations are input with a default line style for their type. You can change their type/length after they have been input.

When using the panel, you can specify the line style of jazz articulations when you input them.

RELATED LINKS

Ornaments popover on page 251
Inputting ornaments with the popover on page 254
Jazz articulations on page 682
Changing the type/length of existing jazz articulations on page 684
Changing the line style of smooth jazz articulations on page 684
Extending the caret to multiple staves on page 163

## Inputting jazz articulations with the panel

You can input jazz articulations using the Ornaments panel, both during note input and by adding them to existing notes.

NOTE

- You can input jazz ornaments, such as flips or jazz turns, in the same ways as inputting ornaments.
- These steps describe inputting with the default mouse input preference **Create item at selection**.

PROCEDURE

1. In Write mode, do one of the following:
   - Start note input.
   - Select the notes to which you want to add jazz articulations.
2. In the Notations toolbox, click **Ornaments** to show the Ornaments panel.

   
3. In the Ornaments panel, click the jazz articulation you want in the **Jazz** section.

RESULT

The jazz articulation you specify is input on all selected notes. During note input, this is usually the previous note you input.

RELATED LINKS

Inputting ornaments with the panel on page 255
Mouse input settings on page 156

## Inputting guitar bends with the popover

You can input guitar bends between existing notes using the ornaments popover. You can input guitar bends between both adjacent and non-adjacent notes.

NOTE

You cannot input guitar bends during note input.

PROCEDURE

1. In Write mode, select one of the following:
   - The note from which you want a guitar bend to start.

     NOTE

     You cannot input a guitar bend on the last note on a staff.

   - Any two notes that you want to join with a guitar bend.

     TIP

     The two notes can be in different voices.
2. Press **Shift-O** to open the ornaments popover.
3. Enter **bend** into the popover.
4. Press **Return** to close the popover.

RESULT

If you selected two notes, the guitar bend is input between the selected notes.

If you selected a single note, the guitar bend starts from the selected note and ends at the next note in the same voice on the staff, even if this crosses rests.

TIP

You can assign a key command for inputting guitar bends. The command is called **Create Guitar Bend** and is in the **Note Input** category on the **Key Commands** page in **Preferences**.

RELATED LINKS

Guitar bends on page 676
Ornaments popover on page 251
Key Commands page in the Preferences dialog on page 59

## Inputting guitar bends with the panel

You can input guitar bends between existing notes using the Ornaments panel. You can input guitar bends between both adjacent and non-adjacent notes.

NOTE

- These steps describe inputting with the default mouse input preference **Create item at selection**.

  If your preference is set to **Load pointer with item**, you can only input guitar bends between the note you click on and the note immediately following it.
- You cannot input guitar bends during note input.

PROCEDURE

1. In Write mode, select one of the following:
   - The note from which you want a guitar bend to start.

     NOTE

     You cannot input a guitar bend on the last note on a staff.

   - Any two notes that you want to join with a guitar bend.

     TIP

     The two notes can be in different voices.
2. In the Notations toolbox, click **Ornaments** to show the Ornaments panel.

   
3. In the Ornaments panel, click **Guitar Bend** in the **Guitar** section.

RESULT

If you selected two notes, the guitar bend is input between the selected notes.

If you selected a single note, the guitar bend starts from the selected note and ends at the next note in the same voice on the staff, even if this crosses rests.

TIP

You can assign a key command for inputting guitar bends. The command is called **Create Guitar Bend** and is in the **Note Input** category on the **Key Commands** page in **Preferences**.

RELATED LINKS

Guitar bends on page 676
Ornaments panel on page 254

## Inputting guitar pre-bends

You can input guitar pre-bends on any existing notes belonging to fretted instruments.

PROCEDURE

1. Select the notes before which you want to input guitar pre-bends.
2. In the Properties panel, activate **Pre-bend interval** in the **Guitar Techniques** group.
3. Change the interval as required.

RESULT

Guitar pre-bends of the specified interval are input before the selected notes.

RELATED LINKS

Guitar bends on page 676

# Input methods for playing techniques, pedal lines, string indicators, and harp pedal diagrams

You can input playing techniques with the keyboard by using the playing techniques popover, and with the mouse by using the Playing Techniques panel. Pedal lines are considered playing techniques in Dorico Elements because both affect the sound that the instrument produces.

You can input string indicators outside the staff in the same ways, using either the playing techniques popover or Playing Techniques panel. However, you can only input harp pedal diagrams using the playing techniques popover.

You can input string indicators inside the staff using a property in the **String Indicators** group of the Properties panel.

RELATED LINKS
Playing techniques on page 709
Pedal lines on page 697
Harp pedaling on page 690
String indicators on page 590
Inputting playing techniques with the popover on page 267
Inputting playing techniques with the panel on page 268
Inputting pedal lines and retakes with the popover on page 269
Inputting pedal lines and retakes with the panel on page 270
Inputting harp pedal diagrams on page 272
Inputting string indicators outside the staff with the popover on page 273
Inputting string indicators outside the staff with the panel on page 274
Inputting string indicators inside the staff on page 275

## Playing techniques popover

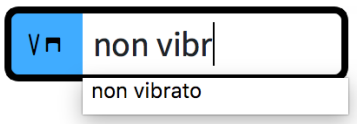
The following tables contain the entries for the playing techniques popover that you can use to input playing techniques, pedal lines, and retakes.

When you start entering a playing technique into the playing techniques popover, a menu appears that shows valid playing techniques containing the letters/words you enter. You can then select one of these playing techniques to input.

You can open the playing techniques popover in Write mode in any of the following ways when either an item is selected or the caret is active:

- Press **Shift-P**.
- Select an existing playing technique and press **Return**.
- Choose **Write** > **Create Playing Technique**.

The icon on the left-hand side of the popover matches the corresponding button in the Notations toolbox on the right of the window.




Playing techniques popover with an example entry for inputting a playing technique


Playing techniques popover with an example entry for inputting a pedal line

**Playing Techniques** button in the Notations toolbox

**Playing techniques**

| Playing technique | Popover entry |
|---|---|
| *Vibrato* | **vibrato** |
| *Senza vibrato* | **senza vibrato** |
| *Naturale* (nat.) | **nat** |
| Con sord. | **con sord** |
| Strong air pressure | **strong air pressure** |
| Double-tongue | **double-tongue** |
| Down bow | **downbow** |
| Up bow | **upbow** |
| *Sul ponticello* | **sul pont** |
| *Sul tasto* | **sul tasto** |
| *Poco sul tasto* | **pst** |
| Pizzicato | **pizz** |
| *Spiccato* | **spicc** |
| Arco | **arco** |
| Tongue click (Stockhausen) | **tongue click** |
| Finger click (Stockhausen) | **finger click** |
| Vibraphone motor on | **motor on** |
| Vibraphone motor off | **motor off** |
| Open | **open** |
| Damp | **damp** |
| Damp (large) | **damp large** |
| Full barré | **full barre** |
| Half barré | **half barre** |
| Strum up | **strum up** |
| Strum down | **strum down** |

| Playing technique | Popover entry |
|---|---|
| Left hand | **lh** |
| Right hand | **rh** |

This list is not comprehensive as there are many valid playing techniques. It is intended to illustrate how you can structure your entry to input different types of common playing techniques.

If you do not know the correct entry for a playing technique, start entering part of the playing technique and see if it becomes available in the popover menu.

NOTE

- To give playing techniques duration, add **->** at the end of your entry, such as **vibrato->**. During note input, the duration of the playing technique extends as you continue inputting notes or advance the caret. When adding playing techniques to existing notes, they are added as a group.
- As playing techniques correspond to specific samples, they must be input as described or selected from the popover menu.

**Pedal lines**

| Type of pedal line or retake | Popover entry |
|---|---|
| Sustain pedal line | **ped** |
| Retake in sustain pedal line | **^**, **notch**, or **retake** |
| Remove retake in sustain pedal line | **nonotch** |
| Stop sustain pedal line | ***** |
| *Sostenuto* pedal line | **sost** |
| Stop *sostenuto* pedal line | **s*** |
| *Una corda* pedal line | **unacorda** |
| Stop *una corda* pedal line | **u*** |

**Harp pedaling**

| Example harp pedaling | Popover entry |
|---|---|
| D, C, Bb, Eb, F, G, A | **DCBbEbFGA**, **BbEb**, or **--^\|^---** |
| D, C♯, B, E, F♯, G♯, A | **DC#BEF#G#A**, **C#F#G#**, or **-v-\|-vv-** |

TIP

The pipe character is optional.

**String indicators outside the staff**

| Example string indicator | Popover entry |
|---|---|
| 1 | **string1** |
| 3 | **string3** |

RELATED LINKS
Playing techniques on page 709
Groups of playing techniques on page 716
Pedal lines on page 697
Sustain pedal retakes and pedal level changes on page 698
Harp pedaling on page 690
Adding retakes to existing pedal lines with the popover on page 270
Inputting harp pedal diagrams on page 272
Inputting string indicators outside the staff with the popover on page 273

## Playing Techniques panel

The Playing Techniques panel contains the different playing techniques available in Dorico Elements, divided into instrument families. Pedal lines are included in the **Keyboard** section.

- You can hide/show the Playing Techniques panel by clicking **Playing Techniques** in the Notations toolbox on the right of the window in Write mode.

  You can also hide/show the panel whose icon is currently selected in the Notations toolbox by pressing **Ctrl/Cmd-9** or clicking the disclosure arrow on the right of the window.

The Playing Techniques panel contains the following sections:

**Common**

Contains commonly used playing techniques that also apply to multiple different instrument families, such as “mute” and “legato”.

**Wind**

Contains playing techniques typically only used for wind instruments, such as “key clicks” and “whistle tones”.

**Brass**

Contains playing techniques typically only used for brass instruments, such as “cup mute” and “stopped”.

**Unpitched Percussion**

Contains playing techniques typically only used for unpitched percussion instruments, such as “rim” and “scrape”.

**Pitched Percussion**

Contains playing techniques typically only used for pitched percussion instruments, such as “motor on” and “½ Ped.” for vibraphones.

**Keyboard**

Contains playing techniques typically only used for keyboard instruments, such as “Ped.” and different pedal depression levels.

**Choral**

Contains playing techniques typically only used for the voice, such as “mouth open” and “tongue click”.

**Strings**

Contains playing techniques typically only used for string instruments, such as “col legno battuto” and “down bow”.

**Guitar**

Contains playing techniques typically only used for guitars and fretted instruments, such as string indicators, “half barré”, and “strum up”.

TIP

You can hover your mouse pointer over the options in each section to show the name of each playing technique.

RELATED LINKS

Inputting string indicators outside the staff with the panel on page 274

## Inputting playing techniques with the popover

You can input playing techniques using the playing techniques popover, both during note input and by adding them to existing notes.

NOTE

You can only enter one playing technique into the popover during note input. You can enter two playing techniques when adding playing techniques to a selection if they are separated by **->**.

PROCEDURE

1. In Write mode, do one of the following:
   - Start note input.
   - Select an item at the rhythmic position where you want to input a playing technique. If you want to input playing techniques with duration, select items that span that duration.
2. Optional: If you want to input playing techniques onto multiple staves at once, extend the caret to those staves.
3. Press **Shift-P** to open the playing techniques popover.
4. Enter the appropriate entry for the playing technique you want into the popover.

   For example, enter **pizz** or **non vibrato->**.

   When you start entering a playing technique into the playing techniques popover, a menu appears that shows valid playing techniques containing the letters/words you enter, which you can select. If you want the playing technique to have duration, you can add **->** at the end.

   
   
5. Press **Return** to close the popover.

   Open-ended playing techniques, such as **non vibrato->**, automatically extend during note input as you continue inputting notes, or if you advance the caret by pressing **Space**.
6. Optional: During note input, stop open-ended playing techniques by opening the playing techniques popover again and entering one of the following entries:

- To end the current playing technique with another playing technique, enter that playing technique. For example, enter **vibrato**. This joins the current playing technique to the following one with a continuation line.
- To end the current playing technique with another open-ended playing technique, enter that playing technique followed by **->**. For example, enter **vibrato->**. This joins the current playing technique to the following one with a continuation line.
- To end the current playing technique without inputting another playing technique, enter **?** into the popover. This leaves the current playing technique with a duration line rather than a continuation line.

RESULT

The specified playing techniques are input. They are considered voice-specific by default, meaning they only apply to the voice indicated by the caret indicator during step input or the selected voice when adding playing techniques to existing notes. They are automatically placed above the staff for up-stem voices and below the staff for down-stem voices.

Adjoining playing techniques, or playing techniques that were input together or in sequence, are automatically grouped together, both during note input and when adding playing techniques to existing notes.

During note input, playing techniques are input at the caret position and extend automatically if you included an open-ended playing technique with duration.

When adding playing techniques to a single existing note, they are added to the selected note only and have no duration. When adding playing techniques to a range of notes, they are added to the first note in the selection and have duration, which applies until the end of the selection. For playing techniques whose continuation type is set to show lines, the appropriate continuation line is shown.

AFTER COMPLETING THIS TASK

- You can move playing techniques within playing technique groups, lengthen/shorten playing techniques, and hide/show playing technique continuation lines.
- You can enable independent voice playback for individual instruments to hear different playing techniques in different voices simultaneously.

RELATED LINKS

Moving playing techniques rhythmically on page 710
Groups of playing techniques on page 716
Playing technique continuation lines on page 713
Hiding/Showing playing technique duration lines on page 715
Extending the caret to multiple staves on page 163
Enabling independent voice playback on page 413

## Inputting playing techniques with the panel

You can input playing techniques using the Playing Techniques panel, both during note input and by adding them to existing notes.

NOTE

- You cannot input playing techniques with duration in sequence, which automatically groups them, when using the panel. If you want to input playing techniques with duration in sequence, you can use the popover.
- These steps describe inputting with the default mouse input preference **Create item at selection**.

If you want to input the same playing technique in multiple places, change your mouse input preference to **Load pointer with item** so that you do not have to reselect the playing technique for each note.

PROCEDURE

1. In Write mode, do one of the following:
   - Start note input.
   - Select an item at the rhythmic position where you want to input a playing technique. If you want to input playing techniques with duration, select items that span that duration.
2. In the Notations toolbox, click **Playing Techniques** to show the Playing Techniques panel.

   
3. In the Playing Techniques panel, click the playing technique you want.

RESULT

The specified playing technique is input. It is considered voice-specific by default, meaning it only applies to the voice indicated by the caret indicator during step input or the selected voice when adding playing techniques to existing notes. It is automatically placed above the staff for up-stem voices and below the staff for down-stem voices.

During note input, playing techniques are input at the caret position, even if your preference is set to **Load pointer with item**.

When adding playing techniques to a single existing note, they are added to the selected note only and have no duration. When adding playing techniques to a range of notes, they are added to the first note in the selection and have duration, which applies until the end of the selection. For playing techniques whose continuation type is set to show lines, the appropriate continuation line is shown.

AFTER COMPLETING THIS TASK

- If you want to show transition lines between playing techniques, you can group them together.
- You can enable independent voice playback for individual instruments to hear different playing techniques in different voices simultaneously.

RELATED LINKS

Changing your mouse input settings on page 157
Grouping playing techniques together on page 716
Enabling independent voice playback on page 413

## Inputting pedal lines and retakes with the popover

You can input pedal lines using the playing techniques popover, both during note input and by adding them to existing music. Because the pedal line extends automatically as you input notes during note input, you can input retakes when you reach the appropriate rhythmic position.

PROCEDURE

1. In Write mode, do one of the following:
   - Start note input.
   - Select items that span the required duration of the pedal line.
2. Press **Shift-P** to open the playing techniques popover.
3. Enter the appropriate entry for the pedal line you want into the popover.

   For example, enter **ped** for a sustain pedal line.

4. Press **Return** to close the popover.
   The pedal line is input.
5. Optional: During note input, extend the pedal line by pressing **Space** to advance the caret.
   The pedal line also extends automatically as you continue inputting notes.
6. Optional: During note input, input retakes by opening the playing techniques popover again at the appropriate rhythmic position and entering **^** or **retake** into the popover.
7. Optional: During note input, stop the pedal line by opening the playing techniques popover again and enter the appropriate entry into the popover.
   For example, enter ***** to stop a sustain pedal line.
8. Press **Return** to close the popover.

RESULT

During note input, pedal lines start at the caret position, and end at the caret position.

When you add pedal lines to existing notes, pedal lines are added across the selected items.

RELATED LINKS

Sustain pedal retakes and pedal level changes on page 698
Inputting notes on page 164
Adding retakes to existing pedal lines with the popover on page 270
Positions of pedal lines on page 699

## Adding retakes to existing pedal lines with the popover

You can add retakes to existing sustain pedal lines using the playing techniques popover.

NOTE

You cannot add retakes to *sostenuto* or *una corda* pedal lines.

PREREQUISITE

You have input a sustain pedal line.

PROCEDURE

1. In Write mode, select an item at the rhythmic position where you want the retake to apply.
2. Press **Shift-P** to open the playing techniques popover.
3. Enter **^** or **retake** into the popover.
4. Press **Return** to close the popover.

RESULT

The retake is input at the selected rhythmic position.

RELATED LINKS

Sustain pedal retakes and pedal level changes on page 698
Playing techniques popover on page 263

## Inputting pedal lines and retakes with the panel

You can input pedal lines and retakes using the Playing Techniques panel.

NOTE

- When using the panel, you cannot input pedal lines or retakes during note input.

- These steps describe inputting with the default mouse input preference **Create item at selection**.

PROCEDURE

1. In Write mode, select the notes to which you want the pedal line to apply.
2. In the Notations toolbox, click **Playing Techniques** to show the Playing Techniques panel.

3. In the Playing Techniques panel, expand the **Keyboard** section.
4. Click the pedal line you want.

   Alternatively, with nothing selected, click the pedal line you want in the **Keyboard** section of the Playing Techniques panel, then click and drag in the score to create a pedal line and extend it to the duration you want.
5. Optional: Select an item at the rhythmic position where you want to input a retake.
6. Optional: In the Playing Techniques panel, click **Retake Pedal** in the **Keyboard** section.

RESULT

The pedal line is input across the selected range.

RELATED LINKS

Sustain pedal retakes and pedal level changes on page 698
Adding retakes to existing pedal lines with the panel on page 271
Mouse input settings on page 156

## Adding retakes to existing pedal lines with the panel

You can add retakes to existing sustain pedal lines using the Playing Techniques panel.

NOTE

You cannot add retakes to *sostenuto* or *una corda* pedal lines.

PREREQUISITE

You have input a sustain pedal line.

PROCEDURE

1. In Write mode, select an item at the rhythmic position where you want the retake to apply.
2. Input the retake in one of the following ways:
   - Click **Retake Pedal** in the **Keyboard** section of the Playing Techniques panel.
   - Choose **Edit** > **Pedal Lines** > **Add Retake**. You can also choose this option from the context menu.

RESULT

The retake is input at the selected rhythmic position.

TIP

Alternatively, if nothing is selected in the score, you can click **Retake Pedal** in the **Keyboard** section of the Playing Techniques panel, and then click at the rhythmic position where you want to input the retake.

RELATED LINKS
Sustain pedal retakes and pedal level changes on page 698
Input methods for playing techniques, pedal lines, string indicators, and harp pedal diagrams on page 263

## Inputting harp pedal diagrams

You can input harp pedal diagrams using the playing techniques popover, both during note input and by adding them to existing music.

If you do not input any harp pedaling, Dorico Elements assumes all harp pedals are in their natural setting, as they would be for C major. Any pitches that do not fit with the current harp pedaling appear red when colors for notes out of range are shown.

PROCEDURE

1. In Write mode, do one of the following:
   - Start note input on a harp staff.
   - Select an item on a harp staff at the rhythmic position where you want to input a harp pedal diagram.
2. Press **Shift-P** to open the playing techniques popover.
3. Enter the appropriate entry for the harp pedals you want.
   For example, enter **C#F#G#** for C♯, F♯, and G♯ pedals, such as in A major.
4. Press **Return** to close the popover.

RESULT

The corresponding harp pedal diagram is input at the selected rhythmic position. Depending on your per-layout settings, it is either displayed as a diagram, using note names, or not shown and instead indicated by a signpost.

During note input, harp pedal diagrams are input at the caret position.

RELATED LINKS
Harp pedaling on page 690
Hiding/Showing harp pedaling in layouts on page 692
Changing the appearance of harp pedal diagrams on page 691
Hiding/Showing colors for notes out range on page 639

## Calculating harp pedal diagrams based on existing music

You can automatically calculate suitable harp pedal diagrams based on the notes you have already input, either from a single point onwards or within a selected region.

If you do not input any harp pedaling, Dorico Elements assumes all harp pedals are in their natural setting, as they would be for C major. Any pitches that do not fit with the current harp pedaling appear red by default.

PROCEDURE

1. In Write mode, select the region you want to use to calculate harp pedaling in one of the following ways:
   - Select an existing single note from which you want to calculate harp pedaling.
   - Select a range of notes for which you want to calculate harp pedaling.
2. Choose **Write** > **Calculate Harp Pedals**.

RESULT

A harp pedal diagram is input at the start of your selection. Depending on your per-layout settings, it is either displayed as a diagram, using note names, or not shown and instead indicated by a signpost.

## Inputting string indicators outside the staff with the popover

You can input string indicators outside the staff using the playing techniques popover, both during note input and by adding them to existing notes.

PROCEDURE

1. In Write mode, do one of the following:
   - Start note input.
   - Select an item at the rhythmic position where you want to input a string indicator above the staff. If you want to input a string indicator with a duration line, select items that span that duration.
2. Optional: If you want to input string indicators onto multiple staves at once, extend the caret to those staves.
3. Press **Shift-P** to open the playing techniques popover.
4. Enter the appropriate entry for the string indicator you want into the popover.
   For example, enter **string1** for just a string 1 indicator or **string3->** for a string 3 indicator with duration.
5. Press **Return** to close the popover.
   Open-ended string indicators, such as **string3->**, automatically extend during note input as you continue inputting notes, or if you advance the caret by pressing **Space**.
6. Optional: During note input, stop open-ended string indicators by opening the playing techniques popover again and entering **?** into the popover.
   This leaves the current string indicator with a duration line. You can also enter another string indicator into the popover, but this joins the current string indicator to the following one with a continuation line rather than a duration line, which is a less common notation.

RESULT

The specified string indicators are input. They are considered voice-specific by default, meaning they only apply to the voice indicated by the caret indicator during step input or the selected voice when adding string indicators to existing notes. They are automatically placed above the staff for up-stem voices and below the staff for down-stem voices.

During note input, string indicators are input at the caret position, and extend automatically if you included an open-ended string indicator with duration.

When adding string indicators to a single existing note, they are added to the selected note only and have no duration. When adding string indicators to a range of notes, they are added to the first note in the selection and have duration, which applies until the end of the selection.

By default, string indicators have dashed duration lines with a hook cap at the end.

AFTER COMPLETING THIS TASK

- If you input string indicators without duration but want to show dashed duration lines, you can add them.
- You can change the staff-relative placement of string indicators.

RELATED LINKS

Playing techniques popover on page 263
String indicators on page 590
Lengthening/Shortening string indicators on page 591

Extending the caret to multiple staves on page 163
Changing the staff-relative placement of items on page 310

## Inputting string indicators outside the staff with the panel

You can input string indicators outside the staff using the Playing Techniques panel, both during note input and by adding them to existing notes.

NOTE

- You cannot input string indicators with duration during note input when using the panel. You can only do so when using the popover.
- These steps describe inputting with the default mouse input preference **Create item at selection**.

  If you want to input the same string indicator in multiple places, change your mouse input preference to **Load pointer with item** so that you do not have to reselect the string indicator for each note.

PROCEDURE

1. In Write mode, do one of the following:
   - Start note input.
   - Select an item at the rhythmic position where you want to input a string indicator above the staff. If you want to input a string indicator with a duration line, select items that span that duration.
2. In the Notations toolbox, click **Playing Techniques** to show the Playing Techniques panel.

   
3. In the Playing Techniques panel, expand the **Guitar** section.
4. Click the string indicator you want.

RESULT

The specified string indicator is input. It is considered voice-specific by default, meaning it only applies to the voice indicated by the caret indicator during step input or the selected voice when adding string indicators to existing notes. It is automatically placed above the staff for up-stem voices and below the staff for down-stem voices.

During note input, string indicators are input at the caret position, even if your preference is set to **Load pointer with item**.

When adding string indicators to a single existing note, they are added to the selected note only and have no duration. When adding string indicators to a range of notes, they are added to the first note in the selection and have duration, which applies until the end of the selection.

By default, string indicators have dashed duration lines with a hook cap at the end.

AFTER COMPLETING THIS TASK

- If you input string indicators without duration but want to show dashed duration lines, you can add them.
- You can change the staff-relative placement of string indicators.

RELATED LINKS

Playing Techniques panel on page 266

## Inputting string indicators inside the staff

You can show a string indicator inside the staff for each fretted instrument note. Dorico Elements automatically detects a string that each pitch could be played on, but you can also specify the string manually.

NOTE

- These steps only apply to notes belonging to fretted instruments.
- This only shows string indicators inside the staff in the current layout, but you can copy property settings to other layouts.

PROCEDURE

1. Select the notes belonging to fretted instruments beside which you want to show string indicators.
2. In the Properties panel, activate **Show** in the **String Indicators** group.

RESULT

String indicators are shown in the staff beside each selected note. Unless you have specified a string for each note, the string number shown in the string indicators is calculated automatically. String indicators inside the staff for open strings appear as a bold number zero without a circle enclosure.

By default, string indicators appear on the left of noteheads without left-hand fingerings and on the right of noteheads with left-hand fingerings.

AFTER COMPLETING THIS TASK

- You can specify the string on which notes are played, which affects the number shown in their corresponding string indicators.
- You can change the notehead-relative position of string indicators.
- You can copy property settings for the selected notes to show string indicators in all applicable layouts.

RELATED LINKS

String indicators on page 590
Fingerings for fretted instruments on page 582
Fretted instrument tuning on page 111
Specifying the string for individual notes on page 638
Changing the notehead-relative position of string indicators on page 594
Copying property settings to other layouts on page 353

# Input methods for lines

You can input both horizontal and vertical lines by using the Lines panel. There is no popover for lines.

TIP

If you want lines to represent specific notations that affect playback if applicable, you can instead input these notations directly. For example, dynamics, arpeggios, glissandi, and trills all have dedicated features in Dorico Elements.

RELATED LINKS

Lines on page 719

Input methods for dynamics on page 229
Input methods for ornaments, arpeggio signs, glissando lines, guitar bends, and jazz articulations on page 251
Input methods for playing techniques, pedal lines, string indicators, and harp pedal diagrams on page 263
Input methods for clefs and octave lines on page 241
Input methods for tempo marks on page 216
Input methods for repeats and tremolos on page 286

## Lines panel

The Lines panel contains the different types of lines available in Dorico Elements. It is located on the right of the window in Write mode.

- You can hide/show the Lines panel by clicking **Lines** in the Notations toolbox on the right of the window in Write mode.

  You can also hide/show the panel whose icon is currently selected in the Notations toolbox by pressing **Ctrl/Cmd-9** or clicking the disclosure arrow on the right of the window.

The Lines panel contains the following sections:

**Horizontal**

Contains the different horizontal lines available. The options at the top of the section allow you to determine the attachment type for the start and end of horizontal lines you subsequently input. Horizontal lines can be attached to noteheads, barlines, or rhythmic positions, and the start and end can have different attachment types.


**Vertical**

Contains the different vertical lines available.

RELATED LINKS
Lines on page 719
Line components on page 721

## Inputting horizontal lines

You can input horizontal lines between existing notes or spanning a specified duration using the Lines panel. Horizontal lines can be attached to noteheads, barlines, or rhythmic positions, and can have different attachment types at their start and end.

You can also input barline-/rhythmic position-attached lines that apply to all staves.

NOTE

- You cannot change the attachment type of horizontal lines after they have been input.
- If you want to input notehead-attached horizontal lines to represent glissandi, you can instead input glissando lines directly.
- These steps describe inputting with the default mouse input preference **Create item at selection**.

PROCEDURE

1. In Write mode, select one of the following:
   - If you want to input notehead-attached lines, select the notes you want to join with a line.

     TIP

     The notes can be in different voices, on different staves, and belong to any instruments held by the same player.
   - If you want to input barline-/rhythmic position-attached lines, select items that span the required duration of the line.
   - If you want to input horizontal lines that are attached to noteheads at one end but are attached to barlines/rhythmic positions at the other end, select the required note and any item at the required rhythmic position of the other end.
2. In the Notations toolbox, click **Lines** to show the Lines panel.

   
3. In the **Horizontal** section, choose one of the following options for both **Start** and **End**:
   - **Attach to notehead**

     
   - **Attach to barline (where available)**

     
   - **Attach to rhythmic position**

     
4. Input a line with the specified attachments in one of the following ways:
   - To input a notehead-attached line or barline-/rhythmic position-attached line on the selected staff only, click it in the **Horizontal** section.
   - To input a barline-/rhythmic position-attached line that applies to all staves, **Alt**-click it in the **Horizontal** section.

RESULT

A horizontal line with the specified attachments is input. They are positioned according to their attachment types and their rhythmic positions.

Horizontal lines that apply to all staves are categorized as system objects. Therefore, they follow your per-layout settings for the visibility and positioning of system objects.

AFTER COMPLETING THIS TASK

- You can change the placement and staff position of barline-/rhythmic position-attached lines.
- You can add text to lines.

RELATED LINKS

Lines on page 719
Positions of lines on page 722
Length of lines on page 726
System objects on page 805
Changing the positions of system objects on page 805
Adding text to lines on page 730
Changing the placement of horizontal lines on page 724

Mouse input settings on page 156
Inputting glissando lines with the popover on page 257

## Inputting vertical lines

You can input vertical lines on existing notes using the Lines panel, including across notes in multiple voices and on different staves that belong to the same instrument, such as piano or harp.

NOTE

- If you want to input vertical lines to represent arpeggios, you can instead input arpeggio signs directly.
- You can only input one vertical line at a time.
- These steps describe inputting with the default mouse input preference **Create item at selection**.

  You cannot create cross-staff and cross-voice vertical lines if your preference is set to **Load pointer with item**.

PROCEDURE

1. In Write mode, select at least one note at the same rhythmic position in each voice to which you want to add a vertical line.

   NOTE

   - For instruments with multiple staves, such as piano and harp, you can select existing notes on multiple staves to create cross-staff vertical lines. However, you cannot create cross-staff vertical lines between different instruments, even if they are held by the same player.
   - Vertical lines are added to all notes in the selected voices at the selected rhythmic position.

2. In the Notations toolbox, click **Lines** to show the Lines panel.

3. Click the line you want in the **Vertical** section.

RESULT

The vertical line specified is input to the left of the selected notes. Its length is adjusted automatically so that it spans the range of all notes in the selected voices/staves at that rhythmic position.

AFTER COMPLETING THIS TASK

- You can change the order of lines when multiple exist at the same rhythmic position and show vertical lines on the right of notes.
- You can add text to lines.

RELATED LINKS

Lines on page 719
Length of lines on page 726
Adding text to lines on page 730
Showing vertical lines on the right/left of notes on page 722
Changing the horizontal order of vertical lines on page 723
Inputting arpeggio signs with the popover on page 256

# Inputting lyrics

You can input lyrics by entering text into the lyrics popover, and you can advance the lyrics popover to the next note on the staff without closing and reopening it for every note.

PROCEDURE

1. In Write mode, select the first note to which you want to input lyrics.
2. Press **Shift-L** to open the lyrics popover.
   By default, the lyrics popover opens with lyric line input selected.
3. Optional: Change the type of lyric in one of the following ways:
   - To change the lyric line number, press **Down Arrow**.
   - To input lyrics above the staff, press **Shift**-**Up Arrow**.
   - To input chorus lines, press **Up Arrow**.
   - To input lyric line translations, press **Alt/Opt**-**Down Arrow**.
4. Enter the word or syllable you want to add to the selected note into the popover.
   - To enter multiple words on a single note, press **Shift-Alt/Opt-Space**.
   - To include a hyphen within a single word or syllable, press **Alt/Opt--** (hyphen).
   - To include an elision in a lyric, press **_** (underscore).
5. Advance the popover to the next note in one of the following ways:
   - If you entered a complete word, or the final syllable in a multi-syllabic word, press **Space**.
   - If you entered one syllable of a multi-syllabic word that is not the final syllable, press **-** (hyphen).
   - If you do not want the syllable to be followed by an extension line or hyphen, press **Right Arrow**.
6. Continue entering words and syllables into the popover for the rest of the notes to which you want to add lyrics.
7. Press **Return** or **Esc** to close the popover.
   The popover closes automatically when you reach the last note on the staff.

RESULT

The text you entered into the popover is input as lyrics of the type indicated by the icon on the left-hand side of the popover.

If you advanced the popover to the next note by pressing **-**, a hyphen appears after the last entered lyric. This is used for multi-syllabic words across multiple notes.

If you advance the popover by pressing **Space**, a gap appears after the last entered lyric. This is used for single-syllable words or for the final syllable in multi-syllabic words.

NOTE

You can later change whether a gap or a hyphen appears between lyrics by changing their syllable type.

RELATED LINKS

Lyrics on page 615
Navigation during lyric input on page 281
Types of lyrics on page 617
Types of syllables in lyrics on page 618
Lyric line numbers on page 626

Lyric hyphens and lyric extender lines on page 626

## Lyrics popover

You can input lyrics, including chorus lines and lyric line translations, using the lyrics popover. You can use key commands to change the type of lyric being input at any time.

You can open the lyrics popover in Write mode in any of the following ways when either an item is selected or the caret is active:

- Press **Shift-L**.
- Select an existing lyric and press **Return**.
- Choose **Write** > **Create Lyrics**.
- Click **Lyrics** in the Notations toolbox.

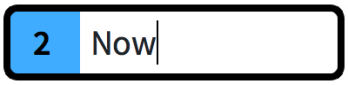

### Lyric lines

The popover automatically opens ready to input lyrics into Line 1, except if you are changing an existing lyric.

The number shown on the left-hand side of the lyrics popover indicates the lyric line into which the lyric is input.


The lyrics popover with an example entry for Line 1

You can change the lyric line number by pressing **Down Arrow** when the lyrics popover is open.




The lyrics popover with an example entry for Line 2

### Lyric lines above the staff

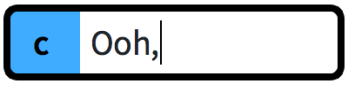
You can input lyrics into lines above the staff by pressing **Shift**-**Up Arrow** when the lyrics popover is open.

You can then press **Up Arrow** and **Down Arrow** to change the lyric line number above the staff.

### Chorus lines

You can input chorus lines by pressing **Up Arrow** when the lyrics popover is open. You can do this when inputting lyrics below the staff and above the staff.

A **c**, for “chorus lines”, is shown on the left-hand side of the popover.




The lyrics popover with an example entry for a chorus line

### Lyric line translations

You can input lyric line translations by pressing **Alt/Opt**-**Down Arrow** when the lyrics popover is open.

An asterisk (*****) is shown beside the lyric line number to which you want to add a lyric line translation on the left-hand side of the popover.


The lyrics popover with an example entry for a lyric line translation

RELATED LINKS
Inputting lyrics on page 279
Lyrics on page 615
Types of lyrics on page 617

## Navigation during lyric input

You can move the lyrics popover to input new lyrics and edit existing lyrics without having to close and reopen the lyrics popover.

| Popover navigation | Key command |
|---|---|
| Finish the current word and advance the popover to the next note or chord. | **Space** |
| Finish the current syllable and advance the popover to the next note or chord. | **-** (hyphen) |
| Advance the popover to the next note without showing an extension line or hyphen. | **Right Arrow** |
| Move the cursor to the next/previous letter. If the next/previous letter is in another lyric, the popover advances to that lyric. | **Right Arrow** / **Left Arrow** |
| Move the popover forwards/backwards from syllable to syllable within lines of lyrics. | **Alt/Opt-Right Arrow** / **Alt/Opt-Left Arrow** |
| Add spaces within a word or syllable without advancing the popover. | **Shift-Alt/Opt-Space** |
| Add a hyphen within a single word or syllable without advancing the popover. | **Alt/Opt--** (hyphen) |
| Add an elision slur within a word or syllable. | **_** (underscore) |

RELATED LINKS
Lyrics on page 615
Inputting lyrics on page 279

# Inputting rehearsal marks

You can input rehearsal marks with the mouse and the keyboard. You can input rehearsal marks during note input and later by adding them to existing music.

NOTE

These steps describe inputting with the default mouse input preference **Create item at selection**.

PROCEDURE

1. In Write mode, do one of the following:
   - Start note input.
   - Select an item at the rhythmic position where you want to input a rehearsal mark. For example, a barline or a note.

     NOTE

     You can only input one rehearsal mark at a time, even if multiple items are selected.
2. Press **Shift-A**.
   Alternatively, you can click **Rehearsal Marks** in the Notations toolbox.

RESULT

A rehearsal mark is input at the selected barline, or at the rhythmic position of the start of a note, a rest, or an object.

The order of rehearsal marks is updated automatically, meaning you can input them in any order, including before and between existing rehearsal marks.

RELATED LINKS

Rehearsal marks on page 733
Mouse input settings on page 156

# Inputting markers/timecodes

You can input markers at specific positions in time. In Dorico Elements, timecodes are automatically shown alongside markers.

PROCEDURE

1. In Write mode, move the playhead to the time position where you want to input a marker.
2. Press **Shift-Alt/Opt-M**.

RESULT

A marker is input at the position of the playhead. It shows the default text “Marker” and includes a timecode reflecting that position.

TIP

You can also input markers by clicking **Add Marker** in the Markers section of the Video panel. This method allows you to enter a timecode directly into the **Add Marker** dialog, rather than input a marker at the playhead position, so it can be useful if, for example, you already know the timecodes for each marker.

Additionally, you can input markers in the **Markers** track in Play mode.

AFTER COMPLETING THIS TASK

You can edit the text shown in the marker.

RELATED LINKS

Markers on page 738
Timecodes on page 743
Moving the playhead on page 410
Editing marker text on page 740
Markers track on page 407
Inputting markers in the Markers track on page 407

## Markers section of the Video panel

In the **Markers** section of the Video panel in Write mode, you can input and edit markers and timecodes, and also define markers as important.

- You can hide/show the Video panel by clicking **Video** in the Notations toolbox.

The **Markers** section of the Video panel contains a table of markers, divided into the following columns:

**Timecode**

Shows the timecode of the marker. You can edit the timecode by double-clicking in the field.

**Text**

Shows the text of the marker. You can edit the text by double-clicking in the field.

**Imp.**

Stands for “important”, allows you to define markers as important by activating their checkbox in this column.

When markers are defined as important, their entry uses a bold font in the table and they are considered when finding a suitable tempo in the **Find Tempo** dialog.

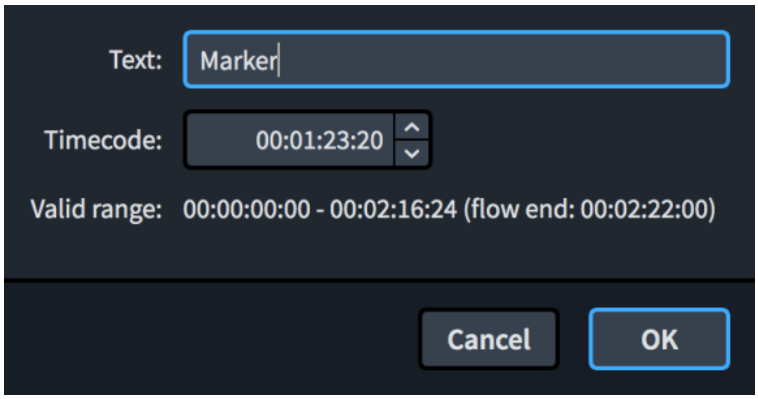
RELATED LINKS

Markers on page 738
Timecodes on page 743

## Add Marker dialog

The **Add Marker** dialog allows you to input markers with custom text at specific timecodes.

- You can open the **Add Marker** dialog in Write mode by clicking **Add Marker** in the **Markers** section of the Video panel.




**Add Marker** dialog

The **Add Marker** dialog contains the following options:

**Text**

Allows you to enter custom text that is shown in the marker.

**Timecode**

Allows you to specify the timecode at which you want to input the marker.

**Valid range**

Displays the timecode range of the flow.

RELATED LINKS
Markers on page 738
Timecodes on page 743
Inputting markers/timecodes on page 282
Markers section of the Video panel on page 283

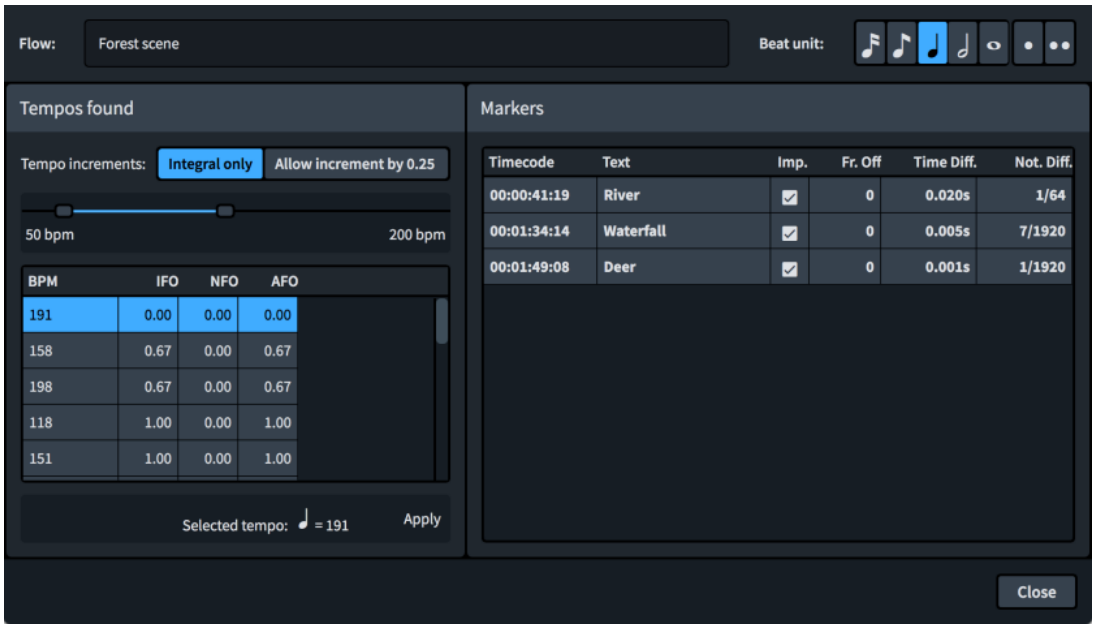
## Find Tempo dialog

The **Find Tempo** dialog allows you to calculate tempos that best accommodate your important markers, for example, by identifying which tempos cause markers to coincide as closely as possible with strong beats.

- You can open the **Find Tempo** dialog in Write mode by clicking **Find Tempo** in the **Markers** section of the Video panel.

NOTE

- The **Find Tempo** dialog only considers markers in a single flow. You can change which flow by selecting an item in the flow whose tempo you want to determine and then opening the dialog.
- The **Find Tempo** dialog is only available if you have input at least one marker in the flow whose tempo you want to determine and defined at least one marker as important.




**Find Tempo** dialog

The **Find Tempo** dialog contains the following options and sections:

**Flow**

Shows the name of the flow whose tempo you are determining. This field is read-only.

**Beat unit**

Allows you to change the beat unit considered for the tempo. For example, if the time signature for the flow is 6/8, you might want to change the beat unit to a dotted quarter note.

**Tempo range**

Allows you to set the minimum/maximum tempos you want to consider.

**Tempo increments**

Allows you to filter the suggested tempos according to their precision.

- **Integral only**: Only whole number tempos, that is, tempos without decimal places, are suggested.
- **Allow increment by 0.25**: Allows tempos with decimal places of .25, .5, and .75 to be suggested.

**Tempos found**

Contains a list of possible tempos that you can select to see how they affect the position of your markers relative to beats. The list is updated automatically when you change options such as **Tempo range** and **Beat unit**.

The list contains columns for the following information:

- **BPM**: Stands for “beats per minute”. Lists different possible tempos according to their metronome mark value.
- **IFO**: Stands for “important frames off”. Indicates the average number of frames by which important markers miss significant beats, either before or after.
- **NFO**: Stands for “non-important frames off”. Indicates the average number of frames by which non-important markers miss significant beats, either before or after.
- **AFO**: Stands for “all frames off”. Indicates the average number of frames by which all markers in the flow miss significant beats, either before or after.

Found tempos are listed in descending order of average frames off for important markers.

**Markers**

Shows the impact that the tempo currently selected in the **Tempos found** list would have on each marker in the flow in more detail.

- **Timecode**: Shows the exact timecode of each marker.
- **Text**: Shows the marker text of each marker to help you identify them.
- **Imp.**: Indicates whether a marker has been defined as important.
- **Fr. Off**: Stands for “frames off”. Shows the average number of frames by which each marker misses being aligned to beats.
- **Time Diff.**: Stands for “time difference”. Shows the time difference between the position of the marker and the position of the nearest beat, expressed in fractions of a second.
- **Not. Diff.**: Stands for “notated difference”. Shows the notated difference between the position of the marker and the position of the nearest beat, expressed in fractions of a whole note.

**Selected tempo**

Displays the currently selected tempo for the flow.

**Apply**

Applies the selected tempo to the flow by inputting it as a tempo mark at the beginning of the flow. Any other tempo marks in the flow are automatically deleted.

RELATED LINKS
Defining markers as important on page 741
Metronome marks on page 825

# Input methods for repeats and tremolos

You can input repeats and tremolos, including repeat endings, repeat markers, and rhythm slashes, with the keyboard by using the repeats popover, and with the mouse by using the Repeat Structures panel.

Tremolos are included in the Repeat Structures panel because they indicate that notes are repeated, either individually as single-note tremolos or in sequences as multi-note tremolos.

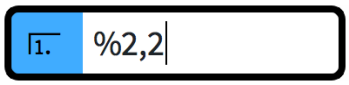
## Repeats popover

The following tables contain the entries for the repeats popover that you can use to input the different tremolos, bar repeats, rhythm slash regions, repeat markers, and repeat endings available.

You can open the repeats popover in Write mode in any of the following ways when either an item is selected or the caret is active:

- Press **Shift-R**.
- Select an existing repeat marker, slash region, or bar repeat and press **Return**.
- Choose **Write** > **Create Repeat**.

The icon on the left-hand side of the popover matches the corresponding button in the Notations toolbox on the right of the window.




Repeats popover with an example entry


**Repeat Structures** button in the Notations toolbox

**Repeat endings**

| Part of repeat ending | Popover entry |
|---|---|
| Whole repeat ending | **end** or **ending** |
| Additional repeat ending segment | **add** |

**Repeat markers**

| Type of repeat marker | Popover entry |
|---|---|
| D.C. | **dc**, **D.C.**, **da capo**, and so on |
| D.C. al Fine | **dcalf**, **DC al Fine**, **D.C. al Fine**, and so on |
| D.C. al Coda | **dcalc**, **DC al Coda**, **D.C. al Coda**, and so on |
| D.S. | **ds**, **D.S.**, **dal segno**, and so on |
| D.S. al Fine | **dsalf**, **DS al Fine**, **D.S. al Fine**, and so on |
| D.S. al Coda | **dsalc**, **DS al Coda**, **D.S. al Coda**, and so on |
| to Coda | **toc**, **tc**, **to coda**, **To Coda**, and so on |
| Segno | **s**, **seg**, **segno**, and so on |
| Fine | **f**, **fin**, **fine**, and so on |
| Coda | **c**, **co**, **coda**, and so on |

The list of entries for repeat markers is not comprehensive, as the flexibility of the popover means you can enter any reasonable version or abbreviation of the type of repeat marker you want and the popover recognizes it in most cases.

**Single-note tremolos**

| Type of tremolo | Popover entry |
|---|---|
| One stroke | **/**, ****, or **1** |
| Two strokes | **//**, ****, or **2** |
| Three strokes | **///**, ****, or **3** |

| Type of tremolo | Popover entry |
|---|---|
| Four strokes | **////**, ****, or **4** |
| Z on stem (buzz roll) | **z** or **zonstem** |
| Remove all tremolos | **0** or **clear** |

**Multi-note tremolos**

| Type of tremolo | Popover entry |
|---|---|
| One stroke | **/2**, **\2**, or **12** |
| Two strokes | **//2**, **\\2**, or **22** |
| Three strokes | **///2**, **\\\2**, or **32** |
| Four strokes | **////2**, **\\\\2**, or **42** |
| Z on stem (buzz roll) | **z** or **zonstem** |
| Remove all tremolos | **0** or **clear** |

**Slash regions**

| Slash region | Popover entry |
|---|---|
| New slash region | **slash** |

**Bar repeats**

| Type of bar repeat | Popover entry |
|---|---|
| Repeat last bar | **%** or **%1** |
| Repeat last 2 bars | **%2** |
| Repeat last 4 bars | **%4** |
| Repeat last bar, group in 2 | **%1,2** |
| Repeat last bar, group in 4 | **%1,4** |
| Repeat last 2 bars, group in 2 | **%2,2** |
| Repeat last 4 bars, group in 4 | **%4,4** |

RELATED LINKS
Inputting repeat markers with the popover on page 293

Inputting tremolos with the popover on page 294
Inputting slash regions on page 297
Inputting bar repeats on page 297
Repeat endings on page 747
Tremolos on page 854
Rhythm slashes on page 763
Bar repeats on page 756

## Repeat Structures panel

The Repeat Structures panel contains the different types of repeat notations, including repeat endings, repeat markers, tremolos, rhythm slashes, and bar repeats.

Tremolos are included in the Repeat Structures panel because they indicate that notes are repeated, either individually as single-note tremolos or in sequences as multi-note tremolos.

- You can hide/show the Repeat Structures panel by clicking **Repeat Structures** in the Notations toolbox on the right of the window in Write mode.

  You can also hide/show the panel whose icon is currently selected in the Notations toolbox by pressing **Ctrl/Cmd-9** or clicking the disclosure arrow on the right of the window.

The Repeat Structures panel contains the following sections:

**Repeat Endings**
Contains options that allow you to input new repeat endings and add additional endings to existing repeat endings.

**Repeat Jumps**
Contains different types of repeat markers that instruct players to jump to a specific point in the piece, such as “D.S. al Coda”.

**Repeat Sections**
Contains different sections used in conjunction with repeat jumps, such as “Coda”.

**Tremolos**
Contains different types of single-note and multi-note tremolos.

**Rhythm Slashes**
Allows you to input a region that displays rhythm slashes that are automatically formatted to be compatible with the prevailing time signature.

**Bar Repeats**
Allows you to input a region that indicates a set number of bars is repeated without re-notating those bars.

## Inputting repeat endings with the popover

You can input repeat endings using the repeats popover, both during note input and by adding them to existing music.

PROCEDURE

1. In Write mode, do one of the following:
   - Start note input.

TIP

During note input, you can select additional notes before/after the last input note without deactivating the caret by pressing **Shift-Right Arrow**/**Shift-Left Arrow**.

- Select at least one item in each bar that you want to include in the first ending.

2. Press **Shift-R** to open the repeats popover.
3. Enter **end** or **ending** into the popover.
4. Press **Return** to close the popover.

RESULT

The repeat ending is input, with the first ending segment covering the bars in which you selected items, and a second ending segment created automatically in the following bar.

An end repeat barline is created at the end of the first ending if none exists already.

RELATED LINKS

Repeats popover on page 286
Repeat endings on page 747

## Adding additional repeat endings with the popover

You can have more than two possible endings in each repeat ending structure by adding additional segments using the repeats popover. You can add repeat ending segments both during note input and by adding them to existing music.

PROCEDURE

1. In Write mode, do one of the following:
   - Start note input.

     TIP

     During note input, you can select additional notes before/after the last input note without deactivating the caret by pressing **Shift-Right Arrow**/**Shift-Left Arrow**.

   - Select the bars that you want to include in the additional ending.

     NOTE

     Your selection must start from the first bar following the previous repeat ending segment.

2. Press **Shift-R** to open the repeats popover.
3. Enter **add** into the popover.
4. Press **Return** to close the popover.
5. Optional: Repeat these steps as many times as required for the number of additional endings you want.

RESULT

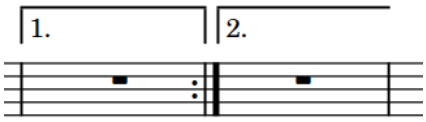
A new repeat ending segment is added. The existing previous repeat ending segment now ends with a closed line, with an end repeat barline created if necessary.

TIP

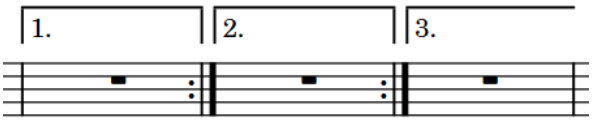
You can also add additional repeat ending segments by selecting the repeat ending and changing the value for **No. endings** in the **Repeat Endings** group of the Properties panel.

However, **No. endings** only adds additional repeat ending segments that contain one bar, and does not automatically input or reposition repeat barlines. You must input repeat barlines as appropriate manually.

EXAMPLE




Default repeat ending structure with two endings




Repeat ending structure with additional third ending

RELATED LINKS
Repeat endings on page 747
Repeats popover on page 286

## Inputting repeat endings with the panel

You can input repeat endings using the Repeat Structures panel, both during note input and by adding them to existing music.

PROCEDURE

1. In Write mode, do one of the following:
   - Start note input.

     TIP

     During note input, you can select additional notes before/after the last input note without deactivating the caret by pressing **Shift-Right Arrow**/**Shift-Left Arrow**.

   - Select at least one item in each bar that you want to include in the first ending.
2. In the Notations toolbox, click **Repeat Structures** to show the Repeat Structures panel.

3. In the Repeat Structures panel, click **Create Repeat Ending** in the **Repeat Endings** section.

RESULT

The repeat ending is input, with the first ending segment covering the bars in which you selected items, and a second ending segment created automatically in the following bar.

An end repeat barline is created at the end of the first ending if none exists already.

RELATED LINKS
Repeat endings on page 747

## Adding additional repeat endings with the panel

You can have more than two possible endings in each repeat ending structure by adding additional segments using the Repeat Structures panel. You can add repeat ending segments both during note input and by adding them to existing music.

PROCEDURE

1. In Write mode, do one of the following:
   - Start note input.

     TIP

     During note input, you can select additional notes before/after the last input note without deactivating the caret by pressing **Shift-Right Arrow**/**Shift-Left Arrow**.

   - Select the bars that you want to include in the additional ending.

     NOTE

     Your selection must start from the first bar following the previous repeat ending segment.

2. In the Notations toolbox, click **Repeat Structures** to show the Repeat Structures panel.

3. In the Repeat Structures panel, click **Add Section To Repeat Ending** in the **Repeat Endings** section.

   NOTE

   If increasing the number of endings makes the repeat ending collide with any part of another repeat ending, the other repeat ending is deleted. However, its repeat barlines are not deleted.

4. Optional: Repeat these steps as many times as required for the number of additional endings you want.

RESULT

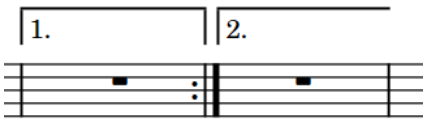
A new repeat ending segment is added. The existing previous repeat ending segment now ends with a closed line, with an end repeat barline created if necessary.

TIP

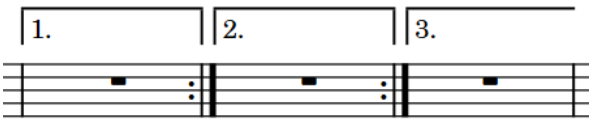
You can also add additional repeat ending segments by selecting the repeat ending and changing the value for **No. endings** in the **Repeat Endings** group of the Properties panel.

However, **No. endings** only adds additional repeat ending segments that contain one bar, and does not automatically input or reposition repeat barlines. You must input repeat barlines as appropriate manually.

EXAMPLE




Default repeat ending structure with two endings




Repeat ending structure with additional third ending

RELATED LINKS

Repeat endings on page 747

## Inputting repeat markers with the popover

You can input repeat markers, including repeat jumps and repeat sections, using the repeats popover, both during note input and by adding them to existing music.

PROCEDURE

1. In Write mode, do one of the following:
   - Start note input.

     TIP

     During note input, you can select additional notes before/after the last input note without deactivating the caret by pressing **Shift-Right Arrow**/**Shift-Left Arrow**.

   - Select an item at the rhythmic position where you want to input a repeat marker.

     For repeat jumps, we recommend that you select the barline with which you want the end of the jump instruction to align. For repeat sections, we recommend that you select the barline with which you want the start of the section marker to align.
2. Press **Shift-R** to open the repeats popover.
3. Enter the appropriate entry for the type of repeat marker you want into the popover.

   For example, enter **coda** to input a coda section or enter **$** to input a segno.
4. Press **Return** to close the popover.

RESULT

During note input, repeat markers are input at the caret position. Coda sections are automatically formatted so that there is a gap between the coda and the preceding material.

When adding repeat markers to existing music, repeat markers are input at the rhythmic position of the earliest selected item.

Repeat markers that indicate the end of a section, such as Fine and D.C. al Coda, are right-aligned with the selected rhythmic position.

RELATED LINKS

Repeats popover on page 286
Repeat markers on page 751

## Inputting repeat markers with the panel

You can input repeat markers using the Repeat Structures panel, both during note input and by adding them to existing music.

PROCEDURE

1. In Write mode, do one of the following:
   - Start note input.

     TIP

     During note input, you can select additional notes before/after the last input note without deactivating the caret by pressing **Shift-Right Arrow**/**Shift-Left Arrow**.
   - Select an item at the rhythmic position where you want to input a repeat marker.

     For repeat jumps, we recommend that you select the barline with which you want the end of the jump instruction to align. For repeat sections, we recommend that you select the barline with which you want the start of the section marker to align.
2. In the Notations toolbox, click **Repeat Structures** to show the Repeat Structures panel.

   
3. In the Repeat Structures panel, click the repeat marker you want to input in any of the following sections:
   - **Repeat Jumps**
   - **Repeat Sections**

RESULT

During note input, repeat markers are input at the caret position. Coda sections are automatically formatted so that there is a gap between the coda and the preceding material.

When adding repeat markers to existing music, repeat markers are input at the rhythmic position of the earliest selected item.

Repeat markers that indicate the end of a section, such as Fine and D.C. al Coda, are right-aligned with the selected rhythmic position.

RELATED LINKS

Repeat markers on page 751

## Inputting tremolos with the popover

You can input both single-note and multi-note tremolos using the repeats popover, both during note input and by adding them to existing notes.

PROCEDURE

1. In Write mode, do one of the following:
   - Start note input.

     TIP

     During note input, you can select additional notes before/after the last input note without deactivating the caret by pressing **Shift-Right Arrow**/**Shift-Left Arrow**.
   - Select the notes to which you want to add tremolos.

NOTE

If you want to input multi-note tremolos, you must select at least two notes, which can also be tuplets.

2. Press **Shift-R** to open the repeats popover.
3. Enter the appropriate entry for the type of tremolo you want into the popover.
   For example, to input a three-stroke multi-note tremolo, enter **///2**.
4. Press **Return** to close the popover.
5. Optional: Repeat steps 2 to 3 to input other tremolos on the selected notes.
   For example, if you want notes to have both single-stem and multi-stem tremolos.

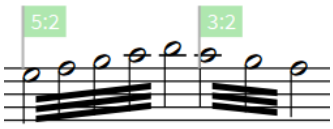
RESULT

Single-note tremolos are input on the selected notes with the number of tremolo strokes specified.

Multi-note tremolos with the number of tremolo strokes specified are input between selected individual notes and the notes immediately after them, or between selected pairs of notes.

When tuplets are selected, multi-note tremolos are input across the selected tuplets, with the tremolo strokes positioned in the center of all notes in the tuplet. The tuplet bracket is hidden, and a signpost is shown at the start of each tuplet indicating its ratio.

EXAMPLE




Multi-note tremolos with three tremolo strokes across tuplets

AFTER COMPLETING THIS TASK

You can enable independent voice playback for individual instruments, for example, if you have tremolos in one voice and slurs in another voice.

RELATED LINKS

Repeats popover on page 286
Tremolos on page 854
Enabling independent voice playback on page 413

## Inputting tremolos with the panel

You can input both single-note and multi-note tremolos using the Repeat Structures panel, both during note input and by adding them to existing notes.

Tremolos are included in the Repeat Structures panel because they indicate that notes are repeated, either individually as single-note tremolos or in sequences as multi-note tremolos.

PROCEDURE

1. In Write mode, do one of the following:
   - Start note input.

TIP

During note input, you can select additional notes before/after the last input note without deactivating the caret by pressing **Shift-Right Arrow** / **Shift-Left Arrow**.

- Select the notes to which you want to add tremolos.

NOTE

If you want to input multi-note tremolos, you must select at least two notes, which can also be tuplets.

2. In the Notations toolbox, click **Repeat Structures** to show the Repeat Structures panel.

3. In the Repeat Structures panel, click the button with the number of single-note or multi-note tremolo strokes you want in the **Tremolos** section.

   For example, click **Two Strokes Single-note Tremolo** to input single-note tremolos with two strokes or click **Three Strokes Multi-note Tremolo** to input multi-note tremolos with three strokes.

**Two Strokes Single-note Tremolo** button

**Three Strokes Multi-note Tremolo** button

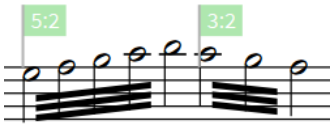
RESULT

Single-note tremolos are input on the selected notes with the number of tremolo strokes specified.

Multi-note tremolos with the number of tremolo strokes specified are input between selected individual notes and the notes immediately after them, or between selected pairs of notes.

When tuplets are selected, multi-note tremolos are input across the selected tuplets, with the tremolo strokes positioned in the center of all notes in the tuplet. The tuplet bracket is hidden, and a signpost is shown at the start of each tuplet indicating its ratio.

EXAMPLE




Multi-note tremolos with three tremolo strokes across tuplets

AFTER COMPLETING THIS TASK

You can enable independent voice playback for individual instruments, for example, if you have tremolos in one voice and slurs in another voice.

RELATED LINKS

Tremolos on page 854
Deleting tremolos on page 856
Enabling independent voice playback on page 413

## Inputting slash regions

You can input slash regions using the repeats popover.

PROCEDURE

1. In Write mode, do one of the following:
   - Start note input.
   - Select items that span the duration in which you want to show rhythm slashes.
2. Press **Shift-R** to open the repeats popover.
3. Enter **slash** into the popover.
4. Press **Return** to close the popover.

RESULT

During note input, slash regions are input spanning the duration of the selected note or item, which is usually the last input note. When adding slash regions to existing music, they span the selected duration.

Slash regions are automatically formatted as appropriate for the meter. If you later change the time signature, slash regions retain their duration but the appearance of slashes within them automatically updates.

TIP

You can also input slash regions by clicking **Create Slash Region** in the **Rhythm Slashes** group of the Repeat Structures panel.

RELATED LINKS

Repeats popover on page 286
Rhythm slashes on page 763
Slash regions on page 763
Slash voices on page 890

## Inputting bar repeats

You can input bar repeat regions when at least one bar before the region contains notes.

PROCEDURE

1. In Write mode, select the bars you want to show as a bar repeat.

   NOTE

   - You cannot input bar repeat regions in the first bar of a flow.
   - You can only input bar repeat regions on one staff at a time.

2. Press **Shift-R** to open the repeats popover.
3. Enter the appropriate entry for the type of bar repeat region you want into the popover.
   For example, enter **%2,2** to repeat the previous two bars, grouped in two.
4. Press **Return** to close the popover.

RESULT

A region of the selected duration is input, in which the specified type of bar repeat symbol is shown in the staff at the intervals specified.

NOTE

- You can also input bar repeat regions during note input; however, this inputs bar repeat regions from the bar containing the currently selected note. As bar repeats are mostly shown in empty bars, this is likely to produce unintended results.
- You can also input bar repeat regions by clicking **Create Bar Repeat Region** in the **Bar Repeats** group of the Repeat Structures panel. However, this only inputs a bar repeat region containing single-bar repeats.

AFTER COMPLETING THIS TASK

You can change how bar repeats are grouped.

RELATED LINKS

Repeats popover on page 286
Bar repeats on page 756
Bar repeat grouping on page 761
Changing bar repeat grouping on page 762

# Inputting text

You can input text at specific rhythmic positions in the score. You can input text for single staves or input system text that applies to all staves.

NOTE

If you want to insert text that is independent of rhythmic positions and attached to a particular page, you can use text frames.

PROCEDURE

1. In Write mode, do one of the following:
   - Start note input.
   - Select an item at the rhythmic position where you want to input text.
2. Open the text editor in any of the following ways:
   - To input staff text, press **Shift-X** or click **Text** in the Notations toolbox.

     
     
   - To input staff text with a specific paragraph style, choose **Write** > **Create Text** > **[Paragraph style]**.
   - To input system text, press **Shift-Alt/Opt-X**.
   - To input system text with a specific paragraph style, choose **Write** > **Create System Text** > **[Paragraph style]**.
3. Enter the text you want.
4. Optional: Press **Return** to insert a line break.
5. Optional: Use the text editor options to format the text.
6. Press **Esc** or **Ctrl/Cmd**-**Return** to close the text editor.

RESULT

During note input, the text you entered into the text editor is input at the caret position. It is automatically placed above the staves to which it applies, using the default paragraph style, and follows the default settings for the vertical position of text.

When adding text to existing music, it is input at the position of the earliest selected item.

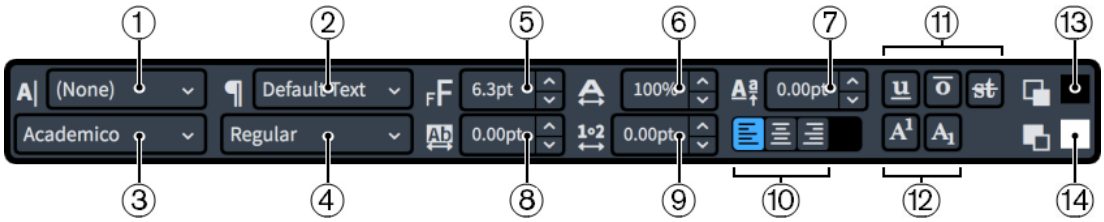
NOTE

- In Dorico Elements, system text is categorized as a system object. Therefore, system text follows your per-layout settings for the visibility and positioning of system objects.
- You can assign key commands for inputting text with specific paragraph styles, for both **Create Text** and **Create System Text**, on the **Key Commands** page in **Preferences**.

RELATED LINKS
Changing the staff-relative placement of items on page 310
System objects on page 805
Changing the positions of system objects on page 805

## Text editor options in Write mode

The text editor allows you to add and format text. In Write mode, it opens when you add or change staff text or system text.




Text editor in Write mode

The text editor provides the following options:

1 **Character Style**

Allows you to change the appearance of selected text within paragraphs. This overrides the paragraph style applied to the corresponding paragraph.

2 **Paragraph Style**

Allows you to change the paragraph style applied to the whole paragraph, which can change the appearance, formatting, and alignment of the text.

Staff text and system text are always treated as single paragraphs.

3 **Font**

Allows you to change the font family of selected text.

4 **Font Style**

Allows you to change the font style of selected text.

NOTE

- Depending on the font selected, some font styles might not be available.
- You can also change the font style using the following standard key commands:
  - **Ctrl/Cmd-B** for bold
  - **Ctrl/Cmd-I** for italic

5 **Font Size**

Allows you to change the size of selected text.

TIP

You can also change the font size using the following key commands:

- **Ctrl/Cmd-Shift-.** to increase the font size
- **Ctrl/Cmd-Shift-,** to decrease the font size

6 **Font Stretch**

Allows you to make selected text wider or narrower.

7 **Baseline Shift**

Allows you to shift the baseline of selected text gradually up or down.

8 **Letter Spacing**

Allows you to increase/decrease the space between the characters of selected text.

9 **Word Spacing**

Allows you to increase/decrease the space between the words of selected text.

10 **Alignment**

Allows you to choose the alignment of selected text relative to the rhythmic position of the text in the score. For text in a text frame, the text is aligned along the left margin of a text frame.

You can choose from the following alignments:

- **Align Left**
- **Align Center**
- **Align Right**

11 **Line Types**

Allows you to show any of the following types of lines, in any combination, on selected text:

- **Underline**

  TIP

  You can also make selected text underlined by pressing **Ctrl/Cmd-U**.

- **Overline**
- **Strikethrough**

12 **Script Types**

Allows you to position selected text in one of the following positions relative to the text on the baseline:

- **Superscript**
- **Subscript**

13 **Foreground Color**

Allows you to change the color of selected text.

14 **Background Color**

Allows you to change the background color of selected text.

RELATED LINKS

Missing Fonts dialog on page 69

## Editing text

You can edit text objects added to staves or text displayed in text frames at any time, including changing the text and changing its formatting.

PROCEDURE

1. Double-click the text you want to edit to open the text editor.

TIP

You can also select text/system text objects and press **Return**.

2. Optional: Change the text in the text frame/object.
3. Optional: Use the text editor options to format the text.
4. Press **Esc** or **Ctrl/Cmd**-**Return** to close the text editor.

RELATED LINKS
Text objects vs. text in text frames on page 354

# Editing and selecting

In Dorico Elements, there are multiple different ways you can select and edit the items in your project, from selecting items individually to making large selections covering multiple staves.

RELATED LINKS
Filters on page 307
Selection tools on page 49

## Selecting/Deselecting notes and items individually

You can select/deselect existing notes and other notation items individually in the music area, for example, if you want to add articulations to a selection of notes or delete a short passage of music.

TIP

If you want to select a large number of notes/items, we recommend that you use one of the larger selection methods.

PROCEDURE

1. Select individual notes/items in the music area in any of the following ways:
   - **Ctrl/Cmd**-click individual notes/items.
   - **Shift**-click adjacent notes/items.
   - Click a single note/item.

     TIP

     If the item you want to select is behind another item, **Shift**-**Alt/Opt**-click it.

   - Make a marquee selection around multiple notes/items.
2. Deselect all currently selected items in any of the following ways:
   - Press **Ctrl/Cmd-D**.
   - Click outside of the staves within the music area.

RELATED LINKS
Selecting multiple items using marquee selections on page 302
Playing/Muting notes during note input/selection on page 308
Filters on page 307

## Selecting more items of the same type

You can incrementally extend your current selection to more items of the same type and notes in the same voices, which is particularly helpful if you want to select multiple different items at once, such as dynamics and lyrics.

PROCEDURE

1. Select the notes and items you want to select more of.

   TIP

   You can select notes and items on multiple staves and in specific voices, for example, if you only want to select notes in up-stem voices on four staves.

2. Press **Ctrl/Cmd-Shift-A** to expand your selection.
3. Optional: Continue pressing **Ctrl/Cmd-Shift-A** to extend your selection further.

RESULT

More of the same types of items and notes in the same voices as your original selection are selected, with the range of selected items expanding each time you press the key command: firstly to the boundaries of the bar, secondly to the boundaries of the system, and finally to the rest of the flow. If there are no other items available in the bar, Dorico Elements automatically advances to the second expansion. In galley view, the second expansion is to the entire flow directly as there is only a single system in galley view.

For items that span multiple bars and systems, they are selected in the earliest bar/system in which they exist.

NOTE

Dorico Elements selects the following items differently if you select only a single one of them:

- Lyrics: The selection expands only to other lyrics with the same line number, placement, and line type as the originally selected lyric.
- Dynamics: The first expansion is to all other dynamics in the same group and on the same staves as the original selection, with further expansions selecting other dynamics in other groups.
- Playing techniques: The selection expands only to playing techniques of the same category, such as **Strings** or **Choral**. Additionally, if you select either an up bow or down bow playing technique, the selection expands only to other up bow and down bow playing techniques. It does not select any other playing techniques.

## Selecting multiple items using marquee selections

You can use a marquee selection to select multiple notes and notations at the same time within a specific area in Write mode and Play mode.

PROCEDURE

1. In the status bar, click **Marquee Tool**.

2. In the music area, click and drag across the area where you want to select everything.

   A gray rectangle is shown to indicate which notes and notations will be selected. We recommend that you click in one corner of the area you want to select and drag diagonally across to the other corner.

RESULT

All notes and notations in the area within the gray rectangle are selected.

NOTE

Only items completely within the area are selected. However, if any part of a note/tie chain is within the area, the whole note/tie chain is selected.

RELATED LINKS

Status bar on page 48
Selection tools on page 49

## Large selections

You can make large selections, including selecting the contents of whole staves or the whole flow.

**Select everything in a specific area**

You can use the **Marquee Tool** to specify an area in which you want to select everything.

**Select everything in the whole flow**

- Press **Ctrl/Cmd-A**.
- Choose **Edit** > **Select All**.

**Select everything on a single staff**

- Select the first note on the staff, hold down **Shift**, and select the last note on the staff.
- Select the first note on the staff and choose **Edit** > **Select To End Of System** or **Edit** > **Select To End Of Flow**.
- Make a marquee selection that includes the staff you want to select.

**Select everything on multiple adjacent staves**

- Select one whole staff at the top/bottom of the range of staves you want to select and press **Shift-Up Arrow** or **Shift-Down Arrow** until all the staves you want are selected.
- Select one whole staff at the top/bottom of the range of staves you want to select and **Shift**-click the staff at the other end of the range of staves you want to select.
- Make a marquee selection that includes the staves you want to select.

**Select more of the currently selected types of items**

You can use **Edit** > **Select More** (**Ctrl/Cmd-Shift-A**) to expand your current selection horizontally and incrementally to other items of the same types and in the selected voices and staves in Write mode. For items that span multiple bars and systems, they are selected in the earliest bar/system in which they exist.

1. The first expansion is to the boundaries of the current bar, both to the left and right. If there is nothing to select within the bar, such as if you selected a whole note in a 4/4 bar, Dorico Elements automatically advances to the second expansion.
2. The second expansion in page view is to the boundaries of the current system, both to the left and right. In galley view, the second expansion is to the rest of the flow, as there is only a single system in galley view.
3. In page view, the third expansion is to the entire flow.

**Select everything in the system within a range of beats/bars**

You can use the system track to select a region of beats/bars and then select everything on all staves in the system within that region.

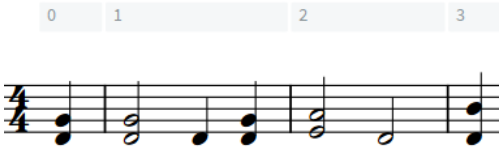
TIP

If you want to select only a certain type of item, such as lyrics or dynamics, you can then use the corresponding filters.

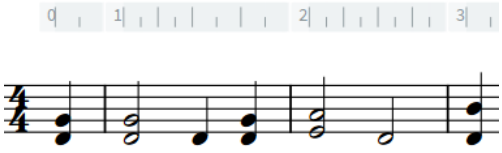
RELATED LINKS
Filters on page 307
Selecting/Deselecting notes and items individually on page 301
Selecting more items of the same type on page 302

# System track

The system track is a translucent line above the top of each system in Write mode. It allows you to add and delete bars and beats, and to select everything on all staves in the system.



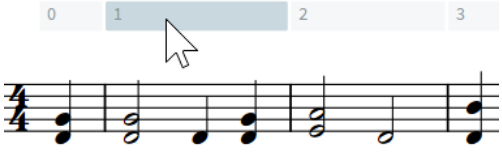

The system track above a staff, showing bars



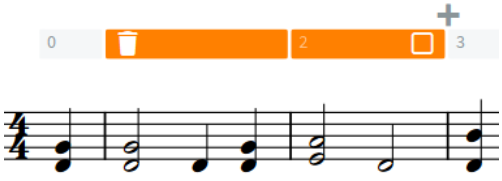

The system track above a staff, showing beat units reflecting the current rhythmic grid resolution

The color of the system track changes depending on how you are interacting with it.

- When you hover the mouse over it, it becomes opaque.
- When you select a region in the system track, it appears highlighted.




The system track when the mouse pointer hovers over it




The system track with a region selected

When you have selected a region in the system track, the following options are available:


**1 Delete**

Allows you to delete the selected region.

NOTE

When you hover over **Delete**, the highlight color of the selected region changes.

2 **System Track Select**

Allows you to select all items on all staves in the system across the selected region.

3 **Add**

Allows you to add bars or beats of the same duration as the selection in the system track. The extra time is inserted immediately after the end of the selection.

NOTE

Selections on the system track are cleared whenever you make any other kind of selection, or when you switch layouts. However, selections on the system track are retained when switching between page and galley view.

RELATED LINKS

Inputting bars/beats with the system track on page 226
Deleting bars/beats with the system track on page 490

## Hiding/Showing the system track

The system track is shown by default in new projects, but you can hide/show it at any time.

PROCEDURE

- Hide/Show the system track in any of the following ways:
  - Press **Alt/Opt-T**.
  - Choose **View** > **System Track**.

RESULT

The system track is shown when a tick appears beside **System Track** in the **View** menu, and hidden when no tick appears.

TIP

If you do not want the system track to be shown in all future projects by default, deactivate **Show system track in new projects** in the **View** section of the **General** page in **Preferences**.

RELATED LINKS

Preferences dialog on page 58

## Selecting bars with the system track

The system track allows you to select all staves in the system across the selected bars.

PREREQUISITE

The system track is shown.

PROCEDURE

1. Click a bar in the system track.
2. Optional: Select multiple bars to the right/left of the first selected bar in any of the following ways:
   - **Shift**-click bars to the right/left along the system track.

- Click and drag to the right/left along the system track.

3. Click **System Track Select** in the system track. It can also appear above the system track if your selection is narrow.

**System Track Select** button in the system track

The **System Track Select** button appears filled in when you hover over it

RESULT

Everything on all staves in the selected bars is selected and highlighted, including notations and signposts.

NOTE

If you then delete your selection, any signposts included are also deleted. This can affect the page layout, for example, by removing ossia staves whose signposts were included in the selection.

RELATED LINKS

Hiding/Showing the system track on page 305
Deleting the contents of bars on page 491
Deleting bars/beats with the system track on page 490

## Selecting beats with the system track

The system track allows you to select all staves in the system across the selected beats.

PREREQUISITE

The system track is shown.

PROCEDURE

1. Press and hold **Alt/Opt**.
   Grid lines that match the current rhythmic grid resolution appear in the system track.
2. Without releasing **Alt/Opt**, click and drag to the right/left along the system track.

   NOTE

   You cannot **Shift**-click when selecting beats.

3. Click **System Track Select** in the system track. It can also appear above the system track if your selection is narrow.

**System Track Select** button in the system track

The **System Track Select** button appears filled in when you hover over it

RESULT

Everything on all staves in the selected beats is selected and highlighted, including notations and signposts.

NOTE

If you then delete your selection, any signposts included are also deleted. This can affect the page layout, for example, by removing ossia staves whose signposts were included in the selection.

RELATED LINKS
Hiding/Showing the system track on page 305
Deleting the contents of bars on page 491
Deleting bars/beats with the system track on page 490

# Filters

Filters in Dorico Elements allow you to select only a specific type of item from a larger selection. Dorico Elements includes a filter for every notation item.

- You can find the available filters by choosing **Edit** > **Filter** > **[Item]** > **[Item type]**.

  You can also choose filters from the context menu.

All significant notation items have their own filter, for example, arpeggio signs, chord symbols, key signatures, and playing techniques. You can also filter for note spacing changes.

The following items have multiple filters because they have multiple types:

**Notes**
: Allows you to filter notes, grace notes, and chords. You can also filter notes according to their position in chords.

**Voices**
: Allows you to filter voices according to their stem-direction. You can also filter slash voices.

**Dynamics**
: Allows you to filter all dynamics, or just gradual or immediate dynamics.

**Tempos**
: Allows you to filter all tempo marks, or just absolute, relative, or gradual tempo changes.

**Lyrics**
: Allows you to filter all lyrics, or just lyrics with a specific line number, type, or staff-relative placement.

NOTE

There is no filter for barlines. You also cannot filter fingerings, beams, articulations, or tremolos, as they are considered part of the notes to which they apply.

RELATED LINKS
Filters for lyrics on page 616

## Changing filters to select/deselect

You can change whether the available filter options select or deselect the specified items. By default, filters select items, meaning that the resulting selection only includes the item being filtered.

When filters are set to deselect, the resulting selection includes everything except the item being filtered.

PROCEDURE

- Change the filter behavior in one of the following ways:
  - To change filters to select, choose **Edit** > **Filter** > **Select Only**.
  - To change filters to deselect, choose **Edit** > **Filter** > **Deselect Only**.

  TIP

  You can also choose these options from the context menu.

RELATED LINKS

Filters for lyrics on page 616

## Playing/Muting notes during note input/selection

You can change your default setting for whether notes are played back as you input them or not.

PROCEDURE

1. Press **Ctrl/Cmd-,** (comma) to open **Preferences**.
2. Click **Note Input and Editing** in the page list.
3. In the **Note Input** section, activate/deactivate **Play notes during note input and selection** in the **Auditioning** subsection.
4. Click **Apply**, then **Close**.

RESULT

When the option is activated, notes play back as you input them during note input and when you select them. When it is deactivated, notes do not play back.

RELATED LINKS

Inputting notes on page 164
Selecting/Deselecting notes and items individually on page 301

## Playing all/individual notes in chords during note input/selection

You can change your default setting for whether all notes in chords are played when you select any note in the chord or whether only the selected notes are played.

PREREQUISITE

Notes are played during note input/selection.

PROCEDURE

1. Press **Ctrl/Cmd-,** (comma) to open **Preferences**.
2. Click **Note Input and Editing** in the page list.
3. In the **Note Input** section, activate/deactivate **Play all notes in chord when any is selected** in the **Auditioning** subsection.
4. Click **Apply**, then **Close**.

RESULT

When the option is activated, all notes in chords are played when any note in the chord is selected. When it is deactivated, only the selected notes are played.

# Disabling automatic linking of dynamics and slurs when pasting

By default, dynamics and slurs are automatically linked when you copy them to other staves at the same rhythmic position. You can disable this behavior so dynamics and slurs are not linked by default.

PROCEDURE

1. Press **Ctrl/Cmd-,** (comma) to open **Preferences**.
2. Click **Note Input and Editing** in the page list.
3. In the **Editing** section, deactivate **Link dynamics and slurs to existing items when pasting**.
4. Click **Apply**, then **Close**.

RELATED LINKS

Linked dynamics on page 574
Linked slurs on page 787

# Changing existing items

You can change all items that have an associated popover, rather than deleting them and inputting new ones. For example, if you want to change an 8va octave line into a 15va octave line or change a short fermata into a long fermata.

PROCEDURE

1. Select the item or the signpost of the item you want to change.
2. Press **Return** to open the popover for that item.
3. Change the existing entry in the popover.
   For chord symbols, you can also play the new chord on your MIDI keyboard.
4. Press **Return** to close the popover.

RESULT

The selected item is changed according to the new entry in the popover. This changes different parameters for different items, such as the duration of a hold or pause or the volume of a dynamic.

NOTE

- If you change a fermata to a breath mark, only the fermata on the top staff is changed to a breath mark. If you change a caesura to a breath mark, a breath mark is input on the top staff at the end of the bar to which the caesura is attached. However, the existing caesura also remains on all staves.
- If you open the playing techniques popover in this way, Dorico Elements inputs your new entry as a separate playing technique and does not delete the previous one.
- If you change an immediate dynamic to a combined dynamic, such as *f* to *fp*, or vice versa, Dorico Elements inputs your new entry as a separate dynamic and does not delete the previous one.
- You can assign key commands to commands that increase/decrease the intensity of immediate dynamics without reopening the dynamics popover, such as increasing *mf* to *f*.

RELATED LINKS

Editing existing lyrics on page 621

Assigning key commands on page 62

## Changing the staff-relative placement of items

You can flip any item that can be placed both above/below the staff to change their staff-relative placement, for example, if you want to change the stem direction of notes quickly.

NOTE

These steps do not apply to text in text frames or pedal lines.

PROCEDURE

1. Select the items you want to flip.

   NOTE

   You cannot flip items during note input. You cannot flip text items when the text editor is open.

2. Press **F**.

RESULT

The staff-relative placement of the selected items is changed by setting **Placement**, **Position**, or **Direction** properties appropriately in the corresponding groups of the Properties panel.

Deactivating these properties resets items to their default placement.

NOTE

If you flipped multiple multi-segment slurs or tuplet brackets with different hook directions at the same time, all selected items are set to either above or below the staff, unless they all originally had compatible directions set.

RELATED LINKS

Changing the staff-relative placement of beams on page 513
Changing the staff-relative placement of fingerings on page 579
Changing the staff-relative placement of tuplet brackets on page 865
Positions of lyrics on page 624

## Resetting the appearance of items

You can reset all changes you have made to the appearance of individual items, which returns them to the default settings. Properties relating to the appearance of items include those that change their style, type, and some additions, such as *poco a poco* text for dynamics.

PROCEDURE

1. Select the items whose appearance you want to reset.
2. Choose **Edit** > **Reset Appearance**.

RESULT

All properties that affect the appearance of the selected items are reset to their default settings. For properties that are layout-specific and frame chain-specific, this only resets the appearance of the selected items in the current layout and frame chain.

RELATED LINKS
Copying property settings to other layouts on page 353

## Resetting the position of items

You can reset the position of individual items you have moved graphically, which returns them to their default position. Properties relating to the position of items include horizontal and vertical offsets, beat-relative position, and staff-relative placement.

PROCEDURE

1. Select the items whose position you want to reset.
2. Choose **Edit** > **Reset Position**.

RESULT

All properties that affect the position of the selected items are reset to their default settings. For properties that are layout-specific and frame chain-specific, this only resets the position of the selected items in the current layout and frame chain.

# Navigation

There are different ways you can navigate around the layout currently open in the music area, such as moving the selection to different items or bringing specific bar numbers or pages into view. Many navigation methods function in multiple modes.

If you have an item selected, you can navigate to other notes/items, which moves the selection to those notes/items.

RELATED LINKS
Workspace setup on page 51

## Navigating to other items in the music area

You can navigate to other notes and items in the music area after you have selected a note/item, for example, if you want to move the selection to other notes along the staff without using the mouse.

PROCEDURE

1. Select an item in the music area.
   - If you want to navigate through notes, select a note.
   - If you want to navigate through a particular type of item, such as rehearsal marks, select an item of that type.

     NOTE

     You can only navigate forwards/backwards through items on the same staff. You cannot navigate to other items of the same type on other staves.
2. Navigate to other notes or items in any of the following ways:
   - To navigate to the next item or note in the same voice, press **Right Arrow**.
   - To navigate to the previous item or note in the same voice, press **Left Arrow**.
   - To navigate to the closest note above the current selection, press **Up Arrow**.

This navigates to any existing notes on the same staff first, then to the lowest note/rest on the staff above.

- To navigate to the closest note below the current selection, press **Down Arrow**.

  This navigates to any existing notes on the same staff first, then to the highest note/rest on the staff below.
- To navigate forwards to the note/rest at the start of the next bar, press **Ctrl/Cmd-Right Arrow**.
- To navigate backwards to the note/rest at the start of the previous bar, press **Ctrl/Cmd-Left Arrow**.
- To navigate to the top staff in the system, press **Ctrl/Cmd-Up Arrow**.
- To navigate to the bottom staff in the system, press **Ctrl/Cmd-Down Arrow**.

3. Optional: Switch the selection to another type of item at the same rhythmic position in one of the following ways:
   - Press **Tab** to cycle forwards through items.
   - Press **Shift-Tab** to cycle backwards through items.

   NOTE

   You cannot switch the selection to system objects, such as system text or rehearsal marks. However, you can select system objects directly and navigate through them.
4. Optional: After switching the selection to another type of item, navigate to other items of that type.

RELATED LINKS
System objects on page 805

## Going to flows

You can go to the next/previous flow in the current layout, which automatically brings the start of that flow into view in the music area. This is particularly useful when navigating around layouts that contain many flows.

These steps function in Setup mode and Write mode.

PROCEDURE

- Go to a different flow in one of the following ways:
  - To go to the previous flow in the layout, choose **Edit** > **Go To** > **Go To Previous Flow**.
  - To go to the next flow in the layout, choose **Edit** > **Go To** > **Go To Next Flow**.

RESULT

The music area updates to show the start of the corresponding flow. Dorico Elements automatically positions the top staff towards the top left of the music area.

TIP

You can assign key commands to both **Go To Previous Flow** and **Go To Next Flow** on the **Key Commands** page in **Preferences**.

RELATED LINKS
Key Commands page in the Preferences dialog on page 59

# Going to pages

You can go to any specified page in the current layout using its page number, for example, to jump quickly to the exact page that requires changes when editing music.

These steps function in Setup mode and Write mode.

PROCEDURE

1. Choose **Edit** > **Go To** > **Go To Page** to open the **Go To Page** dialog.
2. Enter the page number to which you want to go into the **Page** field.
3. Click **OK**.

RESULT

The music area updates to show the start of the corresponding page. Dorico Elements automatically centers the top of the page in the music area.

TIP

You can assign a key command for **Go To Page** on the **Key Commands** page in **Preferences**.

# Going to bars

You can go to any specific bar in any flow in the current layout, for example, to jump quickly to the exact bar that requires changes when editing music.

These steps function in Setup, Write, and Play modes.

PROCEDURE

1. Press **Ctrl/Cmd-G** to open the **Go To Bar** dialog.
2. Select the flow containing the bar to which you want to go from the **Flow** menu.
3. Enter the bar number to which you want to go into the **Bar** field.
4. Click **OK**.

RESULT

The music area updates to show the corresponding bar. Dorico Elements automatically positions the top staff towards the top left of the music area.

In Play mode, the playhead moves to the start of the corresponding bar. Dorico Elements automatically positions the playhead at the start of the ruler.

# Dragging pages in the music area

You can drag pages in the music area in Write mode to bring other parts of your music into view, including in galley view.

PROCEDURE

1. In the status bar, click **Hand Tool**.

2. Click and drag in any empty space within the page boundaries in the music area.

   The mouse pointer changes into a hand symbol during the move.

RELATED LINKS
Status bar on page 48
Selection tools on page 49

## Zooming in/out of the music area

You can change the zoom level in the music area, for example, if you want a larger overview when inputting notes but to see notes and notations more closely when making detailed graphical amendments.

PREREQUISITE

If you want to keep a specific item in the center of the music area when you zoom in/out, you have selected that item.

PROCEDURE

1. Zoom in in any of the following ways:
   - Press **Ctrl/Cmd-= or Z**.
   - Spread two fingers outwards on a touchpad.
   - Scroll upwards on a mouse wheel.
   - Use the zoom options in the status bar.
2. Zoom out in any of the following ways:
   - Press **Ctrl/Cmd-- or X**.
   - Pinch two fingers together on a touchpad.
   - Scroll downwards on a mouse wheel.
   - Use the zoom options in the status bar.

RESULT

The zoom level in the music area is changed. If you had anything selected, Dorico Elements uses your selection as the focal point of the zoom. If you had nothing selected, Dorico Elements focuses on the area previously in the center of the view.

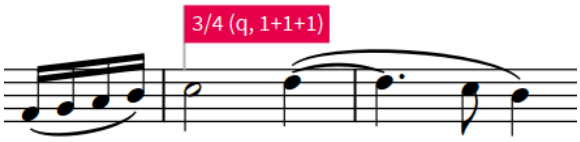
RELATED LINKS
Zoom options on page 50
Zooming in/out of tracks in the event display on page 380
Workspace setup on page 51

# Signposts

In Dorico Elements, signposts indicate the positions of important items or changes that cannot be seen in the score, such as key signatures with no accidentals, hidden items, and note spacing changes.

Signposts have different colors depending on the item they mark because many items can show signposts, such as hidden bar numbers and time signatures. They are selectable, meaning you can use signposts to change properties of hidden/invisible items, for example, by selecting system break signposts in order to change the staff size from that position.

Signposts include a text summary of the hidden/invisible item to help you identify it. For example, time signature signposts include the time signature, expressed as a fraction, and its beat subdivision.

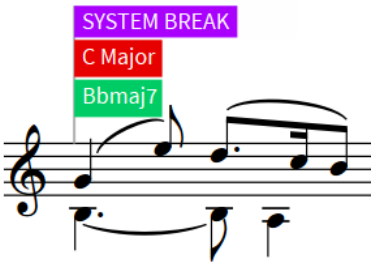



The signpost of a hidden time signature

You can hide/show signposts for the following items:

- Accidentals
- Chord symbols
- Bracket and barline changes
- Clefs
- Cues
- Dynamics
- Frame breaks
- Key signatures
- Pedal lines
- System breaks
- Tempo marks
- Text, both system and staff
- Percussion legends
- Time signatures
- Tuplets

When multiple signposts can exist at a single rhythmic position, they stack vertically so that they do not overlap and remain legible.




Multiple signposts for different items at the same rhythmic position

NOTE

By default, signposts are not printed or included when you export graphics files.

RELATED LINKS
Annotations on page 476

## Hiding/Showing signposts

You can hide/show all signposts or only hide/show signposts for specific items at any time in Setup mode and Write mode.

PROCEDURE

- Hide/Show signposts in any of the following ways:

- To hide/show all signposts, choose **View** > **Signposts** > **Hide Signposts**.
- To hide/show signposts for specific items, choose **View** > **Signposts** > **[Type of item]**.

RESULT

Signposts for individual items are shown when a tick appears beside the corresponding item in the menu, and hidden when no tick appears.

All signposts are shown when no tick appears beside **Hide Signposts** in the menu, and hidden when a tick appears.

# Arranging tools

Arranging tools in Dorico Elements allow you to allocate notes to different staves and voices quickly and efficiently.

These tools include copying notes and items to multiple staves at the same time, and multiple times within a selected range, moving notes between staves, and changing the voices of notes.

RELATED LINKS

Filters on page 307

## Deleting notes and items

You can delete any notes/items you have input into your project independently of each other, such as deleting repeat endings without deleting the notes in them. However, you must be in Write mode. You cannot delete notes and items in Setup mode or Print mode.

You can also delete notes in Play mode, but not other notation items.

PROCEDURE

1. In Write mode, select the notes/items you want to delete.
2. Press **Backspace or Delete**.

RESULT

All selected notes/items are deleted from your project. Deleted notes are replaced by implicit rests as appropriate. Dorico Elements moves your selection to the most logical and nearby item to the deleted items. For example, if you deleted a note, Dorico Elements's first choice is the nearest note in the same voice.

If a slur began or ended on a deleted note, the slur is automatically repositioned to the next/previous notehead. If only one note is left under a slur, the slur is automatically deleted.

Holds and pauses are not automatically deleted if they are not selected when you delete notes. They are positioned above the note/rest closest to their rhythmic position, or over whole bar rests if you delete all notes in a bar.

Any repeat barlines input as part of repeat endings are not deleted automatically when you delete repeat endings.

TIP

You can also delete markers by selecting them in the **Markers** section of the Video panel and clicking **Delete** in the action bar.

RELATED LINKS

Deleting barlines on page 496

# Copying and pasting items

You can copy and paste items, including notes and notations, to other rhythmic positions and staves in different ways.

PROCEDURE

1. In Write mode, select the items you want to copy.
2. Copy the selected items to other rhythmic positions in any of the following ways:
   - **Alt/Opt**-click each position to which you want to paste them.
   - Press **R** to repeat the material directly after itself.
   - Press **Ctrl/Cmd-C**, select the position to which you want to paste them, and press **Ctrl/Cmd-V**.
   - To copy items to the staff above, select them and choose **Edit** > **Paste Special** > **Duplicate to Staff Above**.
   - To copy items to the staff below, select them and choose **Edit** > **Paste Special** > **Duplicate to Staff Below**.

RESULT

The selected items are copied without deleting them from their original positions.

RELATED LINKS

Copying and pasting automation points on page 397
Large selections on page 303
Selecting/Deselecting notes and items individually on page 301
Moving notes to other staves on page 318
Disabling automatic linking of dynamics and slurs when pasting on page 309
Repitching notes without changing their rhythm on page 193

# Copying and pasting items to multiple staves

You can copy and paste notes and other items to multiple staves at once, for example, to copy a single phrase to all the woodwind staves when they are playing in unison.

PROCEDURE

1. In Write mode, select the items you want to copy to multiple staves.
2. Press **Ctrl/Cmd-C** to copy the selected items.
3. Select an item on each staff to which you want to paste the selected items.
4. Press **Ctrl/Cmd-V** to paste the selected items.

RESULT

The selected items are copied to all of the selected staves.

TIP

If you selected a range of items on each staff, the selected items are also pasted multiple times to fill the selected range.

RELATED LINKS

Large selections on page 303
Disabling automatic linking of dynamics and slurs when pasting on page 309

# Copying and pasting items to fill a selected range

You can copy and paste items, including notes and notations, multiple times within a selected range at once, for example, if you want to fill multiple bars with the same phrase.

NOTE

You can only copy and paste items that have a duration to fill a selection. For example, you can copy and paste gradual dynamics to fill a selection but not immediate dynamics.

PROCEDURE

1. In Write mode, select the items you want to copy throughout a range.
2. Press **Ctrl/Cmd-C** to copy the selected items.
3. Select the range throughout which you want to paste the selected items.
4. Press **Ctrl/Cmd-V** to paste the selected items.

RESULT

The selected items are copied as many times as will fit within the selected range without extending beyond it.

TIP

If you selected a range on multiple staves, the selected items are also pasted to multiple staves.

RELATED LINKS

Large selections on page 303

# Moving notes to other staves

You can move notes to other staves of any type, for example, if you want to move individual notes from one keyboard staff to another after importing a keyboard part from a MIDI file.

PROCEDURE

1. In Write mode, select the notes you want to move to another staff.
2. Move the notes to another staff in one of the following ways:
   - To move notes to the staff above, press **Alt/Opt-N**.
   - To move notes to the staff below, press **Alt/Opt-M**.

RESULT

The selected notes are moved to another staff by cutting them from their original staff and pasting them to the new staff. By default, they are pasted into the first voice active on that staff.

NOTE

When moving notes within tuplets to other staves, those notes do not remain tuplets unless you have also selected the tuplet bracket, tuplet number/ratio, or tuplet signpost.

RELATED LINKS

Creating cross-staff beams on page 517
Copying and pasting items to multiple staves on page 317

# Swapping the contents of staves

You can swap the contents of two staves for a selected range, for example, if you change your mind about which players have each line in an arrangement.

PROCEDURE

1. In Write mode, select the range of music on two staves that you want to swap.
2. Choose **Edit** > **Paste Special** > **Swap**. You can also choose this option from the context menu.

RESULT

The contents of the selected staves for the selected duration are swapped.

RELATED LINKS

Swapping the contents of voices on page 320

# Changing the voice of existing notes

You can change the voice of notes after they have been input, including notes in slash voices. For example, you can change notes in an up-stem voice to a down-stem voice.

PROCEDURE

1. In Write mode, select the notes whose voice you want to change.

   TIP

   You can use large selections and filters to select many notes in the same voice quickly.

2. Change the voice in any of the following ways:
   - Choose **Edit** > **Voices** > **Change Voice** > **[Voice]**.
   - Choose **Edit** > **Voices** > **Change Voice** > **[Slash Voice]**.

   TIP

   - You can also choose these options from the context menu.
   - If there is only one voice on the staff, you can create a new voice for your selected notes.

RESULT

The voice of the selected notes is changed, which might cause Dorico Elements to change the stem directions of the selected notes and other notes on the staff, and add implicit rests to ensure correct notation based on convention.

AFTER COMPLETING THIS TASK

You can later delete or hide rests and change the stem direction of notes manually.

You can also change whole voices into slash voices.

RELATED LINKS

Hiding/Showing voice colors on page 887
Large selections on page 303
Filters on page 307
Implicit rests in multiple-voice contexts on page 774
Deleting rests on page 775
Changing the stem direction of notes on page 816
Changing the slash voice type on page 891

## Swapping the contents of voices

You can swap the contents of two voices that contain musical material.

PROCEDURE

1. In Write mode, select the notes in two voices that you want to swap.
2. Choose **Edit** > **Voices** > **Swap Voice Contents**. You can also choose this option from the context menu.

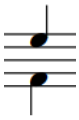
RESULT

The contents of the voices are swapped. For example, the notes previously in an up-stem voice are now in a down-stem voice, and the notes previously in a down-stem voice are now in an up-stem voice.

NOTE

Depending on the pitches involved in the swap and their stem directions, the notes might overlap. Dorico Elements automatically positions notes with the noteheads partially overlapping, in order to minimize the horizontal space they occupy and maintain the clarity of the rhythm. However, if you want to change this arrangement, you can change the order of voices or change the voice column index.

EXAMPLE



An E is in the up-stem voice, an F in the down-stem voice.

After swapping their voice contents, the E is in the down-stem voice, and the F is in the up-stem voice.

RELATED LINKS

Swapping the order of voices on page 888
Voice column index on page 889

# Splitting flows

You can split flows at specific rhythmic positions. Flows in Dorico Elements are independent of each other, meaning they can contain different players and have different time signatures and key signatures.

PREREQUISITE

The layout currently open in the music area contains all players with music in the flow, such as a full score layout.

IMPORTANT

We strongly recommend only splitting flows in layouts that contain all players.

PROCEDURE

1. In Write mode, select a note or item at the position where you want to split the flow.

2. Choose **Write** > **Split Flow**.

RESULT

The flow is split into two flows: the existing flow and a new flow that begins from the position of the item you selected. By default, new flows in full score layouts start on a new page in page view and are shown on a separate background in galley view.

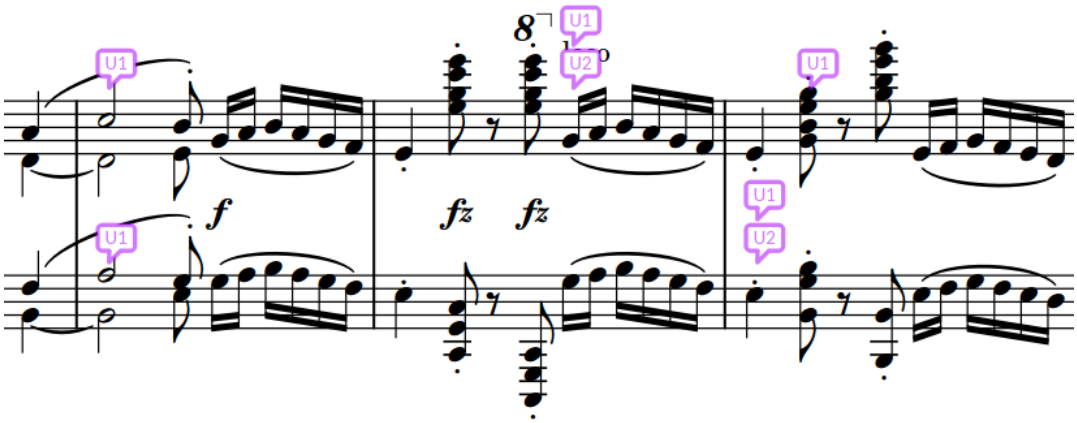
RELATED LINKS

Flows on page 128
Adding flows on page 129
Deleting flows on page 130
Deleting empty bars at the end of flows on page 491
Allowing/Disallowing multiple flows on the same page on page 336
Switching to galley/page view on page 56

# Comments

Comments allow you to add notes or instructions at precise positions in your project without affecting the music. They are considered annotations in Dorico Elements, meaning they are not printed by default.

Comments exist outside of the music, so they do not affect note spacing, vertical spacing, or casting off. However, you can attach them to specific items and staves in order to show the precise subject of each comment.




A passage with comments and replies

By default, comments are shown in the music area. They appear as speech bubble symbols as close as possible to their attached position. Comments that are replies are stacked vertically below the original comment.

All comments in the current flow are listed in the Comments panel in Write mode. Clicking a comment, either in the Comments panel or in the music area, automatically moves the view to bring that rhythmic position into focus.

In addition to its content, each comment identifies the following:

- Author of the comment, using either the current user account name or a custom name

  On macOS, the user account name uses the long account name; on Windows, it uses the full name associated with the account. If Dorico Elements cannot determine your account name, a dialog appears into which you can add the name and initials you want to use for comments. You can also change these in **Preferences**.
- Date the comment was added

- Instrument to which the comment applies
- Bars to which the comment applies

NOTE

In the music area, only the initials of the author are shown. In the Comments panel, all information is shown.

You can hide/show comments at any time, and you can choose to include them, alongside other view options, when printing/exporting layouts.

RELATED LINKS
Deleting notes and items on page 316
Comments panel on page 323
Changing the author name used for comments on page 326
Annotations on page 476

## Adding comments

You can add comments at any rhythmic position in your project, including adding different comments to multiple staves at the same rhythmic position.

PROCEDURE

1. In Write mode, select an item on the staff and at the rhythmic position where you want to add a comment. If you want your comment to apply to a range, select multiple items.
2. Press **Alt/Opt-C** to open the **Comment** dialog.
3. Enter your comment into the dialog.
4. Click **OK** to close the dialog and add the comment.

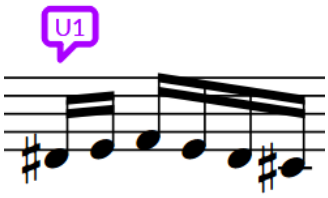
RESULT

The text you entered into the dialog is saved as a comment. In the music area, it is indicated by a speech bubble symbol that contains your initials. In the Comments panel, the text you entered is shown alongside your full username, the date, and the instrument and bar number to which you added the comment.

TIP

You can also add comments by clicking **Create Comment** in the action bar in the Comments panel, or by choosing **Write** > **Create Comment**.

EXAMPLE

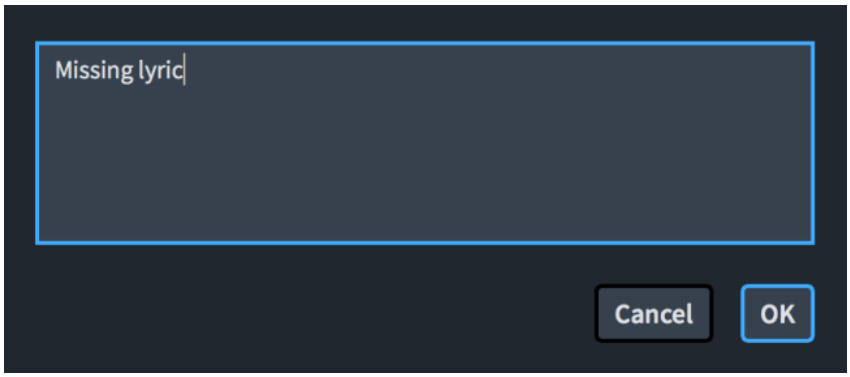



A comment in the music area

## Comment dialog

The **Comment** dialog allows you to enter and edit text as comments.

- You can open the **Comment** dialog by adding a comment, replying to a comment, or double-clicking an existing comment, either in the music area or in the Comments panel.




**Comment** dialog

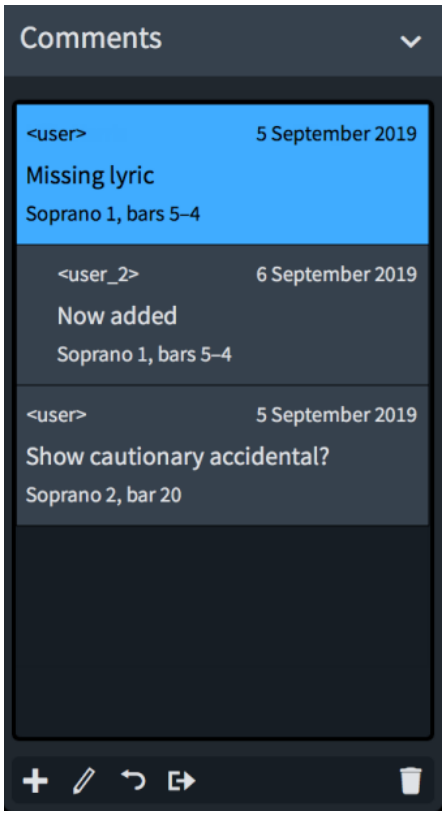
## Comments panel

The Comments panel shows all the comments in the current flow as a list. Replies to comments are indented to indicate their relationship to the original comment. The Comments panel is located on the right of the window in Write mode.

- You can hide/show the Comments panel by clicking **Comments** in the Notations toolbox on the right of the window in Write mode.

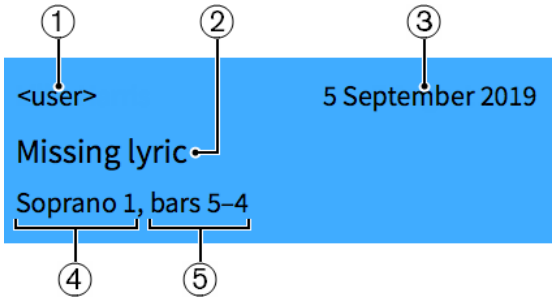
  

  You can also hide/show the panel whose icon is currently selected in the Notations toolbox by pressing **Ctrl/Cmd-9** or clicking the disclosure arrow on the right of the window.




Comments panel

Each comment in the panel shows the following:




1 **Author name**

This uses either the current user account or a custom name, depending on the preference that was set when the comment was added.

2 **Comment content**

3 **Date the comment was added to the project**

4 **Instrument to which the comment applies**

5 **Bars to which the comment applies**

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

**Create Comment**

Adds a comment to the selected rhythmic position and staff.

**Edit Comment**

Opens the selected comment in the **Comment** dialog and allows you to change its content.

**Reply to Comment**

Adds a comment that is a reply to the selected comment. Replies are shown indented in the Comments panel and stacked in the music area.

**Export Comments**

Exports all the comments in the project as an HTML file, which opens automatically in your default web browser. The HTML file is automatically saved in the same location as the project.

**Delete Comment**

Deletes the selected comments.

RELATED LINKS

Changing the author name used for comments on page 326
Exporting comments on page 327

## Replying to comments

You can add replies to existing comments, which is useful when co-ordinating with others as this organizes the list of comments in the Comments panel into clear sections.

PROCEDURE

1. In Write mode, select the comment to which you want to reply. You can do this in the music area and in the Comments panel.
2. Press **Alt/Opt-R** to open the **Comment** dialog.
3. Enter your reply into the dialog.
4. Click **OK** to close the dialog and add the reply.

RESULT

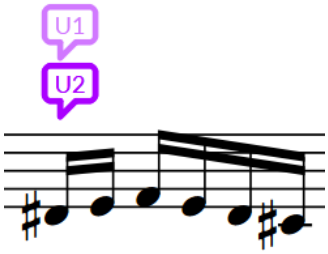
The text you entered into the dialog is saved as a reply to the selected comment. In the music area, it is indicated by a speech bubble symbol that contains your initials and is positioned immediately below the selected comment.

In the Comments panel, the reply is indented below the selected comment.

TIP

You can also reply to comments by clicking **Reply to Comment** in the action bar in the Comments panel, or by choosing **Write** > **Reply to Comment**.

EXAMPLE




A reply stacked below the selected comment

## Editing existing comments

You can change the contents of existing comments after you have added them, for example, to correct misspellings or add further information.

PROCEDURE

1. Double-click the comment you want to edit to open the **Comment** dialog. You can do this in the music area and in the Comments panel.
2. Change the text in the dialog.
3. Click **OK** to save your changes and close the dialog.

## Changing the author name used for comments

You can change the author name used for comments to either your user account name or a custom name. This affects subsequent comments you add to the project without changing the author name used for existing comments.

For the custom name, you can specify both the full name that is shown in the Comments panel and the initials shown in the music area.

PROCEDURE

1. Press **Ctrl/Cmd-,** (comma) to open **Preferences**.
2. Click **General** in the page list.
3. In the **Comments** subsection, choose one of the following options for **Author name for comments**:
   - **User Name**
   - **Custom Name**
4. Optional: If you chose **Custom Name**, enter the full name you want to use into the **Full name** field.
5. Optional: If you chose **Custom Name**, enter the initials you want to use into the **Initials** field.
6. Click **Apply**, then **Close**.

## Exporting comments

You can export all comments in all flows in your project to an HTML file, for example, to view them all in a single place.

PROCEDURE

1. In Write mode, click **Comments** in the Notations toolbox to show the Comments panel.

2. In the Comments section action bar, click **Export Comments**.

RESULT

All comments in the project are saved as an HTML file, which opens automatically in your default web browser. The comments are displayed in a table. The HTML file is automatically saved in the same location as the project.

## Hiding/Showing comments

You can hide/show comments at their positions in the music, for example, if you want to hide them when inputting music but show them when engraving.

PROCEDURE

- Choose **View** > **Comments**.

RESULT

Comments are shown in the music as speech bubbles when a tick appears beside **Comments** in the menu, and hidden when no tick appears.

# Layout and formatting

There are various ways you can control the layout and formatting of pages in your project, including changing the size of pages and adjusting note spacing.

NOTE

In Dorico Elements, you cannot edit all the objects and settings used to determine page formatting, such as frames and master pages. However, we have included basic information about these for your information.

RELATED LINKS
Master pages on page 329
Page formatting on page 330
Note spacing on page 361
Staff spacing on page 363

## Engrave mode

Engrave mode is only available in Dorico Pro. It provides finer controls over the appearance of your music, such as positioning items graphically wherever you want and creating/editing master pages that determine the appearance and layout of pages.

## Frames

Dorico uses boxes called frames to position music, additional text, and graphics inside the margins of pages. In Dorico Elements, you cannot input or edit frames, but frames on master pages control the formatting of pages in your project.

In Dorico Elements, there are the following types of frames:

- Music frames that show the music of selected players and flows
- Text frames that allow you to enter text and text tokens
- Graphics frames that allow you to load images or illustrations in a variety of formats

RELATED LINKS
Flows in Dorico on page 33
Layouts in Dorico on page 36
Frame breaks on page 345
Text tokens on page 355

# Master pages

Master pages function like templates in Dorico Elements, allowing the same page formatting to be applied to multiple different pages in different layouts.

NOTE

Page size and margins, page orientation, and staff size for all layouts are specified in **Setup** > **Layout Options**.

All pages in your score and parts inherit their layout formats from master pages. However, in Dorico Elements, you cannot edit master pages or create new ones; this is only available in Dorico Pro.

Dorico Elements provides default master pages for first (**First**) and subsequent (**Default**) pages. Master pages are contained in master page sets for full score and part layouts. Master page sets are automatically applied to every layout that you create.

NOTE

Changing individual pages in layouts is considered a master page override in Dorico Elements. This includes, for example, editing the title or running header in Write mode. Pages with master page overrides are not automatically deleted, even if they are empty because the layout became shorter.

If you want to change the information shown at the tops of pages, that is, the title and running header text that you cannot select, we recommend that you do so in the **Project Info** dialog to avoid master page overrides. The big title at the top of the first page is the project title, and the running header on subsequent pages uses the flow title for the top flow on that page.

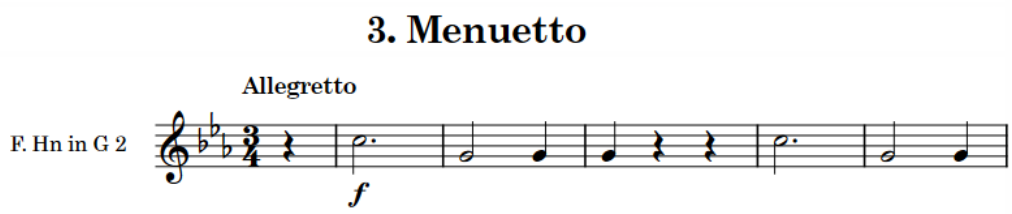
RELATED LINKS
Layout Options dialog on page 100

# Flow headings

Flow headings allow you to show the titles of flows immediately above their first system automatically. They function like templates, in much the same way as master pages.

Flow headings exist as part of master page sets. By default, Dorico Elements provides one flow heading in each master page set, which contains tokens to display the flow number and flow title; in a new project, this appears as “1. Flow 1”. This is used automatically for all flow headings. In Dorico Elements, you cannot edit flow headings or create new ones; this is only available in Dorico Pro.

Flow headings are automatically inserted above the first system of the flow to which they apply, meaning they do not have a fixed vertical position on the page like other frames and follow the music if it moves. They also occupy vertical space within music frames. You can change the margins for the space above and below flow headings.




A flow heading above the third flow in a part layout

RELATED LINKS
Tacets on page 347
Hiding/Showing flow headings on page 338
Changing the margins above/below flow headings on page 338
Text tokens on page 355

# Page formatting

The formatting of pages in Dorico Elements is determined by a number of factors, including the layout's staff size, page margins, the master page applied to them, any casting off values applied to them, system and frame breaks, and frame padding.

The most important factors that determine how pages are formatted in Dorico Elements are:

**Staff size**

Staff size refers to the distance between the top and bottom lines of staves. The most appropriate staff size depends on the intended purpose and contents of the layout. In many cases, changing the staff size is the quickest way to produce legible layouts.

**Staff spacing**

Staff spacing mostly involves the height of staves and the necessary gaps between staves and systems.

**Casting off**

Casting off, that is, the process of determining a set number of bars per system and systems per page, allows you to fix a regular appearance across entire layouts.

**System and frame breaks**

System and frame breaks allow you to adjust layouts on a local level, by determining which bars are shown on each system and where music is pushed into the next frame.

**Page margins**

Page margins determine the dimensions of pages in layouts. Frames cannot exceed the boundaries set by the margins of the layout, which you can change on the **Page Setup** page in **Setup** > **Layout Options**. You can change the size of margins on each edge of each page.

**Master pages**

All pages in your layouts inherit their layout formats from master pages. Although you cannot create or edit master pages in Dorico Elements, we recommend being familiar with them as a concept, so you are aware of how pages are formatted. For example, if you override a master page, such as by editing the title directly in the music area, empty pages that are no longer required might not be deleted automatically.

TIP

The default master pages in Dorico Elements contain tokens for the project title, lyricist, and composer on the first pages in layouts, and the flow title (score layouts) or layout name (part layouts) at the top of subsequent pages. Part layouts also automatically show the layout name in the top left of the first page. These tokens refer to information in the **Project Info** dialog, so we recommend entering information in the **Project Info** dialog in order to show it in your layouts.

**Flow headings**

Flow headings show the number and title of each flow immediately above their first system automatically. They have no fixed vertical position and follow the music if it moves. The default flow heading contains tokens to display the flow number and flow title; in a new project, this appears as "1. Flow 1". In Dorico Elements, you cannot edit flow headings or create new ones.

You can hide/show flow headings on a per-layout basis. Deleting or editing individual flow headings is considered a master page override, which is a type of page format change.

**Music frame margins**

Music frames have margins at the top and bottom. Music frame margins provide padding to ensure that musical material displayed within the frame remains on the page. For example, if music frames have no padding, the top line on the top staff in the frame is positioned at the top of the frame. Any notes that require ledger lines above the staff might then be positioned off the top of the page. You can change the music frame margins for each layout.

We recommend familiarizing yourself with these concepts, and how to use them together and in different contexts, in order to produce well-formatted layouts.

RELATED LINKS

Staff size on page 341
Staff spacing on page 363
Casting off on page 344
System breaks on page 346
Frame breaks on page 345
Master pages on page 329
Flow headings on page 329
Hiding/Showing flow headings on page 338
Tacets on page 347
Layouts on page 130
Flows on page 128
Players on page 103
Project Info dialog on page 98

# Changing page margins

You can change the page margins of each layout independently, for example, if you want wider margins for layouts in your project that will be spiral bound.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to change the page margins.

   By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Page Setup** in the page list.
4. In the **Page Margins** section, choose one of the following options for **Page margins**:
   - **Same**: All pages in the selected layouts have the same margins.
   - **Different**: Left and right pages in the selected layouts can have completely different margins.
   - **Mirrored**: Left and right pages in the selected layouts use the same margin values but they correspond to the inside/outside edges of pages.
5. Optional: Change the margins by changing the values in the value fields.
6. Click **Apply**, then **Close**.

RESULT

The page margins in the selected layouts are changed.

# Changing the page size and orientation

You can change the page size and orientation of each layout independently. For example, you can use a large, landscape page in full score layouts and a small, portrait page for part layouts.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to change the page size and/or orientation.

   By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Page Setup** in the page list.
4. In the **Page Size** section, select a page size from the **Size** menu.

   For example, you can select fixed page sizes, such as **A3** or **Letter**, or select **Custom** to define your own page size.
5. Optional: If you selected **Custom**, change the **Width** and **Height** of the page by changing the values in the value fields.
6. Choose one of the following options for **Orientation**:
   - **Portrait**
   - **Landscape**
7. Optional: Repeat steps 2 to 6 for other layouts whose page size/orientation you want to change.
8. Click **Apply**, then **Close**.

RESULT

The page size is changed for all the selected layouts.

NOTE

Changing the page size of layouts might not change the paper size automatically selected for those layouts in the Print Options panel in Print mode. For example, if your default printer cannot print the page size selected for layouts, the largest paper size the printer can handle is selected. Similarly, if you had already set options for printing layouts before changing the page size in **Layout Options**, Dorico Elements attempts to preserve your original print options.

Similarly, the page orientation is independent of the paper orientation. We recommend that you check that layouts have the correct paper orientation set for their page orientation in the Print Options panel in Print mode before printing/exporting, as it is possible to print landscape layouts on portrait paper and vice versa.

RELATED LINKS

Page sizes and paper sizes on page 473
Paper orientation on page 474
Paper size and orientation setup on page 474
Changing the default staff/system spacing on page 333

# Changing the default staff size

You can change the default size of staves in each layout independently. For example, you can have a small staff size in full score layouts but a larger staff size in part layouts.

NOTE

If the size of system object font styles is set to **Staff-relative**, the staff size of the top staff in each instrument family group affects the size of system objects if they are shown above that bracketed group. Font styles that are set to **Absolute** are unaffected by staff size.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts whose staff size you want to change.

   By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Page Setup** in the page list.
4. In the **Space Size** section, select the staff size you want from the **Rastral size** menu.

   NOTE

   If you select **Custom**, you can set a custom value in the **Space size** field, expressed in your preferred unit of measurement.

   You can also set a **Custom** value by changing the value when any **Rastral size** is selected.
5. Optional: Repeat steps 2 to 4 for other layouts.
6. Click **Apply**, then **Close**.

RESULT

The staff size is changed throughout the selected layouts.

TIP

You can also change the staff size from selected rhythmic positions onwards in layouts, and change the size of individual staves.

RELATED LINKS

Staff size on page 341
Brackets and braces on page 526
System objects on page 805
Changing the size of individual staves on page 342

# Changing the default staff/system spacing

You can change the default gaps between staves and systems in each layout independently. For example, you can have smaller gaps between staves in full score layouts to accommodate more staves, and larger gaps between systems in part layouts to give players space to add pencil markings.

TIP

- If the staves in a layout are very close together, just decreasing the staff size might be sufficient to produce good results.

- We recommend that you set the ideal gaps to the minimum value acceptable to you, as Dorico Elements automatically allocates additional space for other items, such as system objects and dynamics, and avoids collisions between notes and staves above/below.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to change the default staff/system spacing.

   By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Vertical Spacing** in the page list.
4. In the **Ideal Gaps** section, change the values for the different contexts as required.
5. Click **Apply**, then **Close**.

RESULT

The minimum gaps between staves and systems in the corresponding contexts are changed. This affects how much space Dorico Elements allows for staves/systems in its casting off estimations and whether frames are considered full enough to justify vertically automatically.

RELATED LINKS

Per-layout vertical spacing options on page 363
Note spacing on page 361
Changing the default note spacing on page 361

## Changing the vertical justification of staves/systems

You can change the minimum fullness threshold above which Dorico Elements automatically vertically justifies staves and systems, which means they are evenly distributed to fill the height of frames. You can also control whether staves and systems are both vertically justified or only systems are vertically justified.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to change the automatic vertical justification of staves/systems.

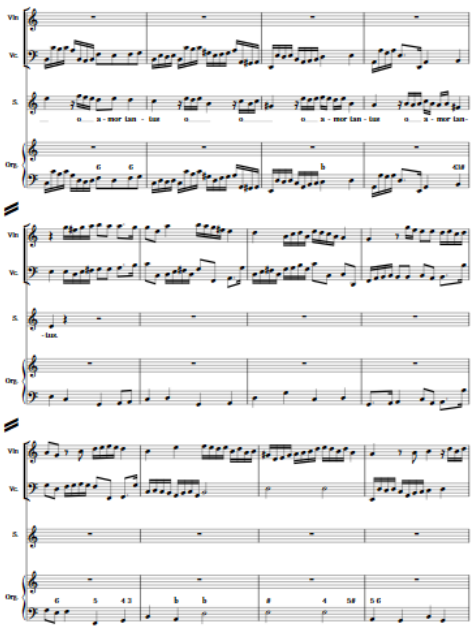
   By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Vertical Spacing** in the page list.
4. In the **Ideal Gaps** section, choose one of the following options for **Gap to use for divisi staves**:
   - **Staff to staff**
   - **Braced staff to braced staff**
5. In the **Vertical Justification** section, change the values for the following options, individually or together:
   - **Justify distance between staves and systems when frame is at least [n]% full**
   - **Justify distance only between systems when frame is at least [n]% full**
6. Activate/Deactivate **Justify staves when frame with single system is above this threshold**.

7. Click **Apply**, then **Close**.

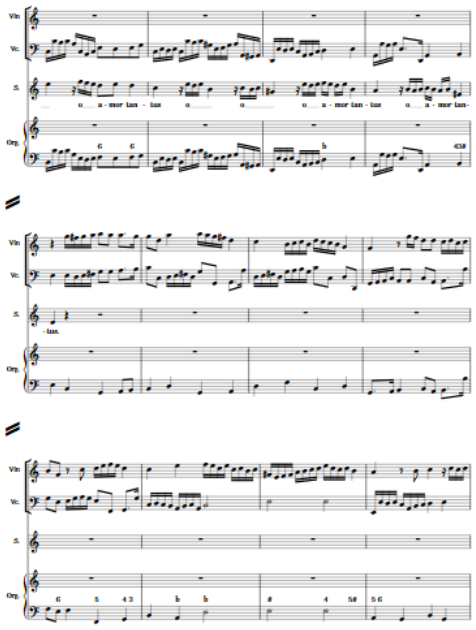
RESULT

The automatic vertical justification of staves and systems in the selected layouts is changed. Braced staves are never vertically justified.

EXAMPLE



A page with staves and systems both justified



The same page with only systems justified

RELATED LINKS

Per-layout vertical spacing options on page 363
Changing the default staff/system spacing on page 333

## Hiding/Showing empty staves

You can hide/show empty staves differently in each layout in your project. For example, you can show all staves, including empty staves, in a full score layout for the conductor but hide empty staves in a full score layout intended for reference only.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to hide/show empty staves.

   By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Vertical Spacing** in the page list.
4. In the **Hide Empty Staves** section, choose one of the following options for **Hide empty staves**:
   - **After first system**
   - **All systems**

- **Never**

5. Activate/Deactivate **Allow individual staves of multi-staff instruments to be hidden**.
6. Optional: For **Players excluded from Hide Empty Staves**, activate the checkbox for each instrument you want to be shown regardless of your choice for **Hide empty staves**.
7. Click **Apply**, then **Close**.

RESULT

Empty staves in the selected layouts are hidden/shown according to your choice. If you activated **Allow individual staves of multi-staff instruments to be hidden**, any single empty staves in multi-staff instruments, such as piano or harp, can be hidden in the selected layouts.

RELATED LINKS

Extra staves on page 802
Changing the default staff/system spacing on page 333
Per-layout vertical spacing options on page 363

## Starting layouts on left-hand pages

By default, all layouts start on a right-hand page, as convention dictates that odd numbered pages are always on the right-hand page. However, you can set individual layouts to start on a left-hand page, for example, to facilitate page turns better in that layout.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts you want to start on a left-hand page.

   By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Page Setup** in the page list.
4. In the **Page Numbers** section, change the value for **Initial page number** to an even number.
5. Click **Apply**, then **Close**.

RESULT

The first page in the selected layouts is shown on a left-hand page when the initial page number is even.

## Allowing/Disallowing multiple flows on the same page

You can allow/disallow new flows to be shown on the same page as previous flows if there is space, for example, to reduce the number of pages required for parts in works with multiple movements. By default, new flows are allowed on the same page in part layouts and are not allowed in full score layouts.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to allow multiple flows to be shown on each page.

   By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.

3. Click **Page Setup** in the page list.
4. In the **Flows** section, choose one of the following options for **New flows**:
   - **Always start new page**
   - **Allow on existing page**
5. Click **Apply**, then **Close**.

RESULT

**Always start new page** ensures flows in the selected layouts always begin at the start of the next page after the end of the previous flow.

**Allow on existing page** allows flows in the selected layouts to continue immediately after each other, including within the same music frame if there is sufficient space. Flow headings are automatically shown above the start of flows if you have chosen to show flow headings in the selected layouts.

NOTE

Flows are not automatically split into separate music frames. You must insert frame breaks manually to divide flows into separate music frames if required.

RELATED LINKS

Text tokens on page 355
Casting off on page 344
Changing the flows assigned to layouts on page 132
Changing the players assigned to flows on page 129
Hiding/Showing information in running headers above flow headings on page 339

## Changing when the First master page is used

You can change the circumstances when the **First** master page is used in each layout independently, for example, if you want to use it for the start of every flow in the full score but only want to use it for the first flow in part layouts, even when subsequent flows start at the top of the page.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to change when the **First** master page is used.

   By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Page Setup** in the page list.
4. In the **Flows** section, choose one of the following options for **Use 'First' master page**:
   - **Never**
   - **First flow only**
   - **Any flow starting at top of page**
5. Click **Apply**, then **Close**.

RESULT

- Choosing **Never** means the **First** master page is not used for any page in the selected layouts.

- Choosing **First flow only** means the **First** master page is used for the first page in the layout but no other pages, even if some subsequent flows start at the top of a page.
- Choosing **Any flow starting at top of page** means the **First** master page is used for all pages in the layout that begin with the start of a flow.

RELATED LINKS
Layout Options dialog on page 100

## Hiding/Showing flow headings

You can hide/show flow headings in each layout independently, for example, if your project only contains a single flow and you only want to show the project title. You can also hide the heading for the first flow but show flow headings for subsequent flows.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to hide/show flow headings.
   By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Page Setup** in the page list.
4. In the **Flows** section, choose one of the following options for **Show flow headings**:
   - **Never**
   - **Not for first flow**
   - **For all flows**
5. Click **Apply**, then **Close**.

RESULT

Flow headings are shown above the first system in each flow in the selected layouts when you choose **For all flows**, hidden when you choose **Never**, and hidden above the first system in the first flow but shown above all other flows when you choose **Not for first flow**.

They are automatically positioned above each flow and below the preceding flow according to the margins set for each layout.

RELATED LINKS
Flow headings on page 329
Allowing/Disallowing multiple flows on the same page on page 336

## Changing the margins above/below flow headings

You can change the margins both above and below flow headings, which control the gap between the preceding flow and the flow heading, and the gap between the flow heading and the start of the next flow.

PREREQUISITE

Flow headings are shown in the layouts in which you want to change the margins above/below flow headings.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.

2. In the **Layouts** list, select the layouts in which you want to change the margins above/below flow headings.

   By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.

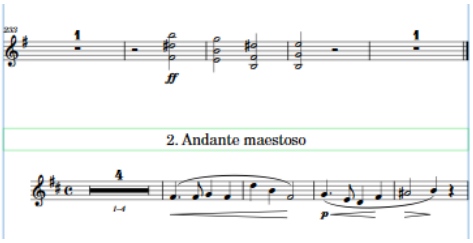
3. Click **Page Setup** in the page list.
4. In the **Flows** section, change the values for **Flow heading top margin** and/or **Flow heading bottom margin**.
5. Click **Apply**, then **Close**.

RESULT

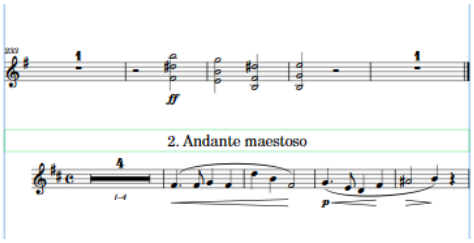
Changing the value for **Flow heading top margin** increases/decreases the gap between the top of flow headings and the end of the preceding flow.

Changing the value for **Flow heading bottom margin** increases/decreases the gap between the bottom of flow headings and the start of the next flow. For example, when the bottom margin is set to **0**, the bottom of the lowest frame in the flow heading aligns with the top staff line of the first system in the flow below the flow heading.

EXAMPLE




Flow heading with default margins above/below




Flow heading with decreased margins above/below

RELATED LINKS

Flow headings on page 329

## Hiding/Showing information in running headers above flow headings

You can hide/show flow titles, page numbers, and flow page numbers separately when they appear above flow headings at the top of a new page in each layout independently. Hiding such information in running headers is a custom in publishing.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to hide/show information in running headers above flow headings.

   By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.

3. Click **Page Setup** in the page list.
4. In the **Flows** section, choose one of the following options for **Flow title in header**:
   - **Show above flow heading**

- **Hide above flow heading**

5. Choose one of the following options for **Page number in header**:
   - **Show above flow heading**
   - **Hide above flow heading**
6. Choose one of the following options for **Flow page number in header**:
   - **Show above flow heading**
   - **Hide above flow heading**
7. Click **Apply**, then **Close**.

RESULT

The corresponding information is hidden/shown when they appear above flow headings at the top of the page.

NOTE

In order to hide running header information, the top of the music frame containing the flow heading frame must be lower than the top of text frames containing the corresponding information. If the top of the music frame is the same height as a running header text frame, any corresponding information in the text frame is shown, regardless of your setting.

RELATED LINKS

Frames on page 328
Master pages on page 329

# Changing the default music frame margins

You can change the default margins in all music frames in each layout independently. For example, you might want more padding at the top of music frames in part layouts containing lots of notes above the staff.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts whose music frame margins you want to change.

   By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Page Setup** in the page list.
4. In the **Music Frame Margins** section, change the values for **Top** and/or **Bottom**.
5. Click **Apply**, then **Close**.

RESULT

The margins within all music frames in the selected layouts are changed.

RELATED LINKS

Changing the default staff/system spacing on page 333

# Changing the horizontal justification of final systems

You can change whether the final systems of flows always fill the width of frames or only do so above a certain fullness threshold in each layout independently. By default in Dorico Elements,

the final systems of flows only justify to the full width of the frame when they are more than half full.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to change the justification of the final systems in flows.

   By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Note Spacing** in the page list.
4. Change the justification of final systems in flows in one of the following ways:
   - If you always want the final systems in flows to justify fully, deactivate **Only justify final system in flow when more than [n]% full**.
   - If you want to change the minimum fullness of final systems before they justify, change the value for **Only justify final system in flow when more than [n]% full**.
5. Click **Apply**, then **Close**.

RESULT

The automatic justification of the final systems in flows in the selected layouts is changed.

TIP

You can also change the width of individual systems independently of your default settings by changing their start/end positions.

RELATED LINKS

Changing the first system indent on page 807
Fixing the number of bars per system on page 344

# Staff size

Staff size refers to the distance between the top and bottom lines of staves, and can be expressed as a point size or in another supported unit of measurement, such as millimeters. For individual staves, you can use a scale size of the default staff size in the layout. The most appropriate staff size depends on the intended purpose of the layout.

For example, full orchestral scores that are quite dense need a much smaller staff size than individual parts, which require large enough notes so that performers can read them easily. Staves can overlap and the music can become illegible if the staff size is too large in dense scores.

In Dorico Elements, you can set the staff size using the rastral size and the space size, depending on which measurement is more appropriate for the selected layouts.

- Rastral size is the size of the full staff, measured from the bottom line to the top line.
- Space size is the distance between two staff lines.

When changing the staff size of each layout in **Layout Options**, we recommend that you use one of the preset rastral sizes, as these are based on traditional and generally accepted staff sizes that are all widely used in music engraving.

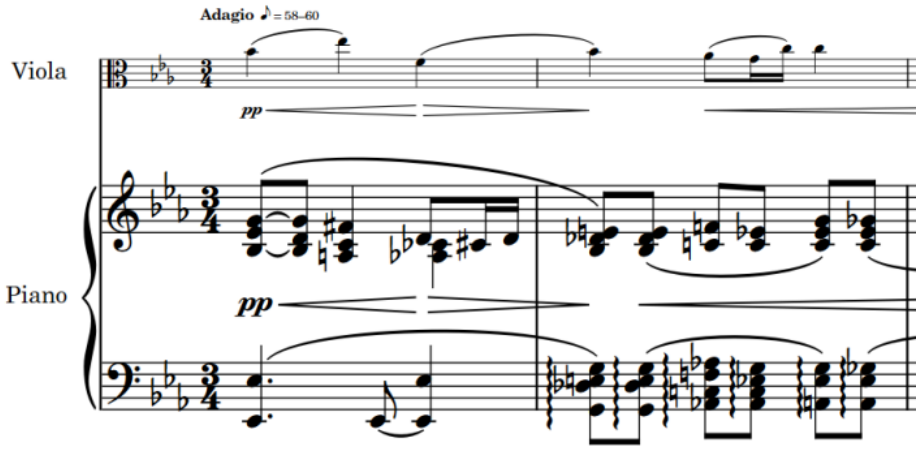
NOTE

The size of staves can affect the size of system objects.

RELATED LINKS
System objects on page 805
Changing your preferred unit of measurement on page 58
Changing the default staff size on page 333

## Changing the size of individual staves

You can change the size of individual staves in each flow independently of other staves and your layout settings. For example, piano accompaniment parts often include the solo line of the instrument the piano is accompanying on a smaller staff.




A piano part with smaller viola staff above

You can change the size of individual staves to a set scale size, expressed as a percentage of the normal staff size in the layout, or set a custom scale.

TIP

If you want to change the staff size to represent an alternative version of a passage, you can instead add an ossia staff, which you can show for specific regions.

PROCEDURE

1. Select an item on the staff whose size you want to change.

   NOTE

   You can only change the size of a single staff at a time.

2. Choose **Edit** > **Staff Size** > **[Staff size]**. You can also choose this option from the context menu.
3. Optional: If you choose **Custom Staff Size**, you must set the staff size using the **Custom Staff Size** dialog that opens.

RESULT

The size of the selected staff is changed in the current flow. This also works in combination with the other ways of changing the staff size, such as changing the size of all staves in the layout or changing the size of staves from a specific point.

NOTE

- Changing the staff size of individual staves affects the staff size of all instruments held by that player.

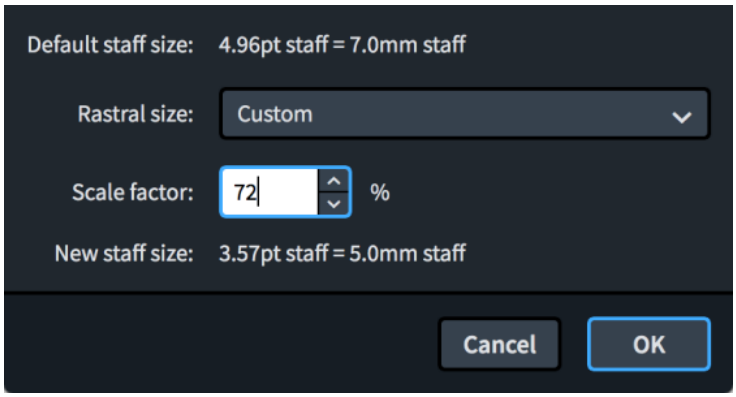
- Changing the staff size of individual staves affects its size for the whole flow.
- If the size of system object font styles is set to **Staff-relative**, the staff size of the top staff in each instrument family group affects the size of system objects if they are shown above that bracketed group. Font styles that are set to **Absolute** are unaffected by staff size.

RELATED LINKS
Brackets and braces on page 526
System objects on page 805

## Custom Staff Size dialog

The **Custom Staff Size** dialog allows you to change the size of individual staves by a custom scale factor.

- You can open the **Custom Staff Size** dialog by selecting an item in the music area and choosing **Edit** > **Staff Size** > **Custom Staff Size**.




**Custom Staff Size** dialog

The **Custom Staff Size** dialog contains the following options:

**Default staff size**

Displays the default size of staves in the current layout. This size is set on the **Page Setup** page in **Setup** > **Layout Options**.

The default staff size is expressed as both a point size and in your preferred unit of measurement.

**Rastral size**

Allows you to select the rastral size on which you want to base your custom staff size.

**Scale factor**

Sets the custom staff size, expressed as a percentage of the selected rastral size.

**New staff size**

Displays the new custom staff size for the selected staff as a result of the changes you have made in the dialog.

The new staff size is expressed as both a point size and in your preferred unit of measurement.

RELATED LINKS
Changing your preferred unit of measurement on page 58

# Casting off

"Casting off" is the term used to encompass fixing the layout of pages of music, such as setting the number of systems per page. In Dorico Elements, you can fix both the number of bars per system and the number of systems per music frame in each layout independently.

RELATED LINKS
Per-layout vertical spacing options on page 363

## Fixing the number of bars per system

You can define a fixed number of bars you want included in each system in each layout in your project.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to fix the number of bars per system.

   By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Staves and Systems** in the page list.
4. In the **Casting Off** section, activate **Fixed number of bars per system**.
5. Change the number of bars you want in each system by changing the value in the value field.
6. Click **Apply**, then **Close**.

RESULT

The number of bars automatically contained in each system in the selected layouts is changed. If any of the layouts contain two-bar or four-bar repeat regions, Dorico Elements automatically adjusts casting off to ensure phrases are not split across systems.

RELATED LINKS
Bar repeats on page 756
Inserting system breaks on page 346
Inserting frame breaks on page 345
Changing the horizontal justification of final systems on page 340

## Fixing the number of systems per frame

You can define a fixed number of systems you want included in each music frame in each layout in your project. Because the default master pages have a single music frame per page, fixing the number of systems per frame usually fixes the number of systems per page.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to fix the number of systems per frame.

   By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Staves and Systems** in the page list.
4. In the **Casting Off** section, activate **Fixed number of systems per frame**.

5. Change the number of systems you want in each frame by changing the value in the value field.
6. Activate/Deactivate **Scale number of systems by frame height**.
7. Click **Apply**, then **Close**.

RESULT

The number of systems automatically contained in each music frame in the selected layouts is changed.

If you activated **Scale number of systems by frame height**, the number of systems contained in each frame is adjusted according to the size of the music frame.

# Frame breaks

In Dorico Elements, you can use frame breaks to push musical material into the next frame, which is usually on the next page, meaning you can use frame breaks to create page breaks. For example, you can use frame breaks to insert page turns at specific positions in part layouts.

Frame breaks are indicated by signposts, which you can hide/show at any time. They are also layout-specific, meaning each layout can have frame breaks at different rhythmic positions.

TIP

You can also control the content of music frames by fixing the number of systems per music frame in each layout.

RELATED LINKS

Per-layout vertical spacing options on page 363

## Inserting frame breaks

You can insert frame breaks at any rhythmic position, for example, to create page turns at appropriate places in the current layout.

PROCEDURE

1. Select a note or item at the rhythmic position where you want to insert a frame break.

   For example, if you select a clef, the clef is placed at the end of the frame and all following notes are moved to the start of the next music frame.
2. Choose **Edit** > **Frame Break**.

RESULT

A frame break is inserted immediately before the rhythmic position of the earliest selected item. All notations after the frame break are moved to the next music frame.

NOTE

If you insert a frame break in the middle of a phrase in a two-bar or four-bar repeat region, Dorico Elements does not automatically move the frame break to before/after the phrase, causing it to be split across the frame break.

## Hiding/Showing frame break signposts

You can hide/show frame break signposts at any time.

PROCEDURE

- Choose **View** > **Signposts** > **Frame Breaks**.

RESULT

Frame break signposts are shown when a tick appears beside **Frame Breaks** in the menu, and hidden when no tick appears.

## Deleting frame breaks

You can delete frame breaks after you have inserted them.

PREREQUISITE

Frame break signposts are shown.

PROCEDURE

1. Select the frame break signposts of the frame breaks you want to delete.
2. Press **Backspace or Delete**.

# System breaks

System breaks are where musical material reaches the right page margin and must continue on a new system, usually below the previous system on the same page or on a new page. Dorico Elements automatically arranges music across systems so that notes are correctly spaced and legible, but you can also control system breaks manually.

System breaks are indicated by signposts, which you can hide/show at any time. They are also layout-specific, meaning each layout can have system breaks at different rhythmic positions.

TIP

You can also control the content of systems by fixing the number of bars per system in each layout.

RELATED LINKS

Fixing the number of bars per system on page 344
Per-layout vertical spacing options on page 363

## Inserting system breaks

You can insert system breaks at any rhythmic position.

PREREQUISITE

If you want to insert system breaks in the middle of multi-bar rests, you have either hidden multi-bar rests in the layout or split multi-bar rests at the required positions.

PROCEDURE

1. Select a note or item at the rhythmic position where you want to insert a system break.

   For example, if you select a clef, the clef is placed at the end of the system, and the notes are moved to the start of the next system.

2. Choose **Edit** > **System Break**.

RESULT

A system break is inserted immediately before the rhythmic position of the earliest selected item. All notations after the system break are moved to the next system.

NOTE

If you insert a system break in the middle of a phrase in a two-bar or four-bar repeat region, Dorico Elements does not automatically move the system break to before/after the phrase, causing it to be split across the system break.

RELATED LINKS

Hiding/Showing multi-bar rests on page 777

## Hiding/Showing system break signposts

You can hide/show system break signposts at any time.

PROCEDURE

- Choose **View** > **Signposts** > **System Breaks**.

RESULT

System break signposts are shown when a tick appears beside **System Breaks** in the menu, and hidden when no tick appears.

## Deleting system breaks

You can delete system breaks after you have inserted them.

PREREQUISITE

System break signposts are shown.

PROCEDURE

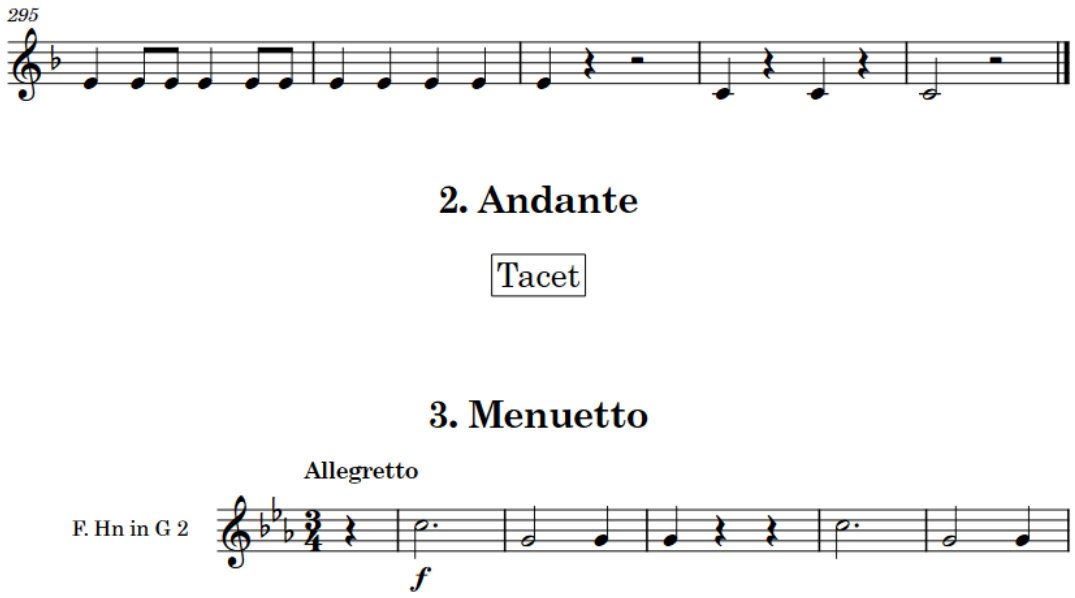
1. Select the system break signposts of the system breaks you want to delete.
2. Press **Backspace or Delete**.

# Tacets

Tacet is the indication used to show that a player does not play anything in an entire flow, which might be a movement in a symphony or cue in a film score. In Dorico Elements, you can generate tacets automatically.

Dorico Elements shows tacets for flows in part layouts when the following conditions are met:

- You have removed the player from the flows in which they do not play.
- The flows are assigned to the part layout.
- The flows are assigned to the master page frame chain in the part layout.
- You have chosen to show tacets in the part layout.




An extract of a part layout where the player is tacet in the second flow

NOTE

We do not recommend that you use **Copy Staff Spacing** and **Lock Frame** on pages where tacets are the first or last system in frames. Because tacets do not contain any bars, Dorico Elements cannot insert system or frame breaks at the ends of tacets in order to lock the frame contents.

However, you can insert system and frame breaks at the start of tacets.

You can change the text shown in tacets and the margin above/below them in each layout independently.

RELATED LINKS
Changing the players assigned to flows on page 129
Allowing/Disallowing multiple flows on the same page on page 336
Staff spacing on page 363
Inserting system breaks on page 346
Inserting frame breaks on page 345
Flow headings on page 329

## Hiding/Showing tacets

You can hide/show tacets in each layout independently, for example, if you want to show empty bars or multi-bar rests in some layouts to allow those players to add in notes on those staves later.

PREREQUISITE

- You have removed the player from the flows in which they do not play.
- The flows are assigned to the part layout.
- The flows are assigned to the master page frame chain in the part layout.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to hide/show tacets.

By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.

3. Click **Players** in the page list.
4. In the **Tacets** section, activate/deactivate **Show tacet for flows where no players are assigned**.
5. Click **Apply**, then **Close**.

RESULT

Tacets are shown in the selected layouts when **Show tacet for flows where no players are assigned** is activated and the prerequisite criteria are also met.

When it is deactivated, any flows to which the player is not assigned do not appear in the layout. When the player is assigned to those flows, all bars in the flow are shown in the part, split into empty bars and multi-bar rests as appropriate for the flow.

RELATED LINKS

Tacets on page 347
Multi-bar rests on page 777
Changing the players assigned to flows on page 129
Hiding/Showing multi-bar rests on page 777

## Editing tacet text

You can change the text shown in tacets in each layout independently.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts whose tacet text you want to edit.

   By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Players** in the page list.
4. In the **Tacets** section, enter the text you want in the **Tacet text** field.
5. Click **Apply**, then **Close**.

RESULT

The text shown in all tacets in the selected layouts is changed.

## Changing the margins above/below tacets

You can change the margins both above/below tacets in each layout independently, for example, if you want smaller gaps between flow headings and tacets in some layouts to facilitate page turns better.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to change the margins above/below tacets.

   By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.

3. Click **Players** in the page list.
4. In the **Tacets** section, change the values for **Margin above tacet** and/or **Margin below tacet**.
5. Click **Apply**, then **Close**.

RESULT

Changing the value for **Margin above tacet** increases/decreases the minimum gap between tacets and whatever precedes them.

Changing the value for **Margin below tacet** increases/decreases the minimum gap between tacets and whatever follows them.

RELATED LINKS

Flow headings on page 329

## Condensing

Condensing is the process of showing the music for multiple players on fewer staves than normal, usually by allowing multiple instruments of the same type to share a staff, such as Flutes 1-2 or Horns 1-4.

In Dorico Elements, you cannot enable automatic condensing as it is only available in Dorico Pro. However, if you import or open a project that contains layouts with condensing enabled, those staves remain condensed.

NOTE

- You cannot select anything on condensed staves.
- Condensing is never enabled in galley view. If you want to see all staves separately without disabling condensing in the current layout, you can switch to galley view.
- Having condensing enabled in any layout in a project can cause Dorico Elements to operate more slowly, due to the large number of calculations involved.

RELATED LINKS

Staff labels on condensed staves on page 800
Switching to galley/page view on page 56
Divisi on page 808

## Part formatting propagation

The propagation of part formatting involves copying the layout options and system formatting that determine the layouts of pages in specific part layouts and applying them to other part layouts. This can save time when formatting similar parts.

System formatting includes the positions of system and frame breaks, but also note spacing changes that affect the horizontal space that notes require.

In Dorico Elements, you can copy layout options and system formatting both together and independently of each other from a selected source layout to other destination layouts. For example, for source layouts whose formatting relies primarily on their **Casting Off** settings in **Setup** > **Layout Options**, it is likely that copying only their layout options is sufficient to produce the required formatting in the destination layouts without adding system/frame breaks on every system.

You can also copy the layout-specific property settings from the layout currently open in the music area to all other layouts in which those items appear.

NOTE

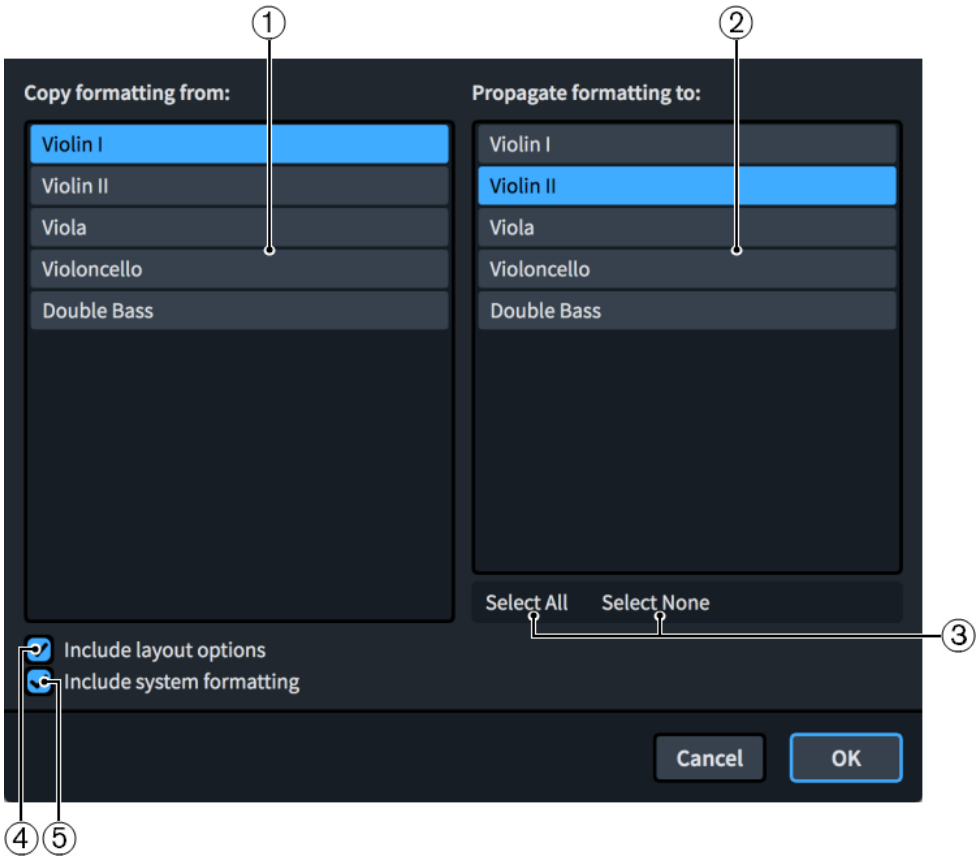
- Part formatting propagation is only available for part layouts. You cannot propagate part formatting from/to full score or custom score layouts.
- We do not recommend using layouts with multiple music frame chains as either source or destination layouts as you can get unexpected results.

## Propagate Part Formatting dialog

The **Propagate Part Formatting** dialog allows you to copy the page formatting and layout options from a source layout to destination layouts.

You can open the **Propagate Part Formatting** dialog in Setup mode in any of the following ways:

- Right-click a part layout in the **Layouts** panel and choose **Propagate Part Formatting** from the context menu. This automatically selects that layout as the source layout in the **Copy formatting from** list.
- Choose **Setup** > **Propagate Part Formatting**.




**Propagate Part Formatting** dialog

The **Propagate Part Formatting** dialog contains the following sections and options:

1 **Copy formatting from list**

Contains a list of all the part layouts in the project. You can only select a single part layout as the source layout.

2 **Propagate formatting to list**

Contains a list of all the part layouts in the project. You can select multiple part layouts as destination layouts.

3 **Selection options**

Allow you to select/deselect all the part layouts in the **Propagate formatting to** list.

4 **Include layout options**

Allows you to copy layout options relating to part formatting from the source layout to the destination layouts. These options include page size, page margins, the default master page set, space size, vertical spacing, note spacing, casting off, multi-bar rest settings, and staff labels.

5 **Include system formatting**

Allows you to copy the distribution of bars in systems, systems on pages, and note spacing changes from the source layout to the destination layouts. Dorico Elements achieves this by copying system breaks, frame breaks, and note spacing changes, inputting additional system and frame breaks as required, and deleting any existing system breaks, frame breaks, and note spacing changes in the destination layouts.

## Copying part formatting to other layouts

You can copy all the formatting from one part layout to other part layouts, for example, to save time if multiple part layouts in your project require similar formatting. You can include layout options, such as page size and margins, and other page formatting, such as system and frame breaks.

NOTE

- Part formatting propagation is only available for part layouts. You cannot propagate part formatting from/to full score or custom score layouts.
- We do not recommend using layouts with multiple music frame chains as either source or destination layouts as you can get unexpected results.

PROCEDURE

1. In the **Layouts** panel in Setup mode, right-click the card of the part layout whose part formatting you want to copy and choose **Propagate Part Formatting** from the context menu.
2. In the **Copy formatting from** list, select the part layout whose part formatting you want to copy.

   By default, the layout whose card you used to open the dialog is selected.
3. In the **Propagate formatting to** list, select the part layouts to which you want to copy part formatting.

   You can use the selection options in the action bar, **Shift**-click adjacent layouts, and **Ctrl/Cmd**-click individual layouts.
4. Activate/Deactivate **Include layout options**.
5. Activate/Deactivate **Include system formatting**.
6. Click **OK** to copy part formatting to the selected layouts and close the dialog.

RESULT

Part formatting from the selected source layout is copied to the selected destination layouts.

- If you activated **Include layout options**, layout options are copied from the source layout to the destination layouts.
- If you activated **Include system formatting**, Dorico Elements copies the distribution of bars in systems, systems on pages, and note spacing changes from the source layout to the destination layouts.

TIP

If the formatting of the source layout relies primarily on its **Casting Off** settings in **Setup** > **Layout Options**, it is likely that only activating **Include layout options** is sufficient to produce very similar formatting in the destination layouts without adding system/frame breaks on every system.

## Copying property settings to other layouts

Many properties are layout-specific, meaning they only affect the layout currently open in the music area. You can copy the properties set on notes and items to all other layouts in which they appear, for example, to show gradual dynamics with the same style in part layouts after changing their style in the full score layout.

PROCEDURE

1. Select the notes or items whose properties you want to copy to other layouts.
2. Choose **Edit** > **Propagate Properties**.

RESULT

All properties set on the selected notes/items are copied to all layouts in which those notes/items appear.

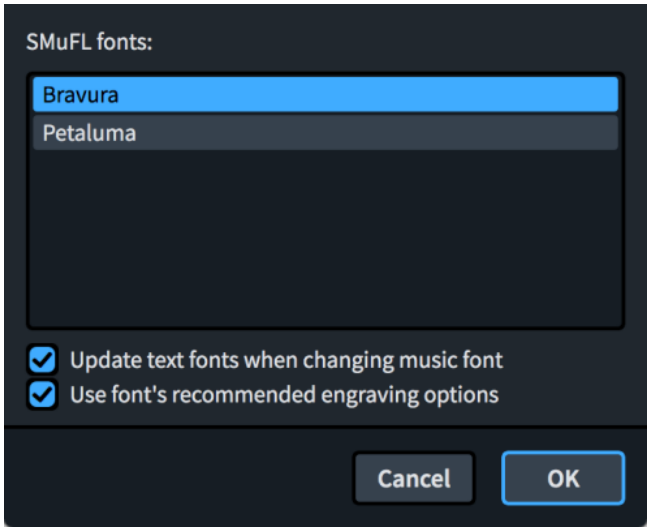
RELATED LINKS

Large selections on page 303
Resetting the appearance of items on page 310
Resetting the position of items on page 311

# Music Fonts dialog

The **Music Fonts** dialog allows you to change the font used for notations and glyphs project-wide. Any font you use for notations and glyphs must be SMuFL-compliant.

- You can open the **Music Fonts** dialog by choosing **Edit** > **Music Fonts**.




**Music Fonts** dialog

The dialog contains all available SMuFL fonts you have installed on your computer that have the appropriate metadata for Dorico Elements to recognize them. By default, Dorico Elements comes with the following SMuFL-compliant fonts:

- **Bravura**: The default music font, inspired by traditional classical music engraving.
- **Petaluma**: Handwritten music font style, similar to the traditional style used for jazz music.

Changing the music font used in the **Music Fonts** dialog changes the fonts used for notations, glyphs, and other items that are not text, such as clefs, dynamics, and bold tuplet numbers/ratios.

The **Music Fonts** dialog also contains the following options:

**Update text fonts when changing music fonts**

Allows you to include/exclude text fonts when changing the music font. For example, deactivating this option allows you to change the appearance of notes and notations without affecting the appearance of flow titles and staff labels.

- For the Bravura music font, the equivalent text font is Academico.
- For the Petaluma music font, the equivalent text font is Petaluma Script.

**Use font's recommended engraving options**

Allows you to import the default settings that come with the font.

NOTE

Certain items that are marked as optional in SMuFL fonts, such as clef changes and non-bold tuplet numbers/ratios, are not affected when you change the music font.

# Text objects vs. text in text frames

Text in Dorico Elements can exist as a text object, added to individual staves or as system text, and in text frames, which are fixed to the page rather than the music.

As you cannot see or edit frames in Dorico Elements, both types of text look very similar. You can tell the difference between text objects and text in text frames by clicking them once: if the text appears highlighted with an attachment line to a staff, it is a text/system text object. If the text does not appear highlighted or has no attachment line, it is in a text frame.

You can edit both types of text in the same ways, but you can only use text tokens in text frames. You cannot use tokens in text added to staves/systems.

NOTE

The project title, page numbers, and running headers that are automatically shown in layouts are in text frames. Their contents and formatting come from master pages, which you cannot edit or create in Dorico Elements. Editing text frames in layouts is considered a master page override. Pages with master page overrides are not automatically deleted, even if they are empty because the layout became shorter.

If you want to change the information shown at the tops of pages, we recommend that you do so in the **Project Info** dialog to avoid master page overrides. The big title at the top of the first page is the project title, and the running header on subsequent pages uses the flow title for the top flow on that page.

RELATED LINKS
Editing text on page 300
Text tokens on page 355

# Text tokens

Text tokens are codes that you can use as substitutes for information stored in your project, such as titles, composers, and the time and date. This can reduce the risk of mistakes or outdated information appearing in your project. Text tokens are also known as “wildcards” or “text codes”.

For example, if you use a token for the title of your project, you can change the project title in the **Project Info** dialog as often as you want, and the project title in every layout in your project is updated automatically.

Tokens can refer to information in the **Project Info** dialog, including for the whole project or each flow individually. Tokens can also refer to the current time and date or the time and date the project was last saved.

NOTE

- You can only use text tokens in text frames. You cannot use tokens in text/system text objects.
- Flow tokens refer to the nearest flow below the top edge of their text frame. When the top edge of a text frame containing a flow token is in line with or above the top staff line of the first staff in a system, it then refers to that flow.

  You can specify the flow number to which you want flow tokens to refer, such as **{@flow2title@}**. This always shows the specified flow, regardless of the token’s position.

  You can see the flow number of each flow in the **Flows** panel in Setup mode.

The following tokens are available in Dorico Elements.

TIP

You can access all the available tokens from the context menu when the cursor is inside a text frame. In the context menu, tokens are organized into submenus.

**General tokens**

| Description | Token |
|---|---|
| Page number | **{@page@}** |
| Player list | **{@playerlist@}** |
| Player names | **{@playernames@}** |
| Layout name | **{@layoutname@}** |
| Layout number, as set in the **Layouts** panel in Setup mode | **{@layoutnumber@}** |

**Staff label tokens**

| Music symbol | Token |
|---|---|
| Full staff labels of the players in the current layout | **{@staffLabelsFull@}** |

| Music symbol | Token |
|---|---|
| Abbreviated staff labels of the players in the current layout | **{@staffLabelsShort@}** |

You can use staff label tokens, for example, as an alternative way to name part layouts, instead of using the default **{@layoutName@}** token shown at the top left of the first page in part layouts.

NOTE

Staff label tokens might not exactly match the appearance of staff labels shown before initial barlines; however, staff label tokens respect your per-layout options for how transpositions appear in staff labels.

**Music symbol tokens**

| Music symbol | Token |
|---|---|
| Flat accidental: ♭ | **{@flat@}** |
| Sharp accidental: ♯ | **{@sharp@}** |
| Natural accidental: ♮ | **{@natural@}** |
| Treble clef | **{@U+E050@}** |
| Fermata above | **{@U+E4C0@}** |

TIP

- This list is not comprehensive, as you can enter the code point for any SMuFL symbol within a token. You can find the necessary code points in the SMuFL specification online.
- Music symbol tokens in text frames automatically use the **Music text** character style, which is set to Bravura Text by default.
- You can include music symbol tokens in fields in the **Project Info** dialog. For example, if you enter **Symphony in B{@flat@} major** into the **Title** field, the title displayed in text frames using the corresponding title token is Symphony in B♭ major.

**Project/Flow-specific information tokens**

| Field in the Project Info dialog | Token for Project page | Token for Flow pages |
|---|---|---|
| **Title** | **{@projecttitle@}** | **{@flowtitle@}** |
| **Subtitle** | **{@projectsubtitle@}** | **{@flowsubtitle@}** |
| **Dedication** | **{@projectdedication@}** | **{@flowdedication@}** |
| **Composer** | **{@projectcomposer@}** | **{@flowcomposer@}** |

| Field in the Project Info dialog | Token for Project page | Token for Flow pages |
|---|---|---|
| **Arranger** | **{@projectarranger@}** | **{@flowarranger@}** |
| **Lyricist** | **{@projectlyricist@}** | **{@flowlyricist@}** |
| **Artist** | **{@projectartist@}** | **{@flowartist@}** |
| **Copyist** | **{@projectcopyist@}** | **{@flowcopyist@}** |
| **Publisher** | **{@projectpublisher@}** | **{@flowpublisher@}** |
| **Editor** | **{@projecteditor@}** | **{@floweditor@}** |
| **Copyright** | **{@projectcopyright@}** | **{@flowcopyright@}** |
| **Work number** | **{@projectworknumber@}** | **{@flowworknumber@}** |
| **Composer dates** | **{@projectcomposerdates@}** | **{@flowcomposerdates@}** |
| **Composition year** | **{@projectcompositionyear@}** | **{@flowcompositionyear@}** |
| **Other information** | **{@projectotherinfo@}** | **{@flowotherinfo@}** |

**Per-flow tokens**

| Per-flow token function | Token |
|---|---|
| Flow number of the current flow, according to its position in the **Flows** panel in Setup mode | **{@flownumber@}** |
| Flow number of the current flow, according to its position in the current layout. | **{@flowInLayoutNumber@}** |
| Flow number of the current flow shown in lower case Roman numerals, such as iii or xvi | **{@flowNumberRomanLower@}** |
| Flow number of the current flow shown in upper case Roman numerals, such as III or XVI | **{@flowNumberRomanUpper@}** |
| Number of this page within the current flow, counting from 1 | **{@flowPage@}** |
| Total number of pages in the current flow | **{@flowPageCount@}** |
| The displayed page number on which the specified flow “n” begins, such as **{@flow3PageCount@}** | **{@flownPageCount@}** |
| Duration of the current flow in minutes and seconds | **{@flowDuration@}** |

| Per-flow token function | Token |
|---|---|
| Duration of the specified flow “n” in minutes and seconds, such as **{@flow3Duration@}** | **{@flownDuration@}** |

**Page number tokens**

| Page number token function | Token |
|---|---|
| Total number of pages in the layout | **{@pageCount@}** |
| Number of this page within the current flow, counting from 1 for the first page of the flow and including pages with no displayed page number | **{@flowPage@}** |
| Total number of pages in the current flow | **{@flowPageCount@}** |
| Displayed page number of the page on which the specified flow “n” begins, according to its position in the **Flows** panel in Setup mode, for example, **{@flow5FirstPage@}** | **{@flownFirstPage@}** |

NOTE

**{@flowPage@}** and **{@flowPageCount@}** tokens only consider the flow that is active at the beginning of the first system of the music frame closest to the top left corner of the page on which the tokens are used.

**Time/Date tokens to show when the project was last saved**

| Time/Date description | Time/Date example | Token |
|---|---|---|
| Standard date and time string (locale dependent) | Sun Dec 31 11:10:12 2017 | **{@projectdate@}** |
| Four-digit year | 2017 | **{@projectdateyear@}** |
| Two-digit year | 17 | **{@projectdateyearshort@}** |
| Full month name (locale dependent) | October | **{@projectdatemonth@}** |
| Short month name (locale dependent) | Oct | **{@projectdatemonthshort@}** |
| Month as a decimal number, range 1-12 | 10 | **{@projectdatemonthnum@}** |
| Full weekday name (locale dependent) | Friday | **{@projectdateday@}** |

| Time/Date description | Time/Date example | Token |
|---|---|---|
| Abbreviated weekday name (locale dependent) | Fri | **{@projectdatedayshort@}** |
| Day of month as decimal number, range 1-31 | 24 | **{@projectdatedaynum@}** |
| ISO 8601 date | 2017-12-31 | **{@projectdateymd@}** |
| Month day, year | December 31, 2017 | **{@projectdatemdy@}** |
| Day month year | 31 December 2017 | **{@projectdatedmy@}** |
| Time representation (locale dependent) | 11:10:12 | **{@projectdatetime@}** |
| Hours:minutes, hour in 24-hour clock range | 23:10 | **{@projectdatetimeHHMM@}** |
| Hours:minutes:seconds, hour in 24-hour clock range | 13:02:24 | **{@projectdatetimeHHMMSS@}** |
| Hour in 24-hour clock range | 23 | **{@projectdatetimehour24@}** |
| Hour in 12-hour clock range | 11 | **{@projectdatetimehour12@}** |
| Minute as decimal number, range 00-59 | 10 | **{@projectdatetimeminute@}** |
| Second as decimal number, range 00-59 | 44 | **{@projectdatetimesecond@}** |

**Time/Date tokens to show the current time and date**

| Time/Date description | Time/Date example | Token |
|---|---|---|
| Standard date and time string (locale dependent) | Sun Dec 31 11:10:12 2017 | **{@date@}** |
| Four-digit year | 2017 | **{@dateyear@}** |
| Two-digit year | 17 | **{@dateyearshort@}** |
| Full month name (locale dependent) | October | **{@datemonth@}** |
| Short month name (locale dependent) | Oct | **{@datemonthshort@}** |
| Month as a decimal number, range 1-12 | 10 | **{@datemonthnum@}** |

| Time/Date description | Time/Date example | Token |
|---|---|---|
| Full weekday name (locale dependent) | Friday | **{@dateday@}** |
| Abbreviated weekday name (locale dependent) | Fri | **{@datedayshort@}** |
| Day of month as decimal number, range 1-31 | 24 | **{@datedaynum@}** |
| ISO 8601 date | 2017-12-31 | **{@dateymd@}** |
| Month day, year | December 31, 2017 | **{@datemdy@}** |
| Day month year | 31 December 2017 | **{@datedmy@}** |
| Time representation (locale dependent) | 11:10:12 | **{@datetime@}** |
| Hours:minutes, hour in 24-hour clock range | 23:10 | **{@datetimeHHMM@}** |
| Hours:minutes:seconds, hour in 24-hour clock range | 13:02:24 | **{@datetimeHHMMSS@}** |
| Hour in 24-hour clock range | 23 | **{@datetimehour24@}** |
| Hour in 12-hour clock range | 11 | **{@datetimehour12@}** |
| Minute as decimal number, range 00-59 | 10 | **{@datetimeminute@}** |
| Second as decimal number, range 00-59 | 44 | **{@datetimesecond@}** |

RELATED LINKS
Project Info dialog on page 98
Player, layout, and instrument names on page 135
Flow names and flow titles on page 140
Renumbering layouts on page 134
Instrument transpositions in staff labels on page 796

## Adding borders to text objects

You can add borders to text and system text objects individually, for example, if you want to make the boundaries of text objects clear.

PROCEDURE

1. Select the text objects to which you want to add borders.
2. In the Properties panel, activate **Border** in the **Text** group.

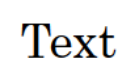
RESULT

Borders are added to the selected text objects.

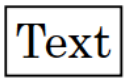
TIP

- You can show borders on text objects in addition to erasing their background.
- Deactivating **Border** removes borders from the selected text objects.

EXAMPLE




Text with no border




Text with border shown

# Note spacing

The positions of notes and rests relative to each other, and the automatic gaps between them, are known as note spacing.

- You can change the default note spacing values for each layout independently on the **Note Spacing** page in **Setup** > **Layout Options**.

The options available include changing the default space for quarter notes (crotchets) and the scale space for grace notes and cues. You can also change the minimum percentage value for how full final systems must be before they are justified.

RELATED LINKS

Layout Options dialog on page 100
Staff spacing on page 363
Changing the default staff size on page 333

## Changing the default note spacing

You can change the default note spacing in each layout independently. For example, you can have tighter note spacing in full score layouts compared to part layouts. The options available include changing the default space for quarter notes and the scale space for grace notes and cues.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to change note spacing.

   By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Note Spacing** in the page list.
4. Change the values of the options you want to change.
5. Click **Apply**, then **Close**.

RESULT

The default note spacing is changed in the selected layouts.

RELATED LINKS
Changing the horizontal justification of final systems on page 340

# Note Spacing page in Layout Options

The **Note Spacing** page in **Layout Options** allows you to change the default values for note spacing in each layout independently. You can also change how full the final system in flows must be before it is automatically justified.

- You can access the **Note Spacing** page by choosing **Setup** > **Layout Options** and clicking **Note Spacing** in the page list.

The **Note Spacing** page in **Layout Options** contains the following options:

**Default space for crotchet/quarter note**

Sets the default note spacing for quarter notes (crotchets). The spacing of other durations is scaled proportionally. Increasing the value increases note spacing, decreasing the value decreases note spacing. This is reflected in the preview as you change the value.

**Minimum space for short notes**

Sets the minimum note spacing for notes with short durations. This can be independent of the default note spacing value.

**Custom spacing ratio**

Sets the spacing of notes in relation to other notes according to their rhythmic values. For example, setting **Custom spacing ratio** to **2** means half notes (minims) take up twice as much space as quarter notes, and eighth notes (quavers) take up half as much space as quarter notes.

**Scale space for grace notes by**

Sets the note spacing for grace notes as a percentage of the note spacing normally used for notes of their duration. The value cannot be greater than 100%. Increasing the value increases the note spacing for grace notes, decreasing the value decreases the note spacing for grace notes.

**Scale space for cue notes by**

Sets the note spacing for cues as a percentage of the note spacing normally used for notes of their duration. The value cannot be greater than 100%. Increasing the value increases the note spacing for cues, decreasing the value decreases the note spacing for cues.

**Make space for lyrics**

Controls whether or not lyrics are included in note spacing calculations. When deactivated, lyrics are excluded from note spacing calculations, producing a result where notes are spaced as if lyrics were not there.

We recommend using this option with caution and only if you intend to space lyrics manually, such as in tightly-spaced hymnals.

**Only justify final system in flow when more than [n]% full**

Allows you to change how full the final system in each flow must be before it is justified to the full width of the frame. By default, final systems that are 50% full or less are not justified.

**Use optical spacing for beams between staves**

When activated, stems in cross-staff beams are evenly spaced, which can mean the noteheads are unevenly spaced. When deactivated, noteheads in cross-staff beams are evenly spaced, which can mean stems appear unevenly spaced.

RELATED LINKS
Optical spacing for cross-staff beams on page 518
Creating cross-staff beams on page 517

# Staff spacing

The vertical positioning of staves and systems within frames is known as staff spacing. Staff spacing calculations consider the height of staves and the necessary gaps between staves and systems.

- You can change the default vertical and staff spacing settings for each layout independently on the **Vertical Spacing** page in **Setup** > **Layout Options**.

The options available allow you to set your ideal spacing, which Dorico Elements then produces as closely as possible. We recommend familiarizing yourself with the available vertical spacing options.

RELATED LINKS
Staff size on page 341
Staves on page 801
Changing the default staff/system spacing on page 333
Changing the staff spacing in galley view on page 365
Changing the default staff size on page 333
Note spacing on page 361

## Per-layout vertical spacing options

Dorico Elements provides multiple options that you can use to control the default vertical spacing and justification of staves and systems in each layout.

- You can access per-layout vertical spacing options by choosing **Setup** > **Layout Options** and clicking **Vertical Spacing** in the page list.

The **Vertical Spacing** page contains the following sections and options:

**Ideal Gaps**

Contains multiple scenarios that allow you to set the gap you want Dorico Elements to allow between staves and systems in the corresponding context, including the default scaling of these gaps in galley view, as Dorico Elements does not automatically avoid collisions between staves and items in galley view. The options are accompanied by diagrams to help you visualize the contexts to which each option applies.

We recommend setting the ideal gaps to the minimum value acceptable to you because Dorico Elements never reduces the gap between staves to less than your set values. Setting smaller values gives Dorico Elements greater flexibility when determining staff spacing, particularly in very full frames, such as reducing the space between staves with no dynamics to allow more space between staves with dynamics. Similarly, we recommend setting vertical spacing options after you have finished inputting notes and items, as this allows you to consider the entire project when setting these options.

Depending on the context, the options are affected by automatic vertical justification in different ways:

- **Staff to staff**, **Staff group to staff**, **Staff to staff group**, **Staff group to staff group**, **Inter-system gap**, and **Timecode staff to staff**

  These gaps do not apply in frames that are automatically justified.
- **Braced staff to braced staff** and **Ossia staff to staff**

These gaps always apply, including in frames that are automatically justified, because braced and ossia staves are never justified. This includes extra staves.

NOTE

- Divisi staves are vertically justified when they use the **Staff to staff** gap. When they use the **Braced staff to braced staff** gap, the staves in each divisi section use only the gap set for braced staves and are not vertically justified.
- If the staves in a layout are very close together, just decreasing the staff size might be sufficient to produce good results.
- When calculating the number of systems that can fit in each frame in a layout, Dorico Elements considers the height of staves, the minimum gaps between staves, the maximum distances between very high/low notes and staves, and other items that require vertical space, such as pedal lines and tempo marks. However, this calculation happens before horizontal spacing is finalized, which can result in either more or fewer systems being allocated to frames than ideally fit. In such circumstances, you can use fixed casting off settings and system/frame breaks to change which systems appear in frames.

**Minimum Gaps**

Contains options for the minimum gaps you want Dorico Elements to allow for items in addition to the staff spacing gaps.

- **Automatically resolve collisions between adjacent staves and systems**: When activated, Dorico Elements automatically allows extra space between staves and systems to avoid collisions. When deactivated, Dorico Elements only uses your set gaps for vertical spacing, which produces evenly-spaced staves and systems but with the possibility of collisions between items.
- **Minimum inter-staff gap with content**: Allows you to set the extra space you want to allow between staves when items are present.
- **Minimum inter-system gap with content**: Allows you to set the extra space you want to allow between systems when items are present.

**Vertical Justification**

Contains options that allow you to control the frame fullness thresholds above which you want staves and/or systems to justify vertically automatically.

- **Justify distance between staves and systems when frame is at least [n]% full**: When frames are filled above this threshold, the staves and systems they contain are all automatically vertically justified, meaning they are evenly distributed to fill the height of the frame. Frames filled below this threshold are not automatically justified, instead staves follow your ideal gap settings. This can leave gaps between the bottom staff/system and the bottom of the frame.
- **Justify distance only between systems when frame is at least [n]% full**: When frames are filled above this threshold, only the distance between systems in the frame is justified. Staves follow your per-layout ideal gap settings. This helps keep a clear distance between systems on very full pages.
- **Justify staves when frame with single system is above this threshold**: When activated, all the staves in a single system taller than the set threshold are vertically justified, which distributes them evenly to fill the height of the frame.

**Hide Empty Staves**

Contains options allowing you to control when and which empty staves are hidden in the layout.

- **Hide empty staves**: Allows you to control when empty staves are hidden. For example, it is a common practice to show all staves in the first system even if some are empty, but this is not always required.

- **Allow individual staves of multi-staff instruments to be hidden**: Allows you to control whether individual empty staves belonging to multi-staff instruments can be hidden independently or all multi-staff instrument staves must always be shown.
- **Players excluded from Hide Empty Staves**: Allows you to identify specific players whose staves you always want to show, even if their staff is empty on systems where you have hidden empty staves.

RELATED LINKS
Page formatting on page 330
Casting off on page 344
Staff size on page 341
Brackets and braces on page 526
Staves on page 801
Ossia staves on page 803
Tablature on page 809
Changing the vertical justification of staves/systems on page 334
Changing the vertical position of markers on page 739
Changing the vertical position of timecodes on page 744

## Changing the staff spacing in galley view

You can change the vertical space between staves in galley view in each layout independently, expressed as a percentage of the set ideal gaps. Increasing the gaps between staves in layouts with very high/low notes can be useful because Dorico Elements does not perform automatic collision avoidance in galley view.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to change the staff spacing in galley view.

   By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Vertical Spacing** in the page list.
4. In the **Ideal Gaps** section, change the value for **In galley view, expand ideal staff gaps to**.
5. Click **Apply**, then **Close**.

# Play mode

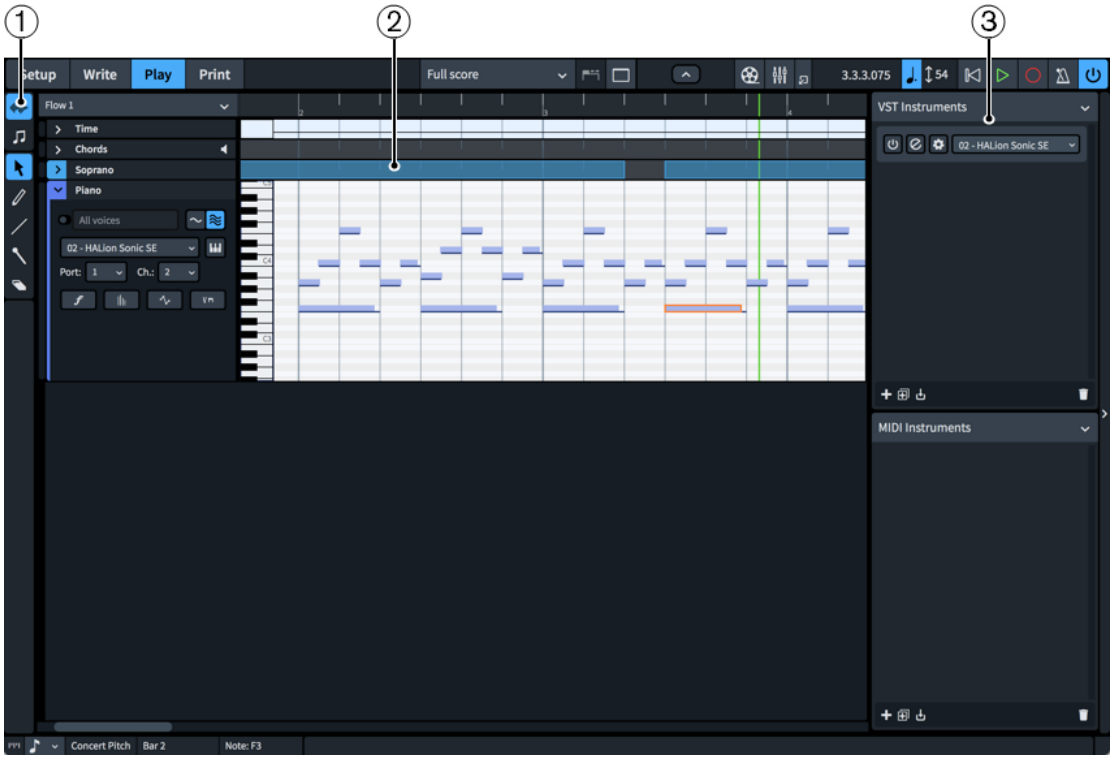
Play mode allows you to change how your music sounds in playback, including by changing the playback template and assigning VST instruments, inputting automation, adjusting the mix, and changing the sounding duration of notes in playback without affecting their notated duration.

## Project window in Play mode

The project window in Play mode contains the default toolbar and the event display, and also a toolbox and panels that contain all the tools and functions that allow you to set up your project for playback.

You can switch to Play mode in any of the following ways:

- Press **Ctrl/Cmd-4**.
- Click **Play** in the toolbar.
- Choose **Window** > **Play**.




Project window in Play mode

NOTE

There is no Properties panel in Play mode.

The project window in Play mode comprises the following:

1 **Play toolbox**
Contains tools that allow you to select and edit note events in the event display.

2 **Event display**

Allows you to view, input, and edit the playback of each flow in your project, including changing the played duration of notes and the tempo at any rhythmic position.

3 **VST and MIDI Instruments panel**

Allows you to load new VST and MIDI instruments. You can also select existing VST and MIDI instruments and edit their settings.

# Play toolbox

The Play toolbox contains tools that allow you to select and edit the note events in the event display in Play mode. It is located on the left of the window in Play mode.

**Played Durations**

Allows you to change when notes start/end in playback without affecting their notated durations. When **Played Durations** is selected, the played durations of notes are shown as a lighter event, above a thinner line that shows the notated duration of notes.

**Notated Durations**

Allows you to change the rhythmic duration of notes, which affects the position and notation of those notes. When **Notated Durations** is selected, the full, notated durations of notes are shown as single events in the piano roll editor.

**Object Selection**

Allows you to select events, such as notes in the piano roll editor/drum editor and points in automation lanes and dynamics lanes.

You can also select **Object Selection** by pressing **S**.

**Draw**

Allows you to input and edit notes in the piano roll editor and drum editor. You can click and drag in the piano roll editor to input notes with the durations you want. The ends of the notes you draw snap to rhythmic positions according to the current rhythmic grid resolution.

It also allows you to add points in the **Time** track and automation and velocity lanes. Using the **Draw** tool rather than the **Line** tool adds a point at regular intervals according to the current rhythmic grid resolution.

You can also select **Draw** by pressing **D**.

**Line**

Allows you to draw straight lines between two points in the **Time** track and automation and velocity lanes, without adding extra values between those points.

**Draw Percussion**

Allows you to add notes to percussion staves in the drum editor with one click. You do not have to click and drag to a duration when using **Draw Percussion**.

**Erase**

Allows you to delete notes. You can make marquee selections to delete multiple notes when **Erase** is selected.

You can also select **Erase** by pressing **E**.

TIP

To deselect **Erase**, select **Object Selection**.

RELATED LINKS

Inputting notes in the event display on page 375
Deleting notes in the event display on page 379
Time track on page 400
Automation lanes on page 393
Velocity lanes on page 390

# VST and MIDI Instruments panel

The VST and MIDI instruments panel contains the VST and MIDI instruments available and used in your project, and allows you to edit their settings. It is located on the right of the window in Play mode.


VST and MIDI Instruments panel

The VST and MIDI Instruments panel contains the following sections:

1 **VST Instruments**

2 **MIDI Instruments**

## VST Instruments

The **VST Instruments** section of the panel contains plug-in instances that each contain a VST instrument plug-in. Dorico Elements automatically loads plug-ins and enough plug-in instances for the instruments you add to your project according to the current playback template, but you can also load VST instruments manually.

Plug-in instances are automatically numbered to help you differentiate between instances when you have multiple instances of the same plug-in.

NOTE

Dorico Elements only shows VST 3 instruments in the **VST Instruments** section by default. If you also want VST 2 instruments to be available, you must whitelist them. Only Kontakt is available by default.


Each plug-in instance contains the following:

1 **Activate Instrument**
Activates/Deactivates the plug-in instance.

2 **Edit Instrument**
Opens/Closes the VST instrument window.

3 **Endpoint Setup**
Opens the **Endpoint Setup** dialog for the corresponding plug-in instance.

4 **VST Instruments menu**
Displays the VST instrument currently loaded in the plug-in instance and allows you to select another available VST instrument from the menu.

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

- **Add**: Adds a new empty plug-in instance.
  
- **Duplicate**: Creates a copy of the selected plug-in instance that you can edit separately from the original.
  
- **Save Endpoint Configuration**: Saves the current state of all plug-in instances in the section as a custom endpoint configuration.
  
- **Delete**: Deletes the selected plug-in instance.
  

## MIDI Instruments

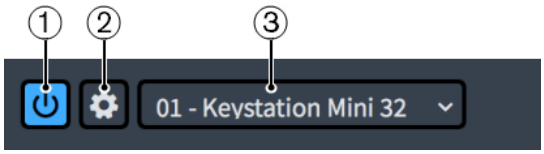
The **MIDI Instruments** section of the panel contains plug-in instances that each contain a MIDI device to use for output during playback. Which MIDI devices are available depends on your operating system.

- On Windows, you can select any MIDI device that is plugged into your computer.
- On macOS, you can select any MIDI device that is plugged into your computer, and any other device set up in the Audio MIDI Setup application. For example, this allows you to use MIDI from one application in another application.

TIP

We recommend plugging MIDI devices into your computer before starting Dorico Elements. Similarly, if your device is not recognized, we recommend restarting Dorico Elements.

Plug-in instances are automatically numbered to help you differentiate between instances when you have multiple instances of the same plug-in.




Each MIDI instance contains the following:

1 **Activate Instrument**

Activates/Deactivates the plug-in instance.

2 **Endpoint Setup**

Opens the **Endpoint Setup** dialog for the corresponding plug-in instance.

3 **MIDI Instruments menu**

Displays the MIDI device currently loaded in the plug-in instance and allows you to select another available MIDI device from the menu.

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

- **Add**: Adds a new empty plug-in instance.

- **Duplicate**: Creates a copy of the selected plug-in instance that you can edit separately from the original.

- **Save Endpoint Configuration**: Saves the current state of all plug-in instances in the section as a custom endpoint configuration.

- **Delete**: Deletes the selected plug-in instance.

RELATED LINKS
Playback templates on page 425
Endpoints on page 433
Endpoint Setup dialog on page 433

## Loading VST/MIDI instruments manually

Dorico Elements automatically loads the plug-in instances required for your project, according to the current playback template. However, you can also load VST/MIDI instruments manually, either into new plug-in instances or into existing ones to replace existing VST/MIDI instruments.

PREREQUISITE

- Any VST instruments you want to use are saved on your computer.
- You have connected any MIDI devices you want to use.

TIP

We recommend plugging MIDI devices into your computer before starting Dorico Elements. Similarly, if your device is not recognized, we recommend restarting Dorico Elements.

PROCEDURE

1. Optional: If you want to load a VST/MIDI instrument into a new plug-in instance, click **Add** in the corresponding section of the VST and MIDI Instruments panel.

2. In the plug-in instance into which you want to load a new VST/MIDI instrument, select the one you want to load from the menu.

RELATED LINKS

Playback templates on page 425

## Whitelisting VST instruments

You must whitelist any VST 2 instruments you want to use in Dorico Elements. After you have whitelisted plug-ins once, they are available in any project.

A default `vst2whitelist.txt` file is included with your Dorico Elements installation, which lists VST 2.x plug-ins that Steinberg has qualified for use with Dorico Elements.

PROCEDURE

1. Press **Ctrl/Cmd-,** (comma) to open **Preferences**.
2. Click **Play** in the page list.
3. In the **VST Plug-ins** subsection, click **Edit VST2 Whitelist** to open the `vst2whitelist.txt` file in a text editor.
4. Enter the names of the VST plug-ins you want to whitelist.

   NOTE

   - Each plug-in must have its own line in the text file.
   - Do not include the plug-in file extension (`.dll` on Windows and `.vst` on macOS).

5. Save and close the text file.
6. Click **Close** to close the **Preferences** dialog.
7. Quit Dorico Elements.

RESULT

When Dorico Elements next opens, your whitelisted VST plug-in entries are available for use in the program.

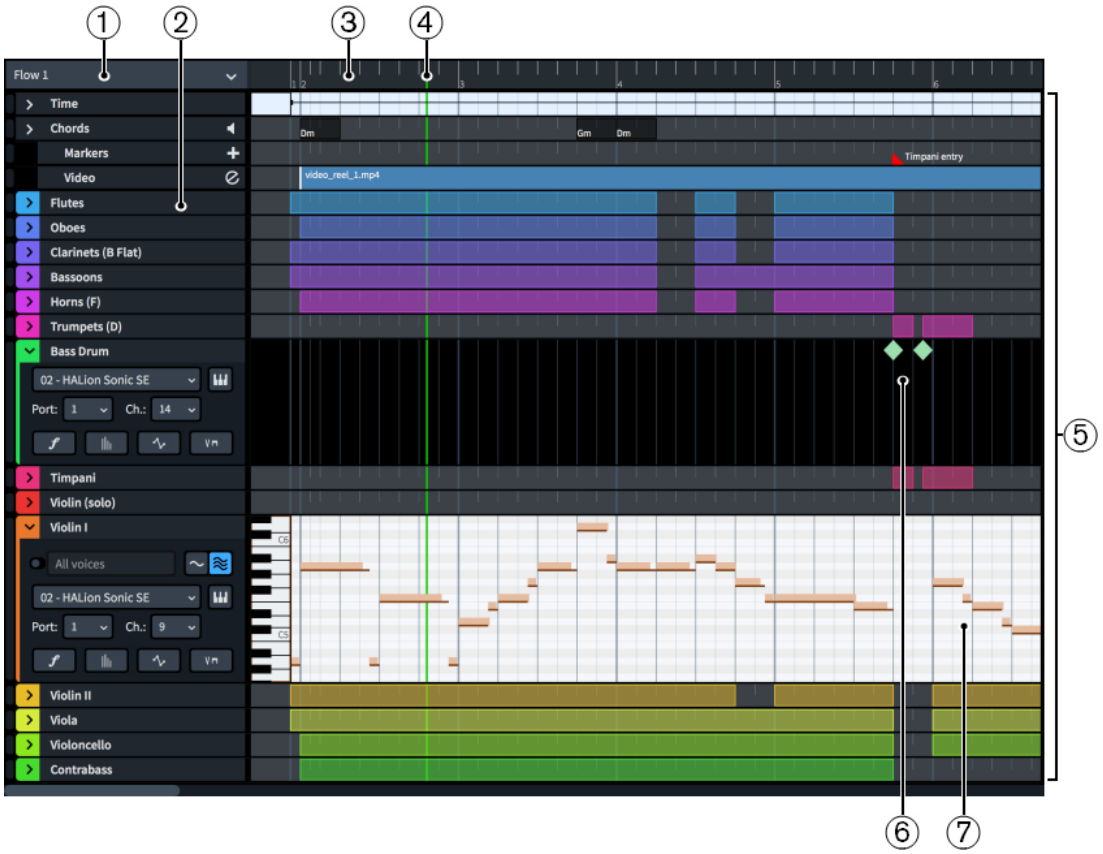
RELATED LINKS

Preferences dialog on page 58

# Event display

The event display in Play mode is the equivalent of the music area in Write mode. It allows you to view and edit your music, but focuses more on how it sounds in playback rather than its notation.

The event display presents your project in a similar way to that used in a digital audio workstation, or “DAW”, such as Cubase.




Event display in Play mode

The event display comprises the following:

1 **Flow menu**

Allows you to select the flow you want to be shown in the event display. Only a single flow is shown at a time.

2 **Track headers**

Display the name of each track and contain appropriate options for the track type. You can expand the track headers of some track types, which reveals further options.

3 **Ruler**

Displays bar numbers and shows beat divisions that match the current rhythmic grid resolution.

4 **Playhead**

Shows the current rhythmic position in playback.

5 **Tracks**

Horizontal rows that contain musical elements represented in time from left to right.

6 **Drum editor**

Displays notes for unpitched percussion instruments.

7 **Piano roll editor**

Displays notes for pitched instruments.

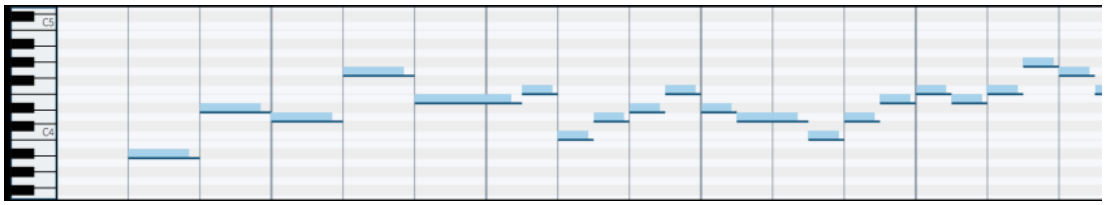
Tools and options in the Play toolbox allow you to input, edit, and delete notes and other events, such as tempo changes, in the event display.

RELATED LINKS
Playhead on page 410
Tracks on page 380
Play toolbox on page 367

## Piano roll editor

The piano roll editor displays MIDI notes for pitched instruments in a continuous sequence, with the vertical position of note events indicating their pitch.

In Dorico Elements, pitched instruments are displayed in an individual piano roll editor for their instrument track. Their notes are positioned vertically according to their pitch, which is demonstrated by a piano keyboard on the left edge of the piano roll editor. Notes are positioned horizontally according to their rhythm and duration.




Piano roll editor

Each instrument is automatically assigned a color when you add them in Setup mode, so that you can tell them apart more easily in Play mode. This color is used for notes in the piano roll on that instrument track, as well as shown as a strip on the instrument track header.

You can edit notes in the piano roll editor, including moving and transposing them.

NOTE

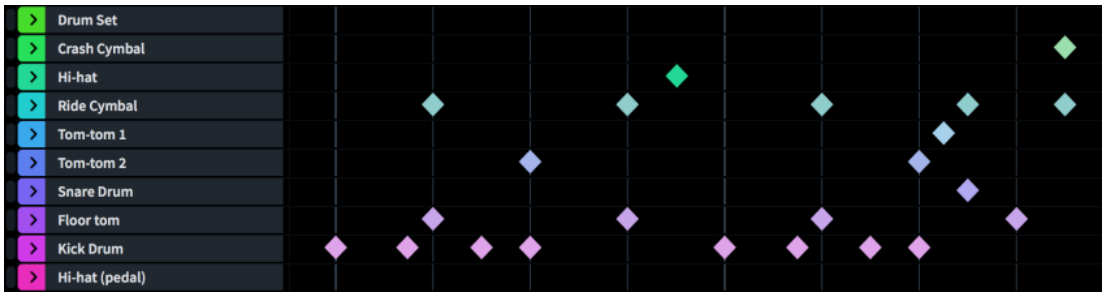
- When instrument tracks have independent voice playback enabled, you can show notes in all voices or only in a single voice in the piano roll editor. By default, the piano roll editor shows all notes belonging to all voices for the corresponding instrument.
- Editing the played duration of notes causes them to appear in a darker color in the piano roll editor to notes whose played duration you have not changed.

RELATED LINKS
Instrument tracks on page 381
Played vs. notated note durations on page 456
Enabling independent voice playback on page 413

## Drum editor

The drum editor displays MIDI notes for unpitched percussion instruments in a continuous sequence. The drum editor appears different to the piano roll editor and has different functionality.

Instead of showing the piano roll view as used in the piano roll editor, in the drum editor the onset of each note on each percussion instrument is shown. Each note is shown as an event of the same size, unlike note events in the piano roll, whose width reflects the duration of the notes.




Drum editor

Each unpitched percussion instrument has its own instrument track, including when they are in a percussion kit. You can expand unpitched percussion instrument tracks like other instrument tracks if you want to make changes, such as assigning the instrument to another playback endpoint.

NOTE

If you change the endpoint for an unpitched percussion instrument, that endpoint must have an appropriate percussion map chosen, otherwise Dorico Elements does not know how to play the music for that instrument.

You can move notes in the drum editor to new rhythmic positions. Unpitched percussion instruments only have one vertical position for their notes, so you cannot transpose notes in the drum editor.

RELATED LINKS
Instrument tracks on page 381
Expanding/Collapsing tracks on page 409

## Inputting notes in the event display

You can input notes into the instruments in your project using the event display in Play mode. You can follow these steps for both pitched and unpitched instruments.

PREREQUISITE

If you want to input notes into a specific voice for an instrument, you have:

- Created that voice in Write mode and input at least one note into it.
- Enabled independent voice playback for that instrument.

PROCEDURE

1. Optional: If you want to input notes for pitched instruments, expand those instrument tracks.
2. Optional: If you want to input notes into a specific voice, select that voice from the **Voice** menu.
3. Select one of the following tools, depending on the instrument type:
   - To input notes in pitched instrument tracks, select **Draw** by pressing **D** or clicking **Draw** in the Play toolbox.

     
   - To input notes in unpitched percussion instrument tracks, select **Draw Percussion** by clicking **Draw Percussion** in the Play toolbox.

4. Input notes in one of the following ways, depending on the instrument type:
   - For pitched instruments, click and drag horizontally in the piano roll for the required duration at the pitch position you want.
   - For unpitched percussion instruments, click in the drum editor at the positions where you want to input notes.

RESULT

In the piano roll editor, notes are input at the pitches indicated by the piano keyboard on the left of the piano roll. If you selected a voice from the **Voice** menu, they are input into that voice, otherwise notes are input into the first available voice for that instrument.

In the drum editor, a note is input in the corresponding instrument each time you click. The current rhythmic grid resolution determines the duration of the notes. The duration of notes is indicated by a highlighted area in the track. The shape of the note event in the drum editor is the same for all durations.

AFTER COMPLETING THIS TASK

You can change both the notated and played durations of notes. You can also change the duration of notes in the score in Write mode.

RELATED LINKS

Instrument tracks on page 381
Expanding/Collapsing tracks on page 409
Changing the played duration of notes on page 456
Changing the duration of notes on page 168
Inputting notes into multiple voices on page 171
Changing the voice of existing notes on page 319
Enabling independent voice playback on page 413

## Moving notes in the event display

You can move notes rhythmically within the event display. This also affects how the selected notes are notated in any relevant score and part layouts.

PREREQUISITE

- **Notated Durations** is selected in the Play toolbox.
- **Object Selection** is selected in the Play toolbox.

PROCEDURE

1. Optional: If you want to move notes belonging to pitched instruments, expand those instrument tracks.

   You can move notes belonging to unpitched percussion instruments without expanding their instrument tracks.

2. In the piano roll/drum editor, select the notes you want to move rhythmically.

   NOTE

   When instrument tracks have independent voice playback enabled, only notes in the currently selected voice appear in the piano roll editor. Selecting **All voices** from the **Voices** menu in the track header shows all notes belonging to the corresponding instrument.

3. Move the selected notes according to the current rhythmic grid resolution in any of the following ways:
   - Press **Alt/Opt-Right Arrow** to move them to the right.

- Press **Alt/Opt-Left Arrow** to move them to the left.
- Click and drag them to the right/left.

RESULT

The selected notes are moved to new rhythmic positions. If you selected multiple notes, they are moved together as a block.

NOTE

When using the keyboard, you can both transpose and move notes in the piano roll editor in the same action. When using the mouse, you must release the mouse between transposing and moving.

RELATED LINKS

Expanding/Collapsing tracks on page 409
Play toolbox on page 367
Enabling independent voice playback on page 413

## Lengthening/Shortening notes in the piano roll editor

You can change the duration of notes belonging to pitched instruments from within the piano roll editor in Play mode. This automatically changes the notated duration of notes in any relevant score and part layouts.

PREREQUISITE

- **Notated Durations** is selected in the Play toolbox.
- **Object Selection** is selected in the Play toolbox.

PROCEDURE

1. Expand the instrument tracks whose notes you want to lengthen/shorten.
2. In the piano roll editor, select the notes you want to lengthen/shorten.

   NOTE

   When instrument tracks have independent voice playback enabled, only notes in the currently selected voice appear in the piano roll editor. Selecting **All voices** from the **Voices** menu in the track header shows all notes belonging to the corresponding instrument.

3. Lengthen/Shorten the notes in any of the following ways:
   - To lengthen notes by the current rhythmic grid resolution, press **Shift-Alt/Opt-Right Arrow**.
   - To shorten notes by the current rhythmic grid resolution, press **Shift-Alt/Opt-Left Arrow**.
   - To double the length of notes, press **Ctrl/Cmd-Shift-Alt/Opt-Right Arrow**.
   - To halve the length of notes, press **Ctrl/Cmd-Shift-Alt/Opt-Left Arrow**.
   - Click and drag the right end of one of the selected notes to the length you want.

RESULT

The selected notes are lengthened/shortened.

NOTE

If you select multiple notes that end at different rhythmic positions and drag them with the mouse pointer, changing their duration forces all the notes to end at the same rhythmic position.

RELATED LINKS
Expanding/Collapsing tracks on page 409
Played vs. notated note durations on page 456
Changing the played duration of notes on page 456
Changing the duration of notes on page 168
Play toolbox on page 367
Enabling independent voice playback on page 413

# Transposing notes in the piano roll editor

You can transpose notes in the piano roll editor by moving them vertically to other pitch positions. You cannot transpose notes in the drum editor, or move them to other unpitched percussion instruments.

PREREQUISITE

**Object Selection** is selected in the Play toolbox.

PROCEDURE

1. Expand the instrument tracks whose notes you want to transpose.
2. In the piano roll editor, select the notes you want to transpose.

   NOTE

   When instrument tracks have independent voice playback enabled, only notes in the currently selected voice appear in the piano roll editor. Selecting **All voices** from the **Voices** menu in the track header shows all notes belonging to the corresponding instrument.

3. Transpose the notes in any of the following ways:
   - To move notes up one staff position, such as from C to D, press **Alt/Opt-Up Arrow**.
   - To move notes down one staff position, such as from D to C, press **Alt/Opt-Down Arrow**.
   - To transpose notes up a single octave division, such as a semitone in 12-EDO or a quarter tone in 24-EDO, press **Shift-Alt/Opt-Up Arrow**.
   - To transpose notes down a single octave division, such as a semitone in 12-EDO or a quarter tone in 24-EDO, press **Shift-Alt/Opt-Down Arrow**.
   - To transpose notes up an octave, press **Ctrl/Cmd-Alt/Opt-Up Arrow**.
   - To transpose notes down an octave, press **Ctrl/Cmd-Alt/Opt-Down Arrow**.
   - Click and drag them upwards/downwards.

RESULT

The selected notes are transposed according to their new pitch positions in the piano roll editor.

NOTE

- This also affects how the selected notes are notated in any relevant score and part layouts.

- When using the keyboard, you can both transpose and move notes in the piano roll editor in the same action. When using the mouse, you must release the mouse between transposing and moving.

RELATED LINKS
Moving notes in the event display on page 376
Equal Division of the Octave (EDO) on page 614
Play toolbox on page 367
Enabling independent voice playback on page 413

## Deleting notes in the event display

You can delete notes in the event display in Play mode. This also removes notes from any relevant score and part layouts.

NOTE

When instrument tracks have independent voice playback enabled, only notes in the currently selected voice appear in the piano roll editor. Selecting **All voices** from the **Voices** menu in the track header shows all notes belonging to the corresponding instrument.

PROCEDURE

1. Optional: If you want to delete notes from pitched instruments, expand those instrument tracks.
2. Optional: For instrument tracks with independent voice playback enabled, select one of the following from the **Voices** menu in the track header:
   - If you want to delete notes from one voice only, select that voice.
   - If you want to delete notes from multiple voices, select **All voices**.
3. Press **E** to select **Erase**.
4. Delete notes in any of the following ways:
   - Click individual notes.
   - Make a marquee selection to delete multiple notes at once.

     NOTE

     You can only make marquee selections on a single instrument, including percussion instruments in percussion kits.

RESULT

The notes you click or include in a marquee selection are deleted.

TIP

You can also delete notes by selecting **Object Selection** in the Play toolbox, then selecting the notes you want to delete and pressing **Backspace or Delete**.

RELATED LINKS
Selecting multiple items using marquee selections on page 302
Enabling independent voice playback on page 413

## Zooming in/out of tracks in the event display

You can change the zoom level in the tracks in the event display to make notes appear larger/smaller. This does not affect the height of tracks.

PROCEDURE

- Change the zoom in any of the following ways:
  - To make notes appear wider, press **Ctrl/Cmd-= or Z**.
  - To make notes appear narrower, press **Ctrl/Cmd-- or X**.
  - To make notes appear taller, **Shift**-click and drag upwards on the piano keyboard on the left.
  - To make notes appear shorter, **Shift**-click and drag downwards on the piano keyboard on the left.
  - To make notes appear wider and taller, spread two fingers outwards on a touchpad.
  - To make notes appear narrower and shorter, pinch two fingers together on a touchpad.
  - To make notes appear wider, click and drag downwards in the ruler.
  - To make notes appear narrower, click and drag upwards in the ruler.

RELATED LINKS
Changing the height of tracks on page 409

# Tracks

Tracks are rows in the event display that represent time horizontally from left to right. They allow you to control multiple musical elements in a project simultaneously but independently of each other.

The term was established when audio mixing was done on tapes, and multitracking allowed separate elements of the music to be recorded and edited independently of each other before being combined into the final piece of music.

In modern programs, such as Cubase, tracks can contain many types of sounds, including audio recordings and software instruments. Tracks containing audio recordings often display the waveform of the audio, while tracks containing software instruments often display the pitches as rectangular note events positioned horizontally in time and vertically in pitch on a piano roll.

Dorico Elements provides the following types of tracks in the event display in Play mode:

**Instrument tracks**

Display the notes belonging to the instrument in a piano roll editor or drum editor, depending on the type of instrument. Each instrument in the project has its own instrument track, including when a single player holds multiple instruments.

Each instrument track also has its own dynamics lane, velocity lane, automation lane, and playing techniques lane.

**Time track**

Displays tempo changes in the flow, including tempo marks input in Write mode as well as tempo changes input in the **Time** track.

**Chords track**

Displays any chord symbols in the flow.

**Markers track**

Displays any markers in the flow, including their text.

**Video track**

Shows any video regions in the flow, including their file names.

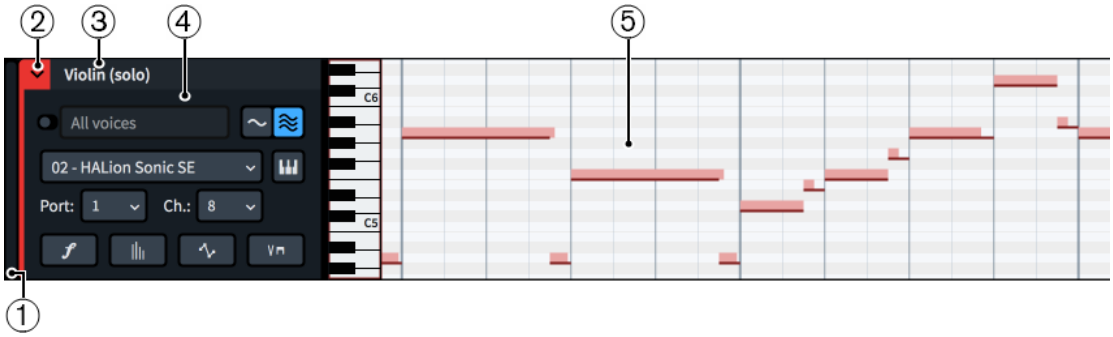
RELATED LINKS
Event display on page 372
Time track on page 400
Chords track on page 405
Markers track on page 407
Video track on page 408
Expanding/Collapsing tracks on page 409

# Instrument tracks

Instrument tracks allow you to view, input, and edit notes belonging to the corresponding instrument. Notes are displayed on a piano roll editor or drum editor, depending on the type of instrument.

Each instrument in the project has its own instrument track in the event display in Play mode, including when a single player holds multiple instruments. Instrument tracks are labeled using the full instrument name set for each instrument.

Instruments are automatically assigned a track color when you add them in Setup mode, so that you can tell them apart more easily in Play mode. This color appears around track disclosure arrows, as a strip on expanded instrument tracks, and is used for notes in the event display and events in lanes.




Each instrument track comprises the following:

1 **Track height adjuster**

Allows you to change the height of the track by clicking and dragging its bottom corner.

2 **Track disclosure arrow/Color strip**

The track disclosure arrow allows you to expand/collapse the track. The color strip displays the color assigned to the track. This color is also used for notes in the piano roll editor/drum editor, colored regions on collapsed instrument tracks, and events in the track's lanes.

- Collapsed instrument tracks show colored regions in the event display where the instrument has notes. You cannot select or move colored regions.
- Expanded instrument tracks show notes in either a piano roll editor or drum editor, depending on the instrument type.

3 **Track name**

Shows the name of the track. Instrument tracks use the full instrument name set in the **Edit Instrument Names** dialog for the instrument.

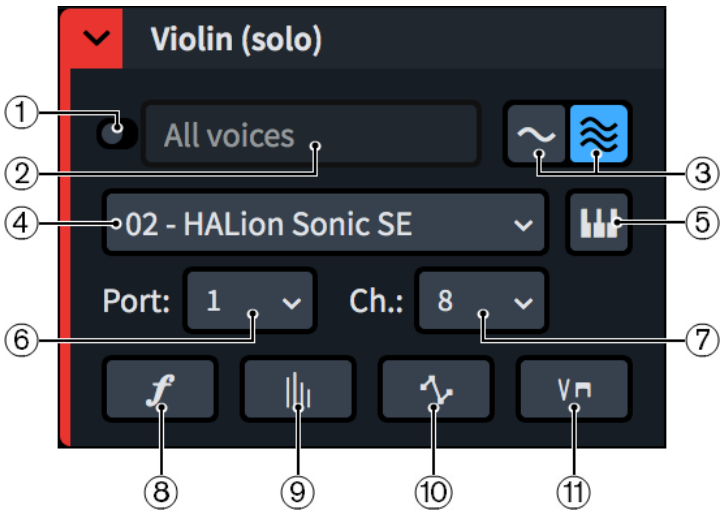
4 **Track header**

Contains appropriate options for instrument tracks, such as VST or MIDI port/channel menus.

5 **Piano roll editor/Drum editor**

Displays notes belonging to the instrument in either a piano roll editor or drum editor, depending on the instrument type.

## Instrument track headers




Each instrument track header contains the following:

1 **Enable independent playback of voices**

Allows you to enable/disable independent voice playback for the instrument track. When enabled, Dorico Elements automatically loads enough additional endpoints, and additional plug-in instances if necessary, to accommodate all voices belonging to the instrument.

2 **Voices menu**

Allows you to select individual voices or all voices belonging to the instrument. Only available when independent voice playback is enabled. Selecting different voices affects which notes appear in the piano roll editor or drum editor.

3 **Set for This Flow/Set for All Flows**

Allows you to determine whether changing the endpoint of the selected voice affects only its endpoint in the current flow or in all flows in the project. This selection only applies once to the changes you make immediately after choosing either **Set for This Flow** or **Set for All Flows**.

4 **Plug-in instance menu**

Allows you to select a VST or MIDI instrument plug-in instance to use for the instrument track or selected voice. Not available when independent voice playback is enabled and **All voices** is selected.

5 **Edit Instrument**

Opens the corresponding VST or MIDI instrument, which allows you to edit its settings.

6 **Port menu**

Allows you to change the endpoint to which the instrument or voice is assigned by selecting the port you want to use when using a plug-in that has multiple ports of 16 channels. Not available when independent voice playback is enabled and **All voices** is selected.

7 **Channel menu**

Allows you to change the endpoint to which the instrument or voice is assigned by selecting the channel in the selected VST or MIDI instrument that you want to use for the instrument track. Not available when independent voice playback is enabled and **All voices** is selected.

8 **Show the dynamics lane**

Hides/Shows the dynamics lane below the instrument track. Not available when independent voice playback is enabled and **All voices** is selected.

9 **Show the MIDI note velocity editor**

Hides/Shows the velocity lane below the instrument track.

10 **Show the automation lane**

Hides/Shows the automation lane below the instrument track. Not available when independent voice playback is enabled and **All voices** is selected.

11 **Show the playing techniques lane**

Hides/Shows the playing techniques lane below the instrument track. Not available when independent voice playback is enabled and **All voices** is selected.

RELATED LINKS
Expanding/Collapsing tracks on page 409
Event display on page 372
Piano roll editor on page 374
Drum editor on page 374
Playing techniques lanes on page 399
Automation lanes on page 393
Player, layout, and instrument names on page 135
Changing instrument names on page 139
Endpoint Setup dialog on page 433
Enabling independent voice playback on page 413
Assigning instruments/voices to endpoints on page 437

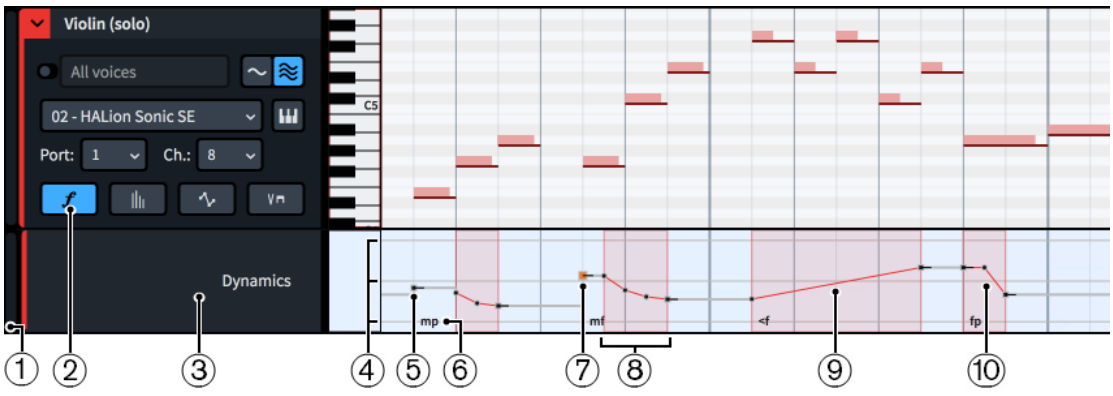
## Dynamics lanes

Dynamics lanes allow you to view, input, and edit the dynamics that apply to the corresponding instrument/voice. Each instrument track has its own dynamics lane that you can show in the event display.

- You can hide/show the dynamics lane for an instrument track/voice by clicking **Show the dynamics lane** in the instrument track header.

NOTE

For instrument tracks with independent voice playback enabled, you can only show the dynamics lane when a single voice is selected. You cannot show the dynamics lane for **All voices**.




Dynamics lane below an instrument track

Dynamics lanes comprise the following:

1 **Lane height adjuster**

Allows you to change the height of the lane by clicking and dragging its bottom corner.

2 **Show the dynamics lane**

Hides/Shows the dynamics lane. This button is located in the track header for the corresponding instrument track.

3 **Lane header**

Shows the name of the lane.

4 **Reference lines**

Indicate the vertical positions of the most common dynamic levels. The maximum range of dynamic levels is from 8 to -8, loudest to quietest.

- Top line: Dynamic level 3, equivalent to the dynamic ***ppp***
- Middle line: Dynamic level 0, equivalent to the dynamic ***mf***
- Bottom line: Dynamic level -3, equivalent to the dynamic ***fff***

5 **Dynamic event**

An immediate change in dynamic, input either in Write mode or using the **Draw** tool in the dynamics lane. Immediate dynamic events comprise a single point that is constant by default.

6 **Dynamic text**

Shows the text of the corresponding dynamic, if applicable, to help you identify different dynamics and orientate yourself within the flow. This is also useful when identifying whether points represent dynamics input in Write mode or were input directly in the dynamics lane, as the points of dynamics input in Write mode function differently, for example, when moving or deleting dynamic points.

7 **Selected dynamic point**

The currently selected dynamic point appears larger and highlighted.

TIP

Clicking and dragging dynamic points in the dynamics lane causes a read-out to appear temporarily, showing their dynamic level.

8 **Dynamic event region**

A highlighted region that contains multiple dynamic points, input by clicking and dragging in a single motion with the **Draw** or **Line** tools in the dynamics lane. When you use the **Draw** tool, points within a dynamic event region are constant by default. When you use the **Line** tool, dynamic event regions have a linear point at the start and a constant point at the end.

NOTE

Dynamic event regions that you input in the dynamics lane override default playback adjustments for dynamics, such as humanization and increased dynamics for notes with accents. However, the dynamic curve setting still applies to dynamic event regions.

9 **Gradual dynamic**

A smooth change in dynamic between two dynamic points, representing gradual dynamics input in Write mode. Gradual dynamics have a linear point at the start, a constant point at the end, and a highlighted region. *Messa di voce* gradual dynamic events have an additional linear point in the middle.

NOTE

Default playback adjustments for dynamics, such as humanization and increased dynamics for notes with accents, still apply to notes within gradual dynamics that you input in Write mode.

**10 Combined/Force dynamic**

A highlighted region that contains multiple dynamic points, representing combined or force dynamics input in Write mode, such as *fp* and *sffz*. Combined/Force dynamics have multiple points to control their envelopes. Combined dynamics have three points, while force dynamics have four points.

NOTE

Because the points of combined/force dynamics correspond to parameters of their envelopes, they function differently than other dynamic points. For example, if you change the value of the second point of a force dynamic, the third point also moves because it controls the duration of the second point.

RELATED LINKS

Making dynamic points constant/linear on page 386
Dynamics on page 558
Types of dynamics on page 558
Gradual dynamics on page 567
Input methods for dynamics on page 229
Play toolbox on page 367
Rhythmic grid on page 158
Enabling independent voice playback on page 413

## Showing dynamics lanes

You can show the dynamics lane for each instrument track independently.

PROCEDURE

1. Expand the instrument tracks whose dynamics lanes you want to show.
2. Optional: For instrument tracks with independent voice playback enabled, select a voice from the **Voice** menu.
3. In each instrument track header, click **Show the dynamics lane**.

RESULT

The dynamics lane for each instrument track is shown when the button is highlighted. For instrument tracks with independent voice playback enabled, the dynamics lane shows dynamics for the currently selected voice only.

TIP

You can hide dynamics lanes by clicking **Show the dynamics lane** again so the button is not highlighted.

## Inputting dynamic points

You can input dynamic points, including gradual dynamic events, in the dynamics lane for each instrument track. Dynamic points input in dynamics lanes do not appear in layouts.

PREREQUISITE

The dynamics lane is shown for each instrument to which you want to add dynamic points.

PROCEDURE

1. Select one of the following tools, depending on the type of dynamic points you want to input:

- To input single dynamic points, or dynamic event regions containing multiple dynamic points at regular intervals, select **Draw** by pressing **D** or clicking **Draw** in the Play toolbox.

- To input gradual dynamic events, select **Line** by clicking **Line** in the Play toolbox.

2. Input dynamic points in one of the following ways:
   - To input single dynamic points, click in the dynamics lane at each position where you want a dynamic point.
   - To input a dynamic event region containing multiple dynamic points at regular intervals, click and drag in a single motion in the dynamics lane.
   - To input gradual dynamic events, click and drag in the dynamics lane from where you want the gradual dynamics event to start to where you want it to end.

RESULT

Dynamic points are input. If you used the **Draw** tool, separate dynamic points are input at each position you clicked. If you clicked and dragged in a single motion using the **Draw** tool, dynamic points are input at sixteenth note intervals, or at smaller intervals if the rhythmic grid resolution is finer than sixteenth notes. If you used the **Line** tool, two dynamic points are input, one at each end of the range.

By default, dynamic points input using the **Draw** tool are constant while gradual dynamic events have a linear point at the start and a constant point at the end.

Gradual dynamic events and dynamic event regions appear with highlighted regions in the dynamics lane.

Dynamic points input in dynamics lanes affect playback but are not shown in layouts.

NOTE

Inputting dynamic points/events at the positions of dynamics input in Write mode overrides default playback adjustments for those dynamics. Single dynamic points only override the dynamic level. Dynamic event regions also override, for example, humanization and increased dynamics for notes with accents. However, the dynamic curve setting still applies to dynamic event regions.

RELATED LINKS

Play toolbox on page 367
Moving dynamic points on page 388
Input methods for dynamics on page 229

## Making dynamic points constant/linear

You can make individual dynamic points constant or linear after they have been input, for example, if you want to make constant points that you input by clicking and dragging using the **Draw** tool linear so they have smooth transitions between them.

By default, dynamic points you input in the dynamics lane are constant when you use the **Draw** tool and linear at the start when you use the **Line** tool.

NOTE

These steps do not apply to the points of dynamics input in Write mode.

PREREQUISITE

The dynamics lane is shown for each instrument whose dynamic points you want to make constant/linear.

PROCEDURE

1. Press **S** to select **Object Selection**.
2. Select the dynamic points you want to make constant/linear in one of the following ways:
   - Click a single dynamic point.
   - Make a marquee selection around multiple dynamic points.

   NOTE

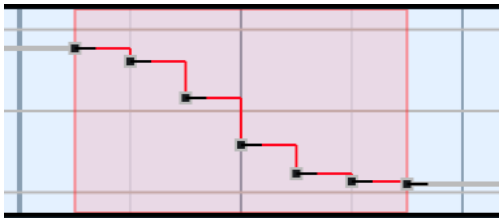
   You can only make dynamic points constant/linear in a single dynamics lane at a time.
3. Right-click in the dynamics lane and choose one of the following options from the context menu:
   - To make the selected points constant, choose **Make Points Constant**.
   - To make the selected points linear, choose **Make Points Linear**.

RESULT

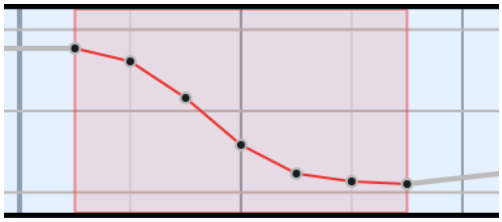
The selected dynamic points become constant or linear. Constant points appear as squares with short horizontal lines extending to their right, indicating that their value continues. Linear points appear as circles.

The value line always appears horizontal after constant points. The value line appears angled after linear points if the next point has a different value, indicating a smooth transition between the points.

EXAMPLE



Constant points in a dynamics lane



Linear points in a dynamics lane

## Copying and pasting dynamic points

You can copy and paste dynamic points, including to other dynamics lanes and repeating them directly after themselves in the same dynamics lane.

PREREQUISITE

The dynamics lane is shown for each instrument whose dynamic points you want to copy/paste.

PROCEDURE

1. Press **S** to select **Object Selection**.
2. Select the dynamic points you want to copy in one of the following ways:
   - Click a single dynamic point.
   - Make a marquee selection around multiple dynamic points.

NOTE

You can only copy and paste dynamic points in a single dynamics lane at a time.

3. Copy the selected dynamic points in any of the following ways:
   - Press **Ctrl/Cmd-C**.
   - Choose **Edit** > **Copy**. You can also choose this option from the context menu.
4. Move the playhead to the position to which you want to paste the selected dynamic points.
5. Paste the selected dynamic points in any of the following ways:
   - Select the header of the dynamics lane into which you want to paste them and press **Ctrl/Cmd-V**.
   - Right-click in the dynamics lane into which you want to paste them and choose **Paste** from the context menu.

RESULT

The selected dynamic points are copied to the selected positions and dynamics lanes without deleting them from their original positions.

NOTE

- All the points of dynamics input in Write mode are copied, even if you only selected a single point.
- You can also repeat selections of two or more dynamic points immediately after themselves by pressing **R**. Each repetition starts at the same position as the last point in the previous repetition. However, you cannot repeat single dynamic points or the points of immediate, combined, or force dynamics input in Write mode.

RELATED LINKS

Moving the playhead on page 410
Copying dynamics on page 563

## Moving dynamic points

You can move individual dynamic points, including moving them upwards and downwards to change their values and therefore their dynamic level. For example, if you want to adjust the volume of specific existing dynamics.

PREREQUISITE

The dynamics lane is shown for each instrument whose dynamic points you want to move.

PROCEDURE

1. Press **S** to select **Object Selection**.
2. Select the dynamic points you want to move in one of the following ways:
   - Click a single dynamic point.
   - Make a marquee selection around multiple dynamic points.

NOTE

- To move dynamics input in Write mode rhythmically, select only their start point, including for gradual dynamics and combined/force dynamics that have multiple points. We recommend only moving one dynamic rhythmically at a time.
- We recommend that you select either only points of dynamics input in Write mode or only points input in the dynamics lane.

- You can only move dynamic points in a single dynamics lane at a time.

3. Move the selected dynamic points in any of the following ways:
   - To move points input in the dynamics lane to the right/left only, **Ctrl/Cmd**-click and drag them to the right/left.
   - To move points input in the dynamics lane upwards/downwards only, **Ctrl/Cmd**-click and drag them upwards/downwards.

     NOTE

     - If you want to move dynamic points upwards/downwards by smaller increments, you can press **Alt** when dragging.
     - You cannot move dynamic points beyond other existing dynamic points during the same action when using the mouse. You must release the mouse before reselecting the dynamic point and move it further.

   - To move a single dynamic input in Write mode to the next notehead on the staff, press **Alt/Opt-Right Arrow**.
   - To move a single dynamic input in Write mode to the previous notehead on the staff, press **Alt/Opt-Left Arrow**.
   - To move points of dynamics input in Write mode to the right according to the current rhythmic grid resolution, press **Ctrl/Cmd-Alt/Opt-Right Arrow**.
   - To move points of dynamics input in Write mode to the left according to the current rhythmic grid resolution, press **Ctrl/Cmd-Alt/Opt-Left Arrow**.

     NOTE

     You can only move dynamics according to the current rhythmic grid resolution when multiple dynamics are selected.

RESULT

The selected dynamic points are moved to new positions. Moving them to the right/left affects their rhythmic positions. Moving them upwards/downwards affects their dynamic level.

Moving the end points of gradual dynamics to the right/left lengthens/shortens the corresponding gradual dynamics rhythmically. Their notated length is automatically updated in all applicable layouts.

NOTE

- Moving dynamic points for linked dynamics affects all linked dynamics.
- If a single dynamic input in Write mode passes over another dynamic input in Write mode as part of its move, the existing one is unaffected as multiple dynamics can exist at the same rhythmic position. However, if you move multiple dynamics input in Write mode together, any existing dynamics input in Write mode they pass over are deleted.

  You can undo this action, but any dynamics deleted in the process are only restored if you moved dynamics using the keyboard.

RELATED LINKS

Gradual dynamics on page 567
Lengthening/Shortening gradual dynamics and groups of dynamics on page 567
Moving dynamics rhythmically on page 560
Linked dynamics on page 574

## Deleting dynamic points

You can delete individual or multiple dynamic points.

PREREQUISITE

The dynamics lane is shown for each instrument whose dynamic points you want to delete.

PROCEDURE

1. Press **E** to select **Erase**.
2. Delete dynamic points in any of the following ways:
   - Click each dynamic point you want to delete.
   - Make a marquee selection around the dynamic points you want to delete.

RESULT

The dynamic points you click or include in a marquee selection are deleted. Deleting points that overrode dynamics that you input in Write mode reverts those dynamics to their default points. Deleting the points of dynamics input in Write mode also deletes the corresponding dynamics.

TIP

You can also delete dynamic points that you input in the dynamics lane by selecting **Object Selection** in the Play toolbox, then selecting the dynamic points you want to delete and pressing **Backspace or Delete**.

RELATED LINKS

Showing dynamics lanes on page 385

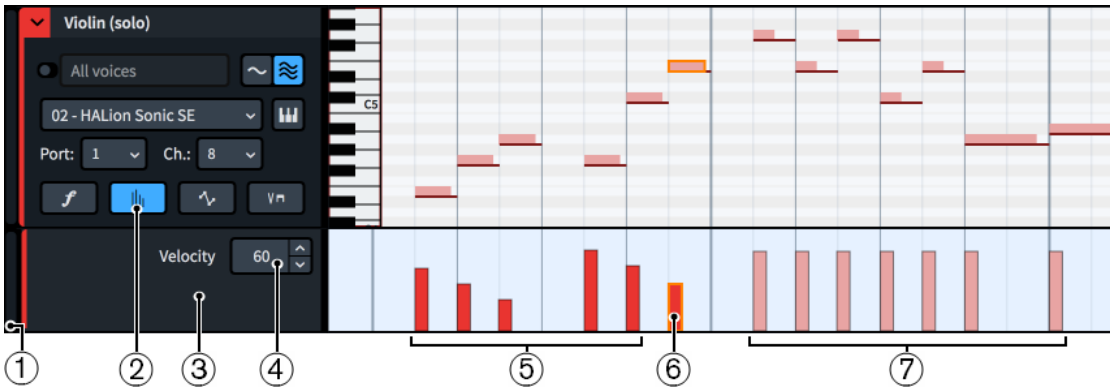
## Velocity lanes

Velocity lanes allow you to view and edit the velocity of each note in the corresponding instrument. Each instrument track has its own velocity lane that you can show in the event display.

- You can hide/show the velocity lane for an instrument track by clicking **Show the MIDI note velocity editor** in the instrument track header.

Velocity is often used to control the dynamics of non-sustaining instruments.

Velocities appear as vertical bars in the velocity lane. Each note belonging to each instrument has its own velocity. When multiple notes exist at the same rhythmic position, such as in chords, the velocities for all notes appear stacked on top of each other. You can select an individual velocity by selecting its corresponding note in the instrument track.




Velocity lane below an instrument track

Velocity lanes comprise the following:

1 **Lane height adjuster**

Allows you to change the height of the lane by clicking and dragging its bottom corner.

2 **Show the MIDI note velocity editor**

Hides/Shows the velocity lane. This button is located in the track header for the corresponding instrument track.

3 **Lane header**

Contains the velocity value field.

4 **Velocity value field**

Displays the velocity value of the currently selected note. You can change this value by changing the value in the value field.

5 **Velocities whose value has been changed**

When you have edited the velocity of notes, their velocities appear darker in the velocity lane.

6 **Selected note and velocity**

The currently selected notes and their velocities all appear highlighted.

7 **Velocities with default values**

All notes have a default velocity value of 100.

RELATED LINKS
Play toolbox on page 367
Instrument tracks on page 381
Inputting notes on page 164
Inputting notes in the event display on page 375

## Showing velocity lanes

You can show the velocity lane for each instrument track independently.

PROCEDURE

1. Expand the instrument tracks whose velocity lanes you want to show.
2. In each instrument track header, click **Show the MIDI note velocity editor**.

RESULT

The velocity lane for each instrument track is shown when the button is highlighted.

TIP

You can hide velocity lanes by clicking **Show the MIDI note velocity editor** again so the button is not highlighted.

## Changing the velocity of notes

You can change the velocity for each note, including for a single note in a chord or create a consistent increase/decrease in velocity across a range of notes.

PREREQUISITE

The velocity lane is shown for each instrument whose note velocity you want to change.

PROCEDURE

1. Select one of the following tools, depending on how you want to change velocities:
   - To change the velocity of one note at a time, select **Object Selection** by pressing **S** or clicking **Object Selection** in the Play toolbox.

     
   - To change the velocity using free shapes, select **Draw** by pressing **D** or clicking **Draw** in the Play toolbox.

     
   - To change the velocity using consistent slopes, select **Line** by clicking **Line** in the Play toolbox.

     
2. Optional: If you want to drag the velocity of a single note in a chord, select that note in the piano roll editor. This also selects its velocity bar.
3. Change the velocity in one of the following ways:
   - If you have **Object Selection** selected, click and drag the top of each velocity bar upwards/downwards.
   - If you have **Draw** selected, click and draw any shape across the required range in the velocity lane.
   - If you have **Line** selected, click and drag a line across the required range in the velocity lane.

RESULT

The velocity of the affected notes is changed. When using the **Draw** or **Line** tools, the velocities of all notes within the range are updated when you release the mouse.

## Removing changes to note velocity

You can remove changes you have made to the velocity of individual notes and reset them to their default velocity.

PROCEDURE

1. In the piano roll/drum editor, select the notes whose note velocity you want to reset.
2. Choose **Play** > **Reset Playback Overrides**.

RESULT

Any changes you have made to the velocity of the selected notes are reset.

NOTE

This also resets any other playback overrides for the selected notes.

## Automation lanes

Automation lanes allow you to view, input, and edit MIDI controller data that applies to the corresponding instrument/voice. Each instrument track has its own automation lane that you can show in the event display.

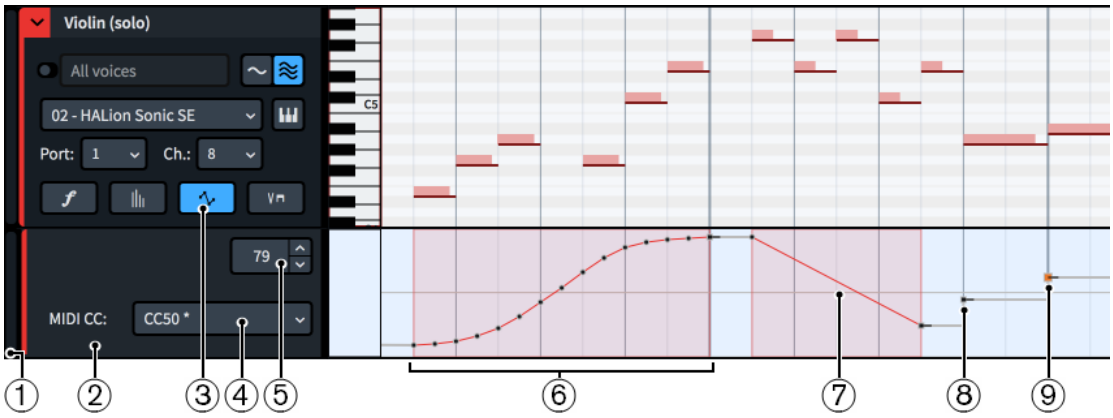
- You can hide/show the automation lane for an instrument track/voice by clicking **Show the automation lane** in the instrument track header.

  NOTE

  For instrument tracks with independent voice playback enabled, you can only show the automation lane when a single voice is selected. You cannot show the automation lane for **All voices**.

- You can change the MIDI controller whose data is displayed in the automation lane by selecting the controller from the menu in the automation lane track header.




Automation lane below an instrument track

Automation lanes comprise the following:

1 **Lane height adjuster**

Allows you to change the height of the lane by clicking and dragging its bottom corner.

2 **Lane header**

Contains the MIDI controller menu and MIDI value field.

3 **Show the automation lane**

Hides/Shows the automation lane. This button is located in the track header for the corresponding instrument track.

4 **MIDI Controller menu**

Allows you to select the MIDI controller whose automation data you want to view and edit in the automation lane. Controllers that already contain automation data are shown with an asterisk beside their name in the menu.

5 **Automation value field**

Displays the value of the currently selected automation point. You can change this value by changing the value in the value field. The available range depends on the type of controller. For example, MIDI CCs have values between 0 and 127.

6 **Automation event region**

A highlighted region that contains multiple automation points with smooth transitions between each event, input by clicking and dragging in a single motion with the **Draw** tool in the automation lane. By default, automation points within a region are linear and the last point is constant.

7 **Gradual automation event**

A smooth change in value between two automation points, input using the **Line** tool. Gradual automation events have a linear point at the start, a constant point at the end, and a highlighted region.

8 **Automation point**

A single change to the automation value, input using the **Draw** tool. Automation points are constant by default.

9 **Selected automation point**

The currently selected automation point appears larger and highlighted.

TIP

Clicking and dragging automation points in the automation lane causes a read-out to appear temporarily, showing their value.

Although only a single automation lane can be displayed, it is possible to create data for multiple MIDI controllers in the same lane.

Automation data is included when exporting MIDI files.

RELATED LINKS
Play toolbox on page 367
Instrument tracks on page 381
Making automation points constant/linear on page 396
Exporting MIDI on page 80

## Showing automation lanes

You can show the automation lane for each instrument track independently.

PROCEDURE

1. Expand the instrument tracks whose automation lanes you want to show.
2. Optional: For instrument tracks with independent voice playback enabled, select a voice from the **Voice** menu.
3. In each instrument track header, click **Show the automation lane**.

RESULT

The automation lane for each instrument track is shown when the button is highlighted. For instrument tracks with independent voice playback enabled, the automation lane shows automation for the currently selected voice only.

TIP

You can hide automation lanes by clicking **Show the automation lane** again so the button is not highlighted.

## Inputting automation data

You can input automation data for multiple MIDI controllers, including pitch bend, in the automation lane for each instrument track.

PREREQUISITE

The automation lane is shown for each instrument to which you want to add automation.

PROCEDURE

1. In each automation lane header, select the MIDI controller into which you want to input automation from the **MIDI Controller** menu.
2. Select one of the following tools, depending on the type of automation you want to input:
   - To input single automation points, or automation event regions containing multiple automation points at regular intervals, select **Draw** by pressing **D** or clicking **Draw** in the Play toolbox.

     
   - To input gradual automation events, select **Line** by clicking **Line** in the Play toolbox.

     
3. Input automation in one of the following ways:
   - To input single automation points, click in the automation lane at each position where you want an automation point.
   - To input an automation event region containing multiple automation points at regular intervals, click and drag in a single motion in the automation lane.
   - To input gradual automation events, click and drag in the automation lane from where you want the gradual automation event to start to where you want it to end.

   NOTE

   When you first start inputting pitch bend data, the horizontal line in the middle of the automation lane represents the unmodified pitch.

RESULT

Automation is input for the selected MIDI controller. If you used the **Draw** tool, separate automation points are input at each position you clicked. If you clicked and dragged in a single motion using the **Draw** tool, automation points are input at sixteenth note intervals, or at smaller intervals if the rhythmic grid resolution is finer than sixteenth notes. If you used the **Line** tool, two automation points are input, one at each end of the range.

By default, single automation points are constant, automation points in regions are linear, the last automation point in regions is constant, and gradual automation events have a linear point at the start and a constant point at the end.

Gradual automation events and automation event regions appear with highlighted regions in the automation lane.

RELATED LINKS

Moving automation points on page 398

## Making automation points constant/linear

You can make individual automation points constant or linear after they have been input, for example, if you want to make constant points linear so they have smooth transitions between them.

By default, automation points are constant when you input them separately and linear when you click and drag them in a single motion. The last automation point in a clicked and dragged region is constant.

PREREQUISITE

The automation lane is shown for each instrument whose automation points you want to make constant/linear.

PROCEDURE

1. In the automation lane header, select the MIDI controller whose automation points you want to make constant/linear from the **MIDI Controller** menu.
2. Press **S** to select **Object Selection**.
3. Select the automation points you want to make constant/linear in one of the following ways:
   - Click a single automation point.
   - Make a marquee selection around multiple automation points.

   NOTE

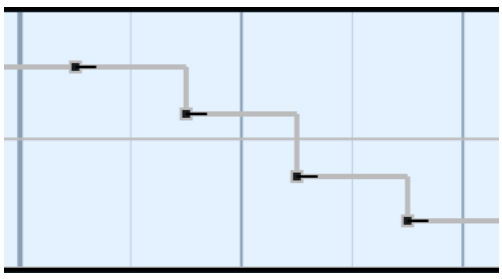
   You can only make automation points constant/linear in a single automation lane at a time.
4. Right-click in the automation lane and choose one of the following options from the context menu:
   - To make the selected points constant, choose **Make Points Constant**.
   - To make the selected points linear, choose **Make Points Linear**.

RESULT

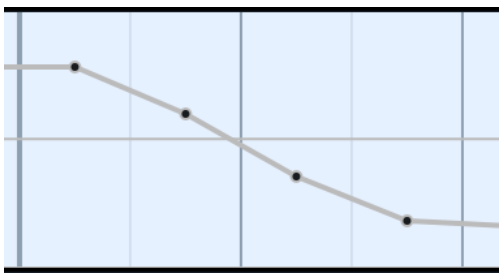
The selected automation points become constant or linear. Constant points appear as squares with short horizontal lines extending to their right, indicating that their value continues. Linear points appear as circles.

The value line always appears horizontal after constant points. The value line appears angled after linear points if the next event has a different value, indicating a smooth transition between the points.

EXAMPLE



Constant points in an automation lane



Linear points in an automation lane

## Copying and pasting automation points

You can copy and paste automation points, including to other automation lanes and repeating them directly after themselves in the same automation lane.

PREREQUISITE

The automation lane is shown for each instrument whose automation points you want to copy/paste.

PROCEDURE

1. In the automation lane header, select the MIDI controller whose automation points you want to copy from the **MIDI Controller** menu.
2. Press **S** to select **Object Selection**.
3. Select the automation points you want to copy in one of the following ways:
   - Click a single automation point.
   - Make a marquee selection around multiple automation points.

   NOTE

   You can only copy and paste automation points in a single automation lane at a time.
4. Copy the selected automation points in any of the following ways:
   - Press **Ctrl/Cmd-C**.
   - Choose **Edit** > **Copy**. You can also choose this option from the context menu.
5. Move the playhead to the position to which you want to paste the selected automation points.
6. Paste the selected automation points in any of the following ways:
   - Select the header of the automation lane into which you want to paste them and press **Ctrl/Cmd-V**.
   - Right-click in the automation lane into which you want to paste them and choose **Paste** from the context menu.

RESULT

The selected automation points are copied to the selected positions and automation lanes without deleting them from their original positions.

NOTE

You can also repeat automation points immediately after themselves by selecting them and pressing **R**. In each repetition, the first point in the selection replaces the last point in the automation lane.

RELATED LINKS

Showing automation lanes on page 394
Moving the playhead on page 410
Copying and pasting items on page 317

## Moving automation points

You can move individual automation points, including moving them upwards and downwards to change their values.

PREREQUISITE

The automation lane is shown for each instrument whose automation points you want to move.

PROCEDURE

1. In the automation lane header, select the MIDI controller whose automation points you want to move from the **MIDI Controller** menu.
2. Press **S** to select **Object Selection**.
3. Select the automation points you want to move in one of the following ways:
   - Click a single automation point.
   - Make a marquee selection around multiple automation points.

   NOTE

   You can only move automation points in a single automation lane at a time.
4. Move the selected automation points in any of the following ways:
   - To move them to the right/left only, **Ctrl/Cmd**-click and drag them to the right/left.
   - To move them upwards/downwards only, **Ctrl/Cmd**-click and drag them upwards/downwards.

     TIP

     - If you want to move automation points upwards/downwards by smaller increments, you can press **Alt** when dragging.
     - You cannot move automation points beyond other existing automation points during the same action when using the mouse. You must release the mouse before reselecting the automation point and move it further.

## Deleting automation points

You can delete individual or multiple automation points.

PREREQUISITE

The automation lane is shown for each instrument whose automation points you want to delete.

PROCEDURE

1. In the automation lane header, select the MIDI controller whose automation points you want to delete from the **MIDI Controller** menu.
2. Press **E** to select **Erase**.
3. Delete automation points in any of the following ways:
   - Click each automation point you want to delete.
   - Make a marquee selection around the automation points you want to delete.

RESULT

The automation points you clicked or included in a marquee selection are deleted.

TIP

You can also delete automation points by selecting **Object Selection** in the Play toolbox, then selecting the automation points you want to delete and pressing **Backspace or Delete**.

## Playing techniques lanes

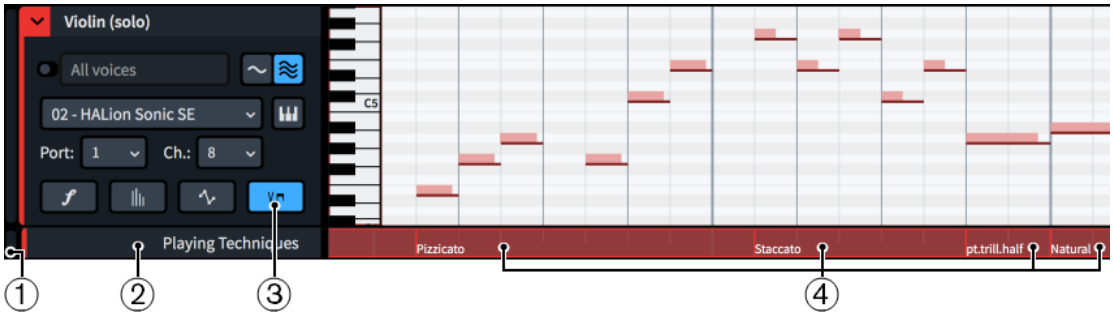
Playing techniques lanes display where you have input playing techniques for the corresponding instrument. Each instrument track has its own playing techniques lane that you can show in the event display.

- You can hide/show the playing techniques lane for an instrument track/voice by clicking **Show the playing techniques lane** in the instrument track header.

  NOTE

  For instrument tracks with independent voice playback enabled, you can only show the playing techniques lane when a single voice is selected. You cannot show the playing techniques lane for **All voices**.




Playing techniques lane below an instrument track

Playing techniques lanes comprise the following:

1 **Lane height adjuster**

Allows you to change the height of the lane by clicking and dragging its bottom corner.

2 **Lane header**

Shows the name of the lane.

3 **Show the playing techniques lane**

Hides/Shows the playing techniques lane. This button is located in the track header for the corresponding instrument track.

4 **Playing technique regions**

Display the playing technique that applies to notes in the region. You can hover your mouse pointer over playing technique regions on the lane to see the following related information:

- Playing technique/Playing technique combination used in the expression map
- VST or MIDI instrument used for the region
- Channel in the VST instrument used for the region
- Expression map used for the region

NOTE

You cannot change playing techniques using this lane. You can only change them in Write mode.

RELATED LINKS
Instrument tracks on page 381
Event display on page 372
Expression maps on page 439
Enabling independent voice playback on page 413

### Showing playing techniques lanes

You can show the playing techniques lane for each instrument track independently.

PROCEDURE

1. Expand the instrument tracks whose playing techniques lanes you want to show.
2. Optional: For instrument tracks with independent voice playback enabled, select a voice from the **Voice** menu.
3. In each instrument track header, click **Show the playing techniques lane**.

RESULT

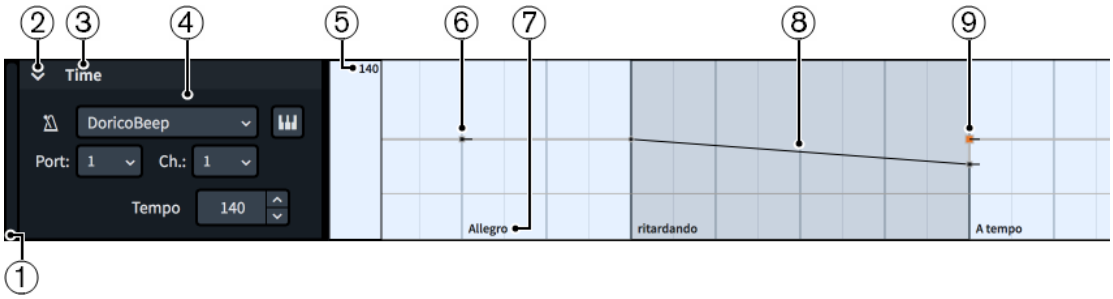
The playing techniques lane for each instrument track is shown when the button is highlighted. For instrument tracks with independent voice playback enabled, the playing techniques lane shows playing techniques for the currently selected voice only.

TIP

You can hide playing techniques lanes by clicking **Show the playing techniques lane** again so the button is not highlighted.

## Time track

The **Time** track allows you to view and edit the tempo of your project, including inputting new tempo changes. It appears above the top instrument track in the event display in Play mode, and is one of the tracks you can hide/show.




The **Time** track comprises the following:

1 **Track height adjuster**

Allows you to change the height of the track by clicking and dragging its bottom corner.

2 **Track disclosure arrow**

Allows you to expand/collapse the track.

3 **Track name**

Shows the name of the track.

4 **Track header**

Contains appropriate options for the track, such as the menu for the sound source for the click.

5 **Fixed tempo read-out**

Displays the tempo that corresponds to the current mouse pointer position in the **Time** track.

6 **Absolute tempo change**

An immediate change in tempo, input either in Write mode or using the **Draw** tool in the **Time** track. Absolute tempo changes comprise a single constant point.

7 **Tempo mark text**

Shows the text of the corresponding tempo change, if applicable, to help you identify different tempo marks and orientate yourself within the flow.

8 **Gradual tempo change**

A smooth change in tempo over time, either input in Write mode or using the **Line** tool in the **Time** track. Gradual tempo changes have a linear point at the start, a constant point at the end, and a highlighted region.

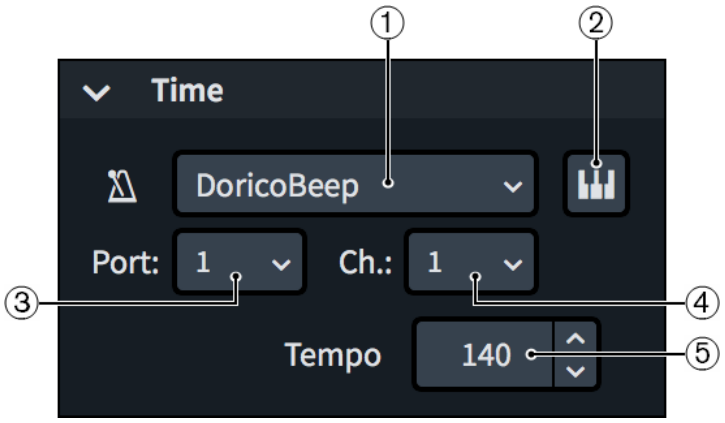
9 **Selected tempo change**

The currently selected tempo change appears larger and highlighted.

TIP

Clicking and dragging tempo changes in the **Time** track causes a read-out to appear temporarily, showing their precise tempo.

## Time track header




The **Time** track header contains the following:

1 **Plug-in instance menu**

Allows you to select a VST or MIDI instrument plug-in instance to use for the click.

2 **Edit Instrument**

Opens the corresponding VST or MIDI instrument, which allows you to edit its settings.

3 **Port menu**

Allows you to change the endpoint to which the **Time** track is assigned by selecting the port you want to use when using a plug-in that has multiple ports of 16 channels.

4 **Channel menu**

Allows you to change the endpoint to which the **Time** track is assigned by selecting the channel in the selected VST or MIDI instrument that you want to use for the click.

5 **Tempo**

Displays the metronome mark value of the currently selected tempo change without decimal places. You can change this value by changing the value in the value field.

Tempo changes input in the **Time** track in Play mode appear as signposts in Write mode by default to avoid changing the appearance of the printed score. Signposts are not printed by default, so if you want such tempo changes to be printed in the score as tempo marks, we recommend that you show them.

All tempo changes input in the **Time** track are included when exporting MIDI files.

RELATED LINKS
Play toolbox on page 367
Rhythmic grid on page 158
Tempo marks on page 819
Input methods for tempo marks on page 216
Changing the type and appearance of absolute tempo changes on page 824
Signposts on page 314
Hiding/Showing tempo marks on page 823
Exporting MIDI on page 80

## Inputting tempo changes in the Time track

You can input tempo changes, including gradual tempo changes, in the **Time** track in Play mode. Tempo changes input in the **Time** track do not appear in layouts, but instead are shown as signposts.

PREREQUISITE

The **Time** track is shown and expanded.

PROCEDURE

1. Select one of the following tools, depending on the type of tempo change you want to input:
   - To input single absolute tempo changes, or multiple absolute tempo changes at regular intervals, select **Draw** by pressing **D** or clicking **Draw** in the Play toolbox.

     
   - To input gradual tempo changes, select **Line** by clicking **Line** in the Play toolbox.

     
2. Input tempo changes in one of the following ways:
   - To input single absolute tempo changes, click in the **Time** track at each position where you want a tempo change.
   - To input multiple absolute tempo changes at regular intervals, click and drag in the **Time** track.
   - To input gradual tempo changes, click and drag in the **Time** track from where you want the gradual tempo change to start to where you want it to end.

   TIP

   The metronome value corresponding to the current vertical position of the mouse pointer is displayed in the **Time** track header.

RESULT

Tempo changes are input. If you used the **Draw** tool, separate tempo changes are input at each position you clicked. If you clicked and dragged in a single motion using the **Draw** tool, tempo

changes are input at eighth note intervals, or at smaller intervals if the rhythmic grid resolution is finer than eighth notes. If you used the **Line** tool, two tempo changes are input, one at each end of the range. The range appears with a highlighted region in the **Time** track.

This affects the speed of playback, but the tempo changes are not shown in layouts. Instead, they appear as signposts.

Tempo changes are included when exporting MIDI files.

RELATED LINKS
Hiding/Showing tracks on page 409
Hiding/Showing tempo marks on page 823
Signposts on page 314
Changing the rhythmic grid resolution on page 158

## Moving tempo changes in the Time track

You can move tempo changes to new rhythmic positions in the **Time** track. This affects their rhythmic position in all applicable layouts.

PREREQUISITE

The **Time** track is shown and expanded.

PROCEDURE

1. Press **S** to select **Object Selection**.
2. In the **Time** track, select the tempo changes you want to move in one of the following ways:
   - Click a single tempo change.
   - Make a marquee selection around multiple absolute tempo changes.

   NOTE

   For gradual tempo changes, you can only move a single point at a time.
3. To move the selected tempo changes without changing their tempo, **Ctrl/Cmd**-click and drag the selected tempo change, or one of the selected tempo changes, to the right/left.

   NOTE

   You cannot move tempo changes beyond other existing tempo changes during the same move. Releasing the mouse causes the moved tempo change to replace the existing one. You can then reselect it and move it further.

RESULT

The rhythmic positions of the selected tempo changes are changed. When you move multiple selected absolute tempo changes, they maintain their positions relative to each other. This also affects their rhythmic positions in any layouts in which they appear.

AFTER COMPLETING THIS TASK

You can also move tempo changes vertically, which changes their tempo.

RELATED LINKS
Time track on page 400
Hiding/Showing tracks on page 409
Hiding/Showing tempo marks on page 823
Selecting multiple items using marquee selections on page 302

## Changing the tempo in the Time track

You can change the tempo of individual tempo changes in the **Time** track, expressed in beats per minute.

PREREQUISITE

The **Time** track is shown and expanded.

PROCEDURE

1. Press **S** to select **Object Selection**.
2. In the **Time** track, select the tempo changes whose tempo you want to change in one of the following ways:
   - Click a single tempo change.
   - Make a marquee selection around multiple absolute tempo changes.

   NOTE

   For gradual tempo changes, you can only change the tempo of a single point at a time.
3. To change the tempo of the selected tempo changes without moving them rhythmically, **Ctrl/Cmd**-click and drag the selected tempo change, or one of the selected tempo changes, upwards/downwards.

   A tempo read-out appears beside the mouse pointer, providing visual feedback of the tempo.

   TIP

   If you want to change the tempo by smaller increments, you can press **Alt** when dragging.

RESULT

The tempo of the selected tempo changes is changed. This affects the speed of playback and the displayed metronome mark of any tempo changes also shown in layouts.

TIP

You can also change the tempo of tempo changes by selecting them and changing the **Tempo** value in the **Time** track header.

RELATED LINKS

Hiding/Showing tracks on page 409

## Deleting tempo changes in the Time track

You can delete tempo changes in the **Time** track.

PREREQUISITE

The **Time** track is shown and expanded.

PROCEDURE

1. Press **E** to select **Erase**.
2. Delete tempo changes in any of the following ways:
   - Click each tempo change you want to delete.
   - Make a marquee selection around the tempo changes you want to delete.

RESULT

The tempo changes you click or include in a marquee selection are deleted. This also deletes their corresponding tempo marks or tempo mark signposts from layouts.

TIP

You can also delete tempo changes by selecting **Object Selection** in the Play toolbox, then selecting the tempo changes you want to delete and pressing **Backspace or Delete**.

RELATED LINKS

Selecting multiple items using marquee selections on page 302

# Chords track

A **Chords** track is included in every project. You can assign the **Chords** track to its own endpoint to hear any chords that you input into the score as chord symbols in playback.

The **Chords** track appears above the top instrument track in the event display, and is one of the tracks you can hide/show.


The **Chords** track comprises the following:

1 **Track height adjuster**

Allows you to change the height of the track by clicking and dragging its bottom corner.

2 **Track disclosure arrow**

Allows you to expand/collapse the track.

3 **Track name**

Shows the name of the track.

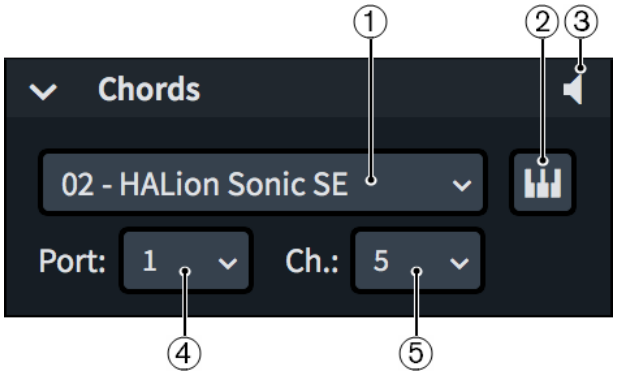
4 **Track header**

Contains appropriate options for the track, such as the button that enables/disables chords playback.

5 **Chords**

Indicates where chord symbols exist in the flow and shows the chord symbol name.

### Chords track header




The **Chords** track header contains the following:

1 **Plug-in instance menu**

Allows you to select a VST or MIDI instrument plug-in instance to use for chords playback.

2 **Edit Instrument**

Opens the corresponding VST or MIDI instrument, which allows you to edit its settings.

3 **Enable Chords Playback**

Allows you to include chords in, or exclude chords from, playback.

4 **Port menu**

Allows you to change the endpoint to which the **Chords** track is assigned by selecting the port you want to use when using a plug-in that has multiple ports of 16 channels.

5 **Channel menu**

Allows you to change the endpoint to which the **Chords** track is assigned by selecting the channel in the selected VST or MIDI instrument that you want to use for chords playback.

You can use an existing channel containing a sound already loaded in the project, or you can use a new channel with a new sound loaded just for chords.

NOTE

- You must assign a VST or MIDI instrument and a channel for the **Chords** track in order to hear chords in playback.
- If you manually load sounds into the channel you selected for your **Chords** track and later add more instruments to your project, the sounds for the new instruments overwrite the sounds you manually loaded in that channel.

RELATED LINKS

Chord symbols on page 532
Loading VST/MIDI instruments manually on page 371
Hiding/Showing tracks on page 409

## Enabling chord symbol playback

You can include chord symbols in playback. They are played as sustained chords, with their duration taken from the gap between one chord symbol and the next. Chord symbols input using a MIDI keyboard use the same voicing as you used to input them, whereas chord symbols input using a computer keyboard use a default voicing.

PREREQUISITE

The **Chords** track is shown.

PROCEDURE

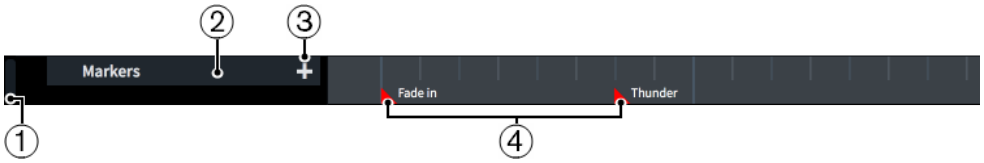
1. In the **Chords** track header, click **Enable Chords Playback**.

2. Optional: If you want to specify the sound used for chords playback, expand the **Chords** track.
3. In the **Chords** track header, select the endpoint you want using the **Port** and **Channel** menus.

RELATED LINKS
Hiding/Showing tracks on page 409
Endpoints on page 433
Endpoint Setup dialog on page 433

# Markers track

The **Markers** track allows you to view the markers in your project and input new ones. It appears above the top instrument track in the event display in Play mode, and is one of the tracks you can hide/show.




The **Markers** track comprises the following:

1 **Track height adjuster**
Allows you to change the height of the track by clicking and dragging its bottom corner.

2 **Track header**
Shows the name of the track and contains appropriate options.

3 **Add Marker**
Allows you to add a new marker at the current position of the playhead.

4 **Markers**
Show the position of each marker in the flow, including their text.

RELATED LINKS
Markers on page 738
Videos on page 141
Hiding/Showing tracks on page 409
Editing marker text on page 740

## Inputting markers in the Markers track

You can input markers directly into the **Markers** track in Play mode.

PREREQUISITE
The **Markers** track is shown.

PROCEDURE

1. Move the playhead to the time position where you want to input a marker.

NOTE

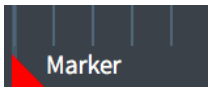
You cannot input markers in negative time, such as when a video starts three bars into the flow, causing the initial timecode of the flow to be in negative time.

2. In the **Markers** track header, click **Add Marker**.

RESULT

A marker is input at the position of the playhead. It shows the default text “Marker”.

EXAMPLE




Marker in the **Markers** track

AFTER COMPLETING THIS TASK

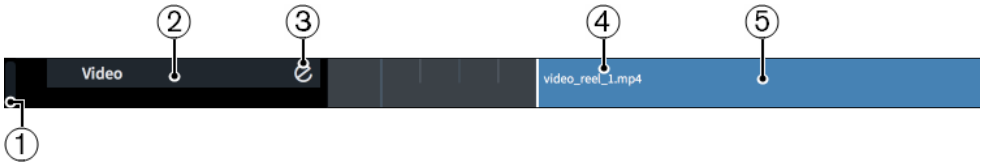
You can change the text shown in the marker.

RELATED LINKS

Changing the start position of videos on page 144
Editing marker text on page 740
Moving the playhead on page 410

# Video track

The **Video** track shows where videos exist in the flow relative to the music. It appears above the top instrument track in the event display in Play mode, and is one of the tracks you can hide/show.




The **Video** track comprises the following:

1 **Track height adjuster**

Allows you to change the height of the track by clicking and dragging its bottom corner.

2 **Track header**

Shows the name of the track and contains appropriate options.

3 **Show Video**

Allows you to hide/show the **Video** window. This performs the same function as **Show Video** in the toolbar.

4 **Video file name**

Shows the video file name and file extension.

5 **Video region**

Shows the position of the video file relative to the music and its length.

RELATED LINKS

Videos on page 141

Adding videos on page 143
Hiding/Showing the Video window on page 144
Changing the start position of videos on page 144
Toolbar on page 39

## Expanding/Collapsing tracks

You can expand/collapse tracks in Play mode individually, and you can expand/collapse all instrument tracks in the current flow at the same time. Expanding tracks allows you to access controls in track headers and to input and edit track contents, such as notes in the piano roll editor and tempo changes in the **Time** track.

PROCEDURE

- Expand/Collapse tracks in any of the following ways:
  - To expand/collapse an individual track, click its disclosure arrow.
  - To expand/collapse all instrument tracks, **Ctrl/Cmd**-click any instrument track disclosure arrow.

## Changing the height of tracks

You can change the height of all types of tracks at any time, for example, if you want a single track to occupy more space in the event display temporarily so you can work on it in more detail.

PROCEDURE

- Change the height of tracks in any of the following ways:
  - To make tracks taller, select them and press **Shift-H**.
  - To make tracks shorter, select them and press **Shift-G**.
  - Click and drag the bottom left corner of a single track upwards/downwards.

    TIP

    When the mouse pointer is in the correct position, it appears as a split arrow.

RELATED LINKS
Zooming in/out of tracks in the event display on page 380

## Hiding/Showing tracks

You can hide/show the tracks that appear above the top instrument track in the event display in Play mode.

By default, only the **Time** and **Chords** tracks are shown. If you have added at least one video to one flow in the project, the **Markers** and **Video** tracks are also shown by default.

NOTE

You cannot hide/show player and instrument tracks.

PROCEDURE

- Choose **Play** > **Tracks** > **[track type]**.

For example, choose **Play** > **Tracks** > **Time Track** to hide/show the **Time** track.

RESULT

The selected track type is shown when a tick appears beside its entry in the submenu, and hidden when no tick appears.

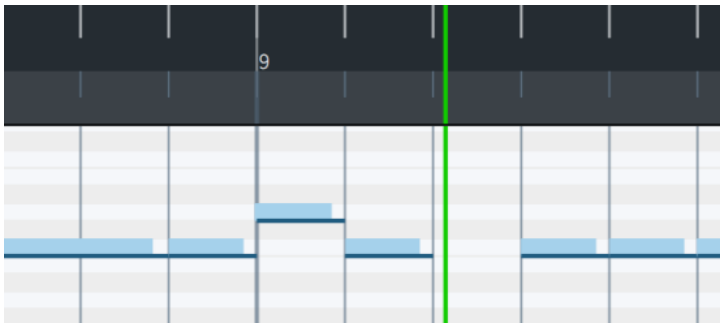
RELATED LINKS

Tracks on page 380

# Playhead

The playhead is a vertical line that moves during playback, showing the current rhythmic position. It is also known as a “playback line”.

The playhead appears at all times in Play mode and during playback in other modes, and its current is shown in both the **Transport** window and the mini transport in the toolbar. You can also choose to show the playhead when playback is stopped in other modes.




The playhead in Play mode

Dorico Elements automatically keeps the playhead in view during playback by moving it along with the music, but you can also move the playhead manually. Dorico Elements tries to keep systems in the same place on the screen when it scrolls along with the playhead for consistency as you follow your music.

NOTE

The playhead never appears in Print mode.

RELATED LINKS

Transport window on page 423
Mini transport on page 40

## Moving the playhead

The playhead automatically moves along with the music during playback, but you can also move the playhead manually in any mode.

You can move the playhead both when it is stopped and during playback, but not all methods of moving the playhead work during playback.

By default, the playhead is only shown during playback but you can choose to show the playhead at all times.

PROCEDURE

- Move the playhead in any of the following ways:

- To move the playhead forwards, press **Num +** (plus on a numeric keypad).
- To move the playhead backwards, press **Num -** (minus on a numeric keypad).
- To move the playhead back to the start of the flow, press **Num .** (period on a numeric keypad).
- To move the playhead to the start of the earliest selected item, press **Alt/Opt-P**.
- To move the playhead forwards by frames, press **Ctrl/Cmd-Num + or Ctrl/Cmd-F9**.
- To move the playhead backwards by frames, press **Ctrl/Cmd-Num - or Ctrl/Cmd-F7**.
- Click **Fast Forward** in the **Transport** window to navigate forwards.
- Click **Rewind** in the **Transport** window to navigate backwards.
- Click **Rewind to Beginning of Flow** in the **Transport** window to go back to the start of the flow.
- In Play mode, click the ruler at any position.

  NOTE

  You cannot click the ruler to move the playhead during playback.

RELATED LINKS
Transport window on page 423
Preferences dialog on page 58
Frame rates on page 146

## Hiding/Showing the playhead

You can hide/show the playhead when playback is stopped, for example, to help line up your music when working with timecodes and video. By default, the playhead is hidden when playback is stopped, except in Play mode where it always appears.

PROCEDURE

1. Press **Ctrl/Cmd-,** (comma) to open **Preferences**.
2. Click **Play** in the page list.
3. In the **Playhead** subsection, activate/deactivate **Show playhead when stopped**.
4. Click **Apply**, then **Close**.

RESULT

The playhead is shown outside of playback when **Show playhead when stopped** is activated, and hidden when it is deactivated.

NOTE

This does not apply to Play mode or Print mode. The playhead always appears in Play mode and never appears in Print mode.

# Playing back music

You can listen to the music you have written from the beginning of your project or from a specific point. You can also use the playback key commands in any mode.

PREREQUISITE

- You have applied a playback template to the project that includes sounds for the instruments in your project.
- If you want to use different sounds for different voices, you have enabled independent voice playback for those instruments.

PROCEDURE

1. Start playback in one of the following ways:
   - To play back all instruments from the selection, select a single note and press **P**.
   - To play back all instruments from the selection, select a single note and choose **Play** > **Play From Selection**.
   - To play back only a single staff, select multiple items on the staff and press **P**.

     NOTE

     This does not affect which channels are soloed or muted in Play mode.

   - To play back multiple staves, select items on multiple staves and press **P**.

     NOTE

     This does not affect which channels are soloed or muted in Play mode.

   - To continue playback from the playhead position, press **Space or Enter**.
   - To play back from the last playback start position, press **Shift-Space**. This works even if you have since deselected the item at that position.
   - To play back from the start of the flow, press **Shift-Alt/Opt-Space**.
   - Click **Play From Playhead Position** in the **Transport** window.
   - Click **Play From Selection** in the **Transport** window.
   - Choose **Play** > **Play From Playhead Position**.
   - Choose **Play** > **Play From Last Start Position**.
   - Choose **Play** > **Play From Start of Flow**.
   - Choose **Play** > **Play From Start of Project**.
2. Optional: Move the playhead during playback to later/earlier positions.
3. Optional: To enable/disable the metronome click, click **Click** in the mini transport.

   TIP

   You can also sign a key command for enabling/disabling the metronome click during playback on the **Key Commands** page in **Preferences**.

4. Stop playback in any of the following ways:
   - Press **Space or Enter** or **P**.
   - Press **Num 0** (0 on a numeric keypad).
   - Click **Stop** in the **Transport** window.

TIP

If you notice a change in sound when stopping playback, you can deactivate **Reset controllers and send 'all notes off' when stopping playback** on the **Play** page in **Preferences**.

RELATED LINKS
Playback templates on page 425
Applying/Resetting playback templates on page 430
Enabling independent voice playback on page 413
Muting/Soloing tracks on page 414
Endpoint Setup dialog on page 433
Mini transport on page 40
Key Commands page in the Preferences dialog on page 59
Status bar on page 48
Preferences dialog on page 58

# Enabling independent voice playback

By default, all voices belonging to a single instrument, including divisi staves, use the same endpoint for playback. You can enable independent voice playback, for example, to hear the different playing techniques in playback for a string divisi where some parts are *pizzicato* and some parts are *arco*.

NOTE

You cannot enable independent voice playback for unpitched percussion kits.

PROCEDURE

1. Expand the instrument tracks for which you want to enable independent voice playback.
2. In each instrument track header, activate **Enable independent playback of voices**.

RESULT

Independent voice playback is enabled for each instrument. Dorico Elements automatically loads enough additional channels, and additional plug-in instances if necessary, to accommodate all voices belonging to the corresponding instrument project-wide.

Voices are automatically assigned to endpoints according to their order in the **Voices** menu. Selecting an individual voice from the **Voices** menu shows only the corresponding notes in the piano roll editor.

NOTE

For instrument tracks with independent voice playback enabled, you can only show dynamics, automation, and playing techniques lanes when a single voice is selected.

AFTER COMPLETING THIS TASK

You can change the endpoints of each voice in each flow independently, for example, if some voices in some flows require a solo sound instead of an ensemble one.

RELATED LINKS
Playback templates on page 425
Endpoints on page 433

Instrument tracks on page 381
Dynamics lanes on page 383
Automation lanes on page 393
Playing techniques lanes on page 399
Piano roll editor on page 374
Assigning instruments/voices to endpoints on page 437

# Muting/Soloing tracks

You can mute/solo individual tracks. This allows you to set fixed groups to sound in playback, for example, if you only want to listen to certain groups of players at a time.

PROCEDURE

1. In the toolbar, click **Show Mixer** to show the Mixer.

2. In the Mixer, click the appropriate button at the top of each channel you want to mute/solo.
   - **Mute**

     
   - **Solo**

RESULT

Each track is muted/soloed and the corresponding buttons are enabled.

This affects which tracks play back until you change which tracks are muted/soloed, meaning you do not have to reselect the tracks you want to hear each time. For example, if you have eight tracks and solo four, only those four are played back. If you mute two tracks, those tracks are not played back but the other six are played back.

NOTE

- Soloing tracks automatically mutes all other tracks. If you solo a track that was muted, it is automatically unmuted.
- You can also play back only certain tracks/staves by selecting notes/items on each track/staff you want to hear.

EXAMPLE

**Mute** when enabled

**Solo** when enabled

RELATED LINKS

Expanding/Collapsing tracks on page 409
Muting notes/items individually on page 416

# Muting/Soloing instruments

You can solo the currently selected instruments, which automatically mutes all other instruments. This can be useful if you want to ensure only certain instruments are played back while you are working on a specific section of a project.

PROCEDURE

1. Select at least one note belonging to each instrument you want to solo. You can do this in Write mode and Play mode.
2. Press **Alt/Opt-S**.

RESULT

The selected instruments are soloed and all other instruments are muted by changing their mute/solo states in the Mixer. This affects which instruments are muted/soloed until you deactivate their mute/solo states.

TIP

You can also determine which staves are included in playback for each separate playback without changing their states in the Mixer.

RELATED LINKS

Mixer on page 421

## Deactivating mute/solo instrument states

You can deactivate the mute and solo states of all instruments in your project, for example, if you want to hear all instruments in playback after soloing a small selection. You can do this in any mode.

PROCEDURE

- Deactivate mute/solo instrument states in the following ways:
  - To deactivate all mute instrument states, press **Alt/Opt-U**.
  - To deactivate all solo instrument states, press **Shift-Alt/Opt-S**.
  - In the Mixer, click **Deactivate All Mute States**.
  - In the Mixer, click **Deactivate All Solo States**.

RESULT

All instruments in the project have the corresponding state removed. For example, removing both mute and solo instrument states reverts all instruments to their default state, causing all instruments to be included in playback.

RELATED LINKS

Mixer on page 421

## Muting notes/items individually

You can mute individual notes and items to exclude them from playback without deleting them, for example, to hear chords without their arpeggios, a passage with multiple dynamics at a single volume level, or without tempo changes from tempo marks.

PROCEDURE

1. In Write mode, select the notes/items you want to mute/suppress in playback.
2. In the Properties panel, activate **Suppress playback** in the **Common** group.

## Resetting changes to volume faders

You can reset changes you have made to volume faders in the Mixer back to their default level.

PREREQUISITE

The Mixer window is shown.

PROCEDURE

- In the Mixer, **Ctrl/Cmd**-click each volume fader that you want to reset.

RELATED LINKS

Hiding/Showing the Mixer window on page 423
Mixer on page 421

## Changing the tempo mode

You can switch the tempo mode at any time between using a single fixed tempo and following tempo changes, for example, if you have a project with multiple tempo changes but want to use a single fixed tempo when recording MIDI.

PROCEDURE

1. Change the tempo mode in any of the following ways:
   - In any mode, click **Fixed Tempo Mode** in the toolbar.
   - In Play mode, choose **Play** > **Fixed Tempo Mode**.
2. Optional: When **Fixed Tempo Mode** is active, change the metronome mark value by clicking and dragging upwards/downwards on the **Fixed Tempo Mode** number in the toolbar.

   TIP

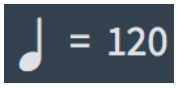
   If you want to change the metronome mark value by smaller increments, you can hold **Shift** when clicking and dragging.

RESULT

In follow tempo mode, the tempo for playback and recording is set by tempo marks in the project. Follow tempo mode is active when **Fixed Tempo Mode** in the toolbar appears highlighted, and when no tick appears beside **Fixed Tempo Mode** in the **Play** menu.

In fixed tempo mode, the tempo for playback and recording is a single tempo, as determined by the **Fixed Tempo Mode** metronome mark value. Fixed tempo mode is active when **Fixed Tempo Mode** in the toolbar is not highlighted, and when a tick appears beside **Fixed Tempo Mode** in the **Play** menu.

EXAMPLE




**Fixed Tempo Mode** when fixed tempo mode is active


**Fixed Tempo Mode** when follow tempo mode is active

RELATED LINKS
Tempo marks on page 819
Time track on page 400
MIDI recording on page 195
Playing back music on page 412

## Repeats in playback

Dorico Elements supports the playback of repeat structures, including repeat endings, repeat barlines, and repeat markers, provided all the correct jumps and sections are in place.

There is no limit to the number of repeat structures you can have in a single flow and still obtain correct playback.

By default, Dorico Elements includes repeats in playback, except after repeat jumps, such as D.S. al Coda.

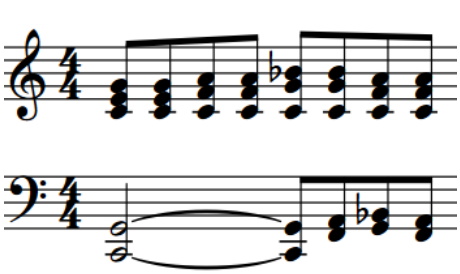
During playback, the bars/beats and time displays in the mini transport and **Transport** window reflect the current position of the playhead in repeat structures.

Dynamics and tempo marks are reflected in repeats. Repeats are also included in both audio and MIDI exports.

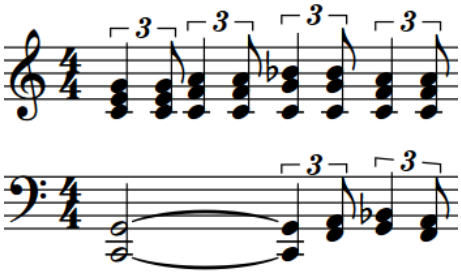
RELATED LINKS
Transport window on page 423
Mini transport on page 40

## Swing playback

Swing is a style of performance where equally-notated notes are played in a regular pattern of alternating longer and shorter notes, which commonly entails eighth notes being played as a quarter note triplet followed by an eighth note triplet.



A swing phrase with simplified straight notation




How the same phrase sounds with a 2:1 swing ratio

Swing playback allows you to hear the uneven rhythms you want whilst retaining their simplified notation, including if the second eighth note beat is divided into two 16th notes. In Dorico Elements, you can enable swing playback for certain sections and for individual instruments only. You can swing either eighth notes or 16th notes.

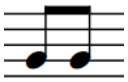
Based on academic research into the rendering of swing by musicians, swing patterns in Dorico Elements are tempo-dependent by default. This means that the swing feels more pronounced at lower tempos, and straighter at higher tempos.

RELATED LINKS
Enabling swing playback on page 419

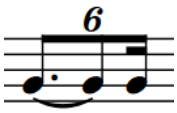
## Swing ratios and rhythmic feels

Swing ratios express the strength of the swing using beat units. For example, a swing ratio of 2:1 means the first note in each pair is twice as long as the second, creating a triplet swing.

A swing ratio of 1:1 means the music is played straight, while a swing ratio of 5:1 means each pair of notes is played as if they were sextuplets, with the first note in the pair lasting five divisions and the second note lasting one.



Swing ratio 1:1




Swing ratio 5:1

The following rhythmic feels and swing ratios are provided by default in Dorico Elements:

**2:1 swing 16ths (fixed)**

Extends the first note in a pair of 16th notes to be twice as long as the second, creating a strict triplet 2:1 ratio. This is also known as a “triplet swing”. This ratio is maintained regardless of the tempo by default.

**2:1 swing 8ths (fixed)**

Extends the first note in a pair of eighth notes to be twice as long as the second, creating a strict triplet 2:1 ratio. This is also known as a “triplet swing”. This ratio is maintained regardless of the tempo by default.

**3:1 swing 16ths (fixed)**

Extends the first note in a pair of 16th notes to be three times as long as the second, creating a dotted 16th-32nd ratio (dotted semiquaver-demisemiquaver). This ratio is maintained regardless of the tempo by default.

**3:1 swing 8ths (fixed)**

Extends the first note in a pair of eighth notes to be three times as long as the second, creating a dotted eighth-16th ratio (dotted quaver-semiquaver). This ratio is maintained regardless of the tempo by default.

**Heavy swing 16ths**

Produces a tempo-dependent 16th note swing ratio of between 3:1 at low tempos and 1.5:1 at high tempos.

**Heavy swing 8ths**

Produces a tempo-dependent eighth note swing ratio of between 3:1 at low tempos and 1.5:1 at high tempos.

**Light swing 16ths**

Produces a tempo-dependent 16th note swing ratio of between 1.5:1 at low tempos and 1:1 at high tempos.

**Light swing 8ths**

Produces a tempo-dependent eighth note swing ratio of between 1.5:1 at low tempos and 1:1 at high tempos.

**Medium swing 16ths**

Produces a tempo-dependent 16th note swing ratio of between 2:1 at low tempos and 1.5:1 at high tempos.

**Medium swing 8ths**

Produces a tempo-dependent eighth note swing ratio of between 2:1 at low tempos and 1.5:1 at high tempos.

**Straight (no swing)**

Produces no swing, that is, even eighth notes in the ratio 1:1 at all tempos.

You can change the swing ratio used for specific sections and for individual players.

## Enabling swing playback

You can enable swing playback for specific sections in your project and for individual instruments independently, for example, if you want only the soloist to swing for a twelve-bar section.

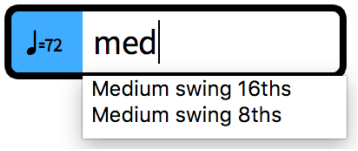
PROCEDURE

1. In Write mode, select one of the following:
   - If you want to enable swing playback from a specific point onwards, select a single item at the start of the bar where you want swing playback/a different rhythmic feel.
   - If you want to enable swing playback within a section then return to straight playback, select multiple items that span the duration where you want swing playback/a different rhythmic feel.

   NOTE

   - If you want to enable swing playback for a single instrument, select an item or items that belong to that instrument only.
   - If you select an item in the middle of a bar, the rhythmic feel change only takes effect from the start of the next bar.
2. Press **Shift-T** to open the tempo popover.
3. Enter the appropriate entry for rhythmic feel you want into the popover.

   When you start entering a rhythmic feel into the tempo popover, a menu appears that shows valid rhythmic feels containing the letters/words you enter, which you can select.

   NOTE

   If you do not enter the name of a rhythmic feel that exists in your project, the text you entered into the popover is input as a tempo mark and does not enable swing playback.
4. Input the rhythmic feel change and close the popover in one of the following ways:

- To input a rhythmic feel change for all staves, press **Return**.
- To input a rhythmic feel change only for the selected instrument, press **Alt/Opt-Return**.

RESULT

The rhythmic feel used for swing playback is changed from the start of the bar containing the earliest selected item, or the start of the next bar if you selected an item in the middle of a bar. If you selected multiple items, the rhythmic feel is automatically reset at the position of the last selected item. If you pressed **Alt/Opt-Return**, the rhythmic feel change only applies to the instrument on whose staff you selected an item. Rhythmic feels added to single instruments apply to all staves belonging to those instruments.

A signpost appears showing the name of the rhythmic feel you input. It is shown above the top staff in the system for rhythmic feel changes that apply to all staves, and directly above the top staff for rhythmic feel changes that apply only to single instruments.

RELATED LINKS

Tempo popover on page 216

## Deleting rhythmic feel changes

You can delete rhythmic feel changes you have enabled for specific sections or for individual players only.

PREREQUISITE

Rhythmic change signposts are shown.

PROCEDURE

1. In Write mode, select the signposts of the rhythmic changes you want to delete.
2. Press **Backspace or Delete**.

RESULT

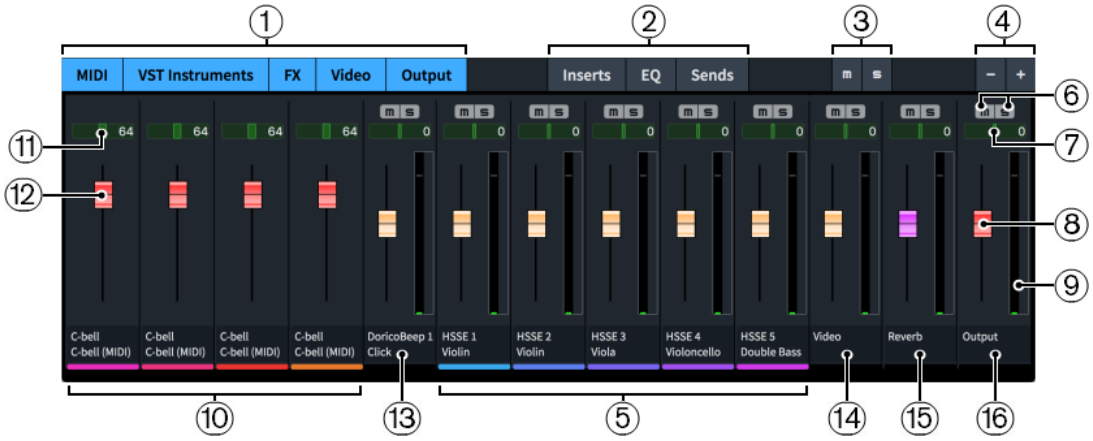
The rhythmic changes are deleted. The affected staves return to the default non-swing playback until the next existing rhythmic change signpost, if applicable.

RELATED LINKS

Hiding/Showing signposts on page 315

# Mixer

The Mixer allows you to control the sounds produced in playback, both for the master output and on each individual channel.




The Mixer comprises the following:

**1 Channel type buttons**

Allow you to hide/show channels in the Mixer according to their type, and in any combination.

**2 Channel controls**

Allow you to hide/show the corresponding controls in the channel strip according to their type, and in any combination.

**3 Deactivate All Mute States/Deactivate All Solo States**

Allows you to deactivate all mute/solo states by clicking the corresponding button.

**4 Zoom**

Allows you to make channels wider/narrower.

**5 VST channels**

There is a mixer channel for each stereo output from the VST instruments in your project, and all instruments in your project are shown, even if they are spread across multiple VST instrument instances. Channels are stereo by default.

**6 Mute/Solo**

Allows you to mute/solo individual tracks.

**7 Balance panner**

Allows you to position the sound of each individual track on the stereo spectrum for stereo playback.

**8 Fader**

Allows you to control the volume level of each individual track.

MIDI channels have a MIDI fader.

**9 Channel meter**

Indicates the output volume of each individual channel in real time.

**10 MIDI channels**

Every VST instrument in your project has its own MIDI channel in addition to its VST channel. These MIDI channels allow you to change the MIDI volume and MIDI pan of each instrument.

**11 MIDI pan**

Allows you to position the MIDI output of the channel on the stereo spectrum for stereo playback.

**12 MIDI fader**

Allows you to change the MIDI volume of the channel.

Some plug-ins require MIDI faders, and this is often useful if you are using a MIDI device for playback.

**13 Click channel**

Allows you to control the volume of the metronome click.

**14 Video channel**

Allows you to control the volume of video audio.

**15 FX Send channel**

Allows you to control the volume of send effects, such as reverb. By default, this channel has REVerence loaded automatically.

**16 Output channel**

Allows you to control the master output volume.

NOTE

In order to control the volume levels in your project, we recommend that you first input dynamics and adjust the dynamic curve to suit your project before using the track faders.

Any changes you make in the Mixer are automatically saved and applied to the project.

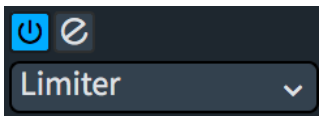
RELATED LINKS
Hiding/Showing the Mixer window on page 423
Muting/Soloing tracks on page 414
Resetting changes to volume faders on page 416

## Mixer channel strips

Each channel in the Mixer has its own channel strip, which contains the channel controls. You can hide/show each type of channel control by clicking the corresponding button at the top of the mixer.

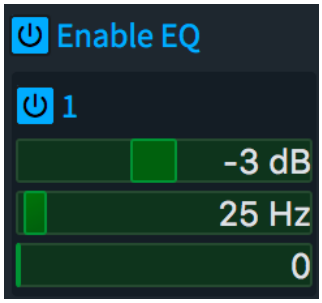
Each channel strip contains the following types of controls:

**Inserts**




Each channel has four slots into which you can load an insert. You can select an insert from the available options in the menu.

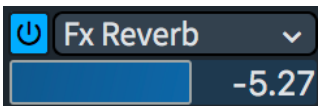
**EQ**




Each channel has four bands of EQ.

In order to make changes to the EQ bands on a channel, you must first click **Enable EQ**. You can use this to bypass the EQ on a channel without losing your settings.

**Sends**




Each channel has four slots for sends. By default, the first slot for each channel sends to the FX channel, which has reverb loaded on it.

## Hiding/Showing the Mixer window

You can open and close the Mixer window at any time, for example, if you do not want it in view when working on the music in the music area.

PROCEDURE

- Hide/Show the Mixer window in any of the following ways:
  - Press **F3**.
  - Click **Show Mixer** in the toolbar.

    
  - Choose **Window** > **Mixer**.

    The Mixer window is shown when a tick appears beside **Mixer** in the menu, and hidden when no tick appears.

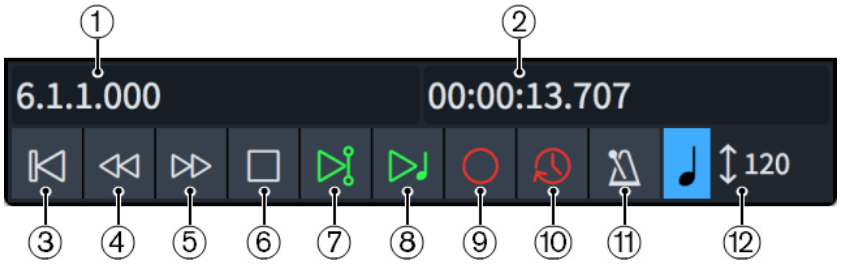
# Transport window

The **Transport** window contains all the transport functions in Dorico Elements. It contains more precise versions of the transport functions available in the toolbar and additional transport functions.

You can open/close the **Transport** window in any of the following ways:

- Press **F2**.
- Click **Show Transport Bar** in the toolbar.




**Transport** window

The **Transport** window contains the following information and functions:

1 **Bars/Beats display**

Shows the position of the playhead relative to bars and beats in the current flow in the following order of units: bars, beats, 16th notes, 120ths of a 16th note.

2 **Time display**

Shows the position of the playhead as elapsed time in the following order of units: hours, minutes, seconds, milliseconds. Alternatively, it can show the timecode position of the playhead in the current flow in the following order of units: hours, minutes, seconds, frames.

You can switch between having the time display show the time and timecode by clicking it.

3 **Rewind to Beginning of Flow**

Moves the playhead back to the beginning of the flow.

4 **Rewind**

Moves the playhead back by a half note each time you click.

5 **Fast Forward**

Moves the playhead forwards by a half note each time you click.

6 **Stop**

Stops playback.

7 **Play From Playhead Position**

Plays back from the position of the playhead.

8 **Play From Selection**

Plays back from the position of the first selected item in the music area.

If you select items on multiple staves, or multiple items on a single staff, only the selected staves are played back.

9 **Record**

Starts/Stops MIDI recording.

10 **Retrospective Record**

Retrieves any MIDI notes you played during the previous playback and allows you to input them on any staff, even if you were not recording them explicitly.

11 **Click**

Plays/Mutes the metronome click during playback and recording.

12 **Fixed Tempo Mode**

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

RELATED LINKS

Mini transport on page 40
Changing the tempo mode on page 416

# Changing the content shown in the transport display

You can switch between showing the timecode, the total elapsed time, and the current rhythmic position of the playhead expressed in bars, beats, and ticks in both the mini transport in the toolbar and the **Transport** window.

PROCEDURE

- In either the mini transport in the toolbar or the **Transport** window, click the transport display until the content you want appears.

  In the **Transport** window, this is the display on the right.

RESULT

Each time you click in the mini transport display, it cycles through showing the rhythmic position of the playhead, elapsed time, and the timecode.

In the **Transport** window, it only switches between the timecode and elapsed time, as the rhythmic position of the playhead is shown permanently on the left of the window.

TIP

You can change what is shown in the mini transport by default for all future projects on the **Play** page in **Preferences**.

RELATED LINKS
Toolbar on page 39
Mini transport on page 40
Timecodes on page 743
Preferences dialog on page 58

# Playback templates

Dorico Elements uses playback templates to allocate sounds from VST instruments and MIDI devices to the instruments in your project.

Playback templates combine the following information in order to obtain correct playback:

- The instrument sounds, articulations, and playback playing techniques provided by plug-ins, such as VST instruments
- The expression/percussion maps required to obtain those sounds
- The endpoint configurations required for the sounds for each instrument

When you add instruments to players in a project, Dorico Elements automatically loads plug-ins for them according to the current playback template and sets up expression maps and percussion maps as required. Dorico Elements also automatically loads enough plug-in instances, as many plug-ins can only load a limited number of sounds in each instance.

You can override playback templates and make your own manual changes to the sounds used by instruments in your project, such as by changing the expression maps assigned to endpoints. You can then save such changes as custom endpoint configurations, which you can include in your own custom playback templates.

You can also export custom playback templates, for example, to share them with other users. Playback templates are saved as `.dorico_pt` files.

NOTE

- Playback templates are available in all projects you open or create on your computer, meaning any changes you make to playback templates affect all projects that use those playback templates.
- Dorico Elements automatically loads sounds for any new instruments you add to the project, using the sounds included in the current playback template. Therefore, we recommend that you always include a factory default playback template at the bottom of custom playback templates as a fallback to ensure that all instruments are assigned sounds.
- Any changes you make within plug-ins are saved when you save the project but are not communicated to Dorico Elements, which can lead to unexpected low notes sounding in playback because Dorico Elements is still using the expression and percussion maps for the original sounds. If you make changes in plug-ins, you must manually assign the correct expression and percussion maps to the appropriate endpoints.

RELATED LINKS
Edit Playback Template dialog on page 428
Applying/Resetting playback templates on page 430

Creating custom playback templates on page 431
Exporting playback templates on page 432
Endpoint Setup dialog on page 433
Assigning expression/percussion maps to endpoints on page 438
Endpoints on page 433
Custom endpoint configurations on page 435

# Apply Playback Template dialog

The **Apply Playback Template** dialog allows you to change the playback template applied to the current project and to import/export playback templates. It also allows you to access the **Edit Playback Template** dialog.

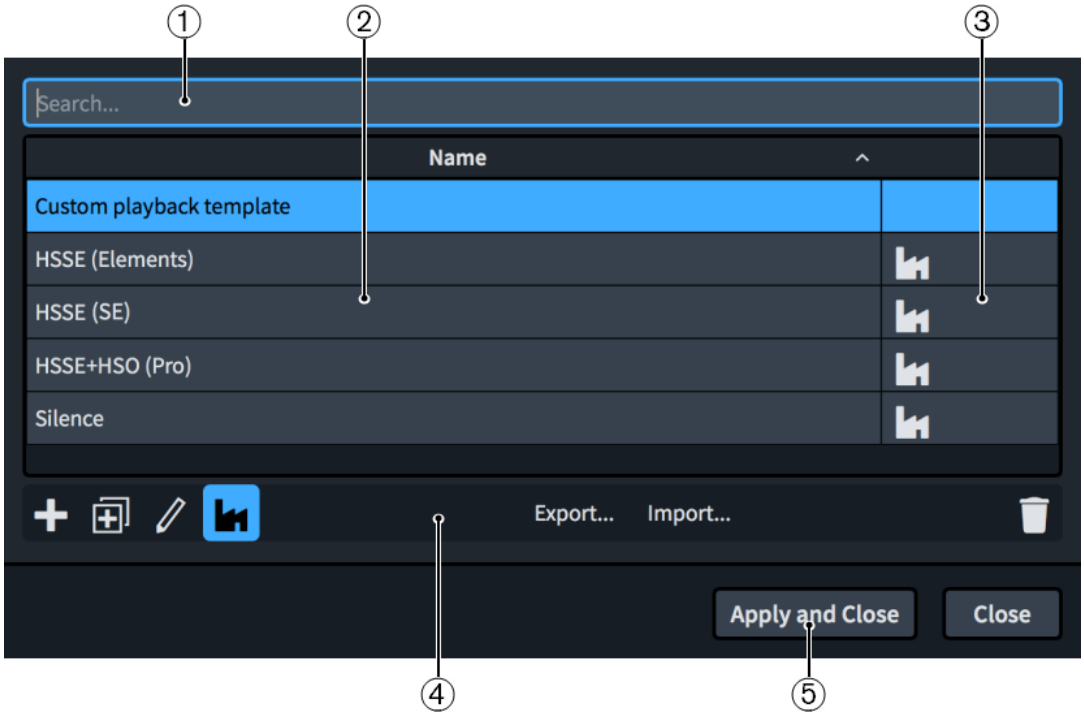
- You can open the **Apply Playback Template** dialog in Play mode by choosing **Play** > **Playback Template**.

The **Apply Playback Template** dialog shows all the playback templates available on your computer in a table. Dorico Elements provides the following factory default playback templates:

- **HSSE (Elements)**: Intended for use with HALion Sonic SE.
- **HSSE+HSO (Pro)**: Intended for use with both HALion Sonic SE and HALion Symphonic Orchestra.
- **Silence**: Prevents Dorico Elements from loading sounds.

TIP

- Choosing the **Silence** template makes Dorico Elements project files significantly smaller, for example, if you want to send them electronically.
- We recommend that you only use the **HSSE+HSO (Pro)** playback template if you own a separate HALion Symphonic Orchestra license, as Dorico Elements only includes HALion Sonic SE.




**Apply Playback Template** dialog

The **Apply Playback Template** dialog comprises the following:

1 **Search field**

Allows you to enter the name of the playback template you are searching for directly, which filters the list.

2 **Name column**

Contains a list of the playback templates available on your computer. You can click the column header to change the sorting order.

3 **Factory column**

Contains the factory symbol if the playback template in the corresponding row is a factory default playback template. You can click the column header to change the sorting order.

4 **Action bar**

Contains the following options for playback templates:

- **Add Playback Template**: Opens the **Edit Playback Template** dialog and allows you to create a new playback template.

- **Duplicate Playback Template**: Opens the **Edit Playback Template** dialog and allows you to create a new playback template that starts as a duplicate of the selected one.

- **Edit Playback Template**: Opens the **Edit Playback Template** dialog and allows you to edit the existing selected playback template.

NOTE

You cannot edit factory default playback templates.

- **Show Factory**: Allows you to hide/show factory default playback templates in the table.

- **Export**: Opens the File Explorer/macOS Finder, where you can select the location to which you want to export the currently selected playback templates as `.dorico_pt` files. You can then import the `.dorico_pt` files into Dorico Elements on other computers and share them with other users.
- **Import**: Opens the File Explorer/macOS Finder, where you can select the `.dorico_pt` files that you want to import as playback templates.
- **Delete**: Deletes the selected playback templates.

NOTE

You cannot delete factory default playback templates.

5 **Apply and Close**

Applies the selected playback template to the project and closes the dialog.

RELATED LINKS

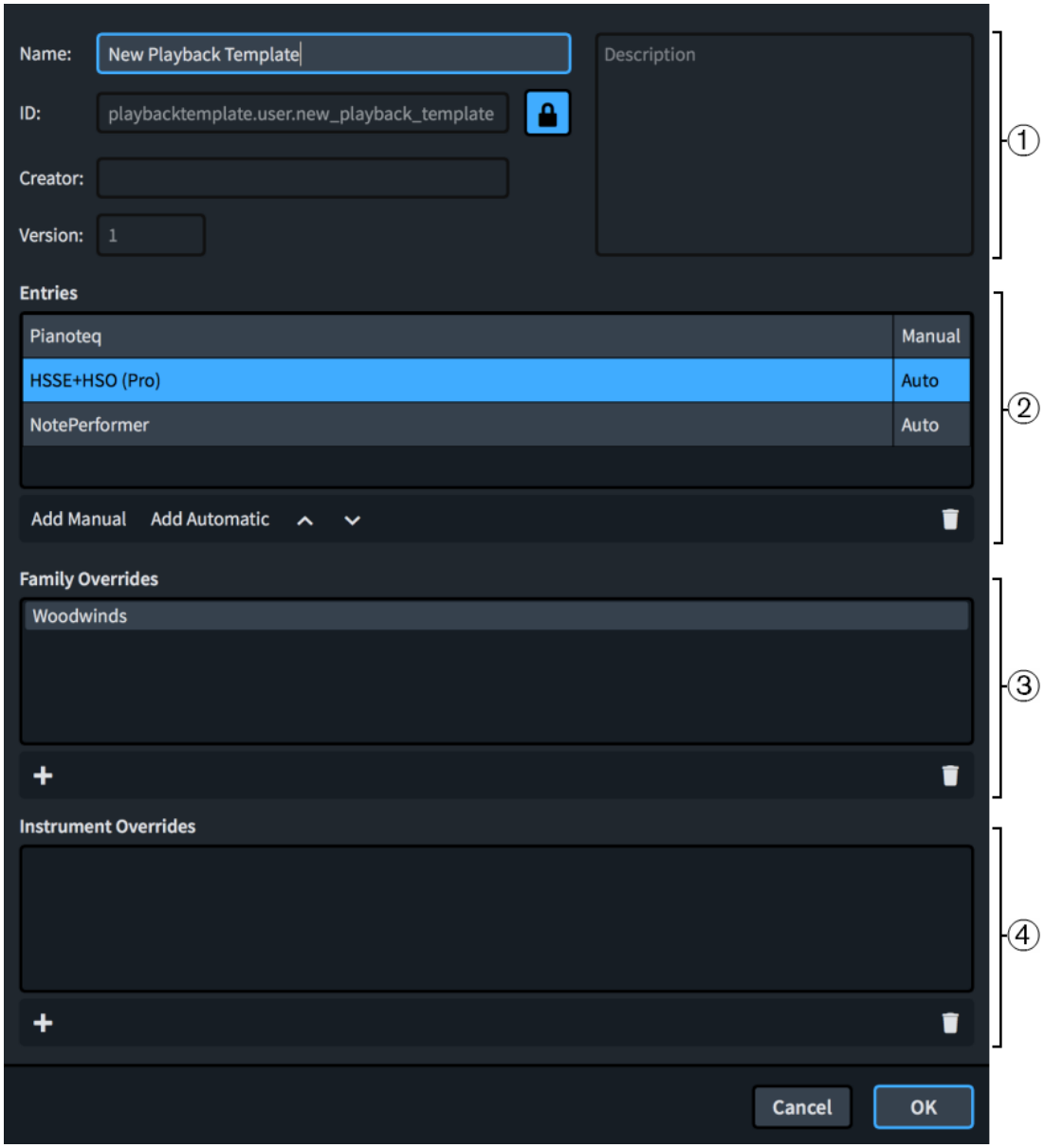
Creating custom playback templates on page 431
Applying/Resetting playback templates on page 430
Importing playback templates on page 432
Exporting playback templates on page 432

# Edit Playback Template dialog

The **Edit Playback Template** dialog allows you to create new custom playback templates and edit existing ones. You can use any combination of custom endpoint configurations and existing playback templates and specify the order in which they should be used.

Playback templates are available in all projects you open or create on your computer.

- You can open the **Edit Playback Template** dialog in Play mode by clicking **Add Playback Template**, **Duplicate Playback Template**, or **Edit Playback Template** in the **Apply Playback Template** dialog.




**Edit Playback Template** dialog

The **Edit Playback Template** dialog contains the following sections:

1 **Playback template data**

Allows you to specify the following identifying information for the selected custom playback template:

- **Name**: Allows you to set the name of the playback template that appears in the program, for example, in the **Apply Playback Template** dialog.
- **ID**: Allows you to set the unique ID of the playback template. Dorico Elements automatically populates the **ID** field with the information you enter into the **Name** field.
- **Creator**: Allows you to name the creator if you are sharing your playback template with other users.
- **Version**: Allows you to indicate the playback template version so you can identify the most recent one, for example, you can increase the **Version** number each time you make changes to the playback template.
- **Description**: Allows you to add any other information about the playback template.

NOTE

All fields in the playback template data section, except for **Name**, are locked by the **Lock Info** button. You must click this button in order to change the information in the fields.

**2 Entries**

Contains a table of all the custom endpoint configurations and existing playback templates used by the selected custom playback template. Entries are listed in order of priority, meaning that Dorico Elements assigns sounds from the top entry first. We recommend that you always include a factory default playback template at the bottom of the list as a fallback to ensure that all instruments are assigned sounds.

In most cases, listing entries in your order of preference in the **Entries** section is sufficient to achieve your desired playback. However, if multiple entries in your custom playback template provide sounds for the same instrument, you must set family and/or instrument overrides, for example, if you only want to use woodwind sounds from the first entry and use all other sounds from the second entry.

The column on the right identifies the type of the entry in the corresponding row.

- **Manual**: Entries that cannot load sounds automatically, including custom endpoint configurations
- **Auto**: Entries that can load sounds automatically, that is, factory default playback templates

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

- **Add Manual**: Allows you to add a manual entry to the playback template.
- **Add Automatic**: Allows you to add an automatic entry to the playback template.
- **Move up**: Moves the selected entry up the list.

- **Move down**: Moves the selected entry down the list.

- **Delete**: Removes the selected entry from the playback template.

**3 Family Overrides**

Contains a list of family overrides applied to the selected entry and allows you to add/remove overrides. Family overrides allow you to specify the instrument family sounds you want to use, for example, if you only want to use the woodwind sounds from an entry that also includes brass and string sounds.

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

- **Add Instrument Family**: Allows you to select an instrument family to apply as an override to the selected entry.

- **Delete Instrument Family**: Removes the selected family override from the selected entry.

4 **Instrument Overrides**

Contains a list of instrument overrides applied to the selected entry and allows you to add/remove overrides. Instrument overrides allow you to specify individual instrument sounds you want to use, for example, if you only want to use a solo violin sound from an entry that also includes ensemble string sounds.

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

- **Add Instrument**: Allows you to select an instrument to apply as an override to the selected entry.

- **Delete Instrument**: Removes the selected instrument override from the selected entry.

RELATED LINKS
Apply Playback Template dialog on page 426
Endpoints on page 433
Custom endpoint configurations on page 435

## Applying/Resetting playback templates

You can change the playback template applied to the current project, for example, if you do not need to use playback and so want to prevent Dorico Elements from loading sounds. Re-selecting playback templates resets them to their default settings.

PROCEDURE

1. Choose **Play** > **Playback Template** to open the **Apply Playback Template** dialog.
2. Select the playback template you want to use.
3. Click **Apply and Close**.

RESULT

The playback template applied to the current project is changed. If you re-selected the playback template already in use, the playback template is reset.

Sounds are loaded into plug-in instances in their score order.

TIP

- You can change the default playback template used for all future projects on the **Play** page in **Preferences**.
- You can also load sounds just for instruments without assigned sounds by choosing **Play** > **Load Sounds for Unassigned Instruments**.

RELATED LINKS
Playback templates on page 425
Preferences dialog on page 58

# Creating custom playback templates

You can create custom playback templates that can include combinations of factory default playback templates, custom endpoint configurations, and other non-factory default playback templates that cannot load sounds automatically.

PROCEDURE

1. In Play mode, choose **Play** > **Playback Template** to open the **Apply Playback Template** dialog.
2. Open the **Edit Playback Template** dialog to create a new playback template in one of the following ways:
   - To create an empty playback template, click **Add Playback Template** in the action bar.

     
   - To create a copy of an existing playback template, select it and click **Duplicate Playback Template** in the action bar.

     
3. In the **Edit Playback Template** dialog, click **Lock Info** to unlock the data fields.

   
   Locked

   
   Unlocked
4. Enter information for your playback template in the relevant fields.
5. In the **Entries** section, add the custom endpoint configurations and/or factory default playback templates you want.
   - To add a custom endpoint configuration or non-factory default playback template, click **Add Manual** and select the one you want from the menu.
   - To add a factory default playback template, click **Add Automatic** and select the one you want from the menu.

   TIP

   We recommend that you always include a factory default playback template at the bottom of the list as a fallback to ensure that all instruments are assigned sounds.
6. Optional: To change the order of entries and their order of preference in the playback template, select an entry and click one of the following options in the action bar:
   - To move the selected entry upwards, click **Move up**.
   - To move the selected entry downwards, click **Move down**.
7. Optional: Repeat step 6 until all the entries are in the correct order of preference.
8. Optional: Select an entry for which you want to specify instrument family overrides.
9. In the **Family Overrides** section action bar, click **Add Instrument Family** and select the one you want from the menu.

   For example, if you only want to use the woodwind sounds from a sound library that also has string sounds, select **Woodwinds**.
10. Optional: Select an entry for which you want to specify individual instrument overrides.
11. In the **Instrument Overrides** section action bar, click **Add Instrument** and select the one you want in the instrument picker.

    For example, if you only want to use the piano sound from a sound library that has other keyboard instrument sounds, select **Piano**.

12. Optional: Repeat steps 8 to 11 for other entries for which you want to specify instrument family and instrument overrides.
13. Click **OK** to save your changes and close the dialog.

RESULT

Your new custom playback template is created. It is available to use in the current project and all projects you create/open on your computer.

RELATED LINKS

Apply Playback Template dialog on page 426
Edit Playback Template dialog on page 428
Endpoint Setup dialog on page 433
Custom endpoint configurations on page 435
Saving custom endpoint configurations on page 436

## Importing playback templates

You can import playback templates into projects, for example, if someone you are working with exported their custom playback template for you to use. Playback templates are saved as `.dorico_pt` files.

PROCEDURE

1. Choose **Play** > **Playback Template** to open the **Apply Playback Template** dialog.
2. Click **Import** to open the File Explorer/macOS Finder.
3. In the File Explorer/macOS Finder, locate and select the playback template file you want to import.
4. Click **Open**.

RESULT

The selected playback template is imported. It becomes available in the current project and all projects you create/open on your computer.

TIP

You can also import playback templates by dragging `.dorico_pt` files into a Dorico Elements project window.

## Exporting playback templates

You can export playback templates so you can send them to other users or use them on other computers. By default, any playback templates you create are available in all projects on your computer.

PROCEDURE

1. Choose **Play** > **Playback Template** to open the **Apply Playback Template** dialog.
2. Select the playback templates you want to export.
3. Click **Export** to open the File Explorer/macOS Finder.
4. Specify a name and location for the playback template files.
5. Click **Save**.

RESULT

The selected playback templates are exported and saved in the selected location as separate `.dorico_pt` files.

# Endpoints

“Endpoint” is the term used for the unique combination of inputs and outputs that together allow the correct sounds to be played for each instrument.

In Dorico Elements, each endpoint brings together the following:

- A VST instrument or MIDI output device instance
- A specific channel on that VST instrument or MIDI output device
- The patch or program assigned to that channel
- The expression map and/or percussion map that describes the instrument or instruments that can be played by that patch or program, and the playback playing techniques and articulations provided

Each instrument in your project is connected to a specific endpoint. Assigning an expression/percussion map to the same endpoint allows Dorico Elements to translate any playing technique changes and articulations you input into the key switches and controller switches necessary to produce the required sounds for the instrument in playback.

When you use a factory default playback template, Dorico Elements sets up endpoints and expression/percussion maps automatically. If you want to load other plug-ins or change the patches within HALion Sonic SE, you can do so in the **Endpoint Setup** dialog.

NOTE

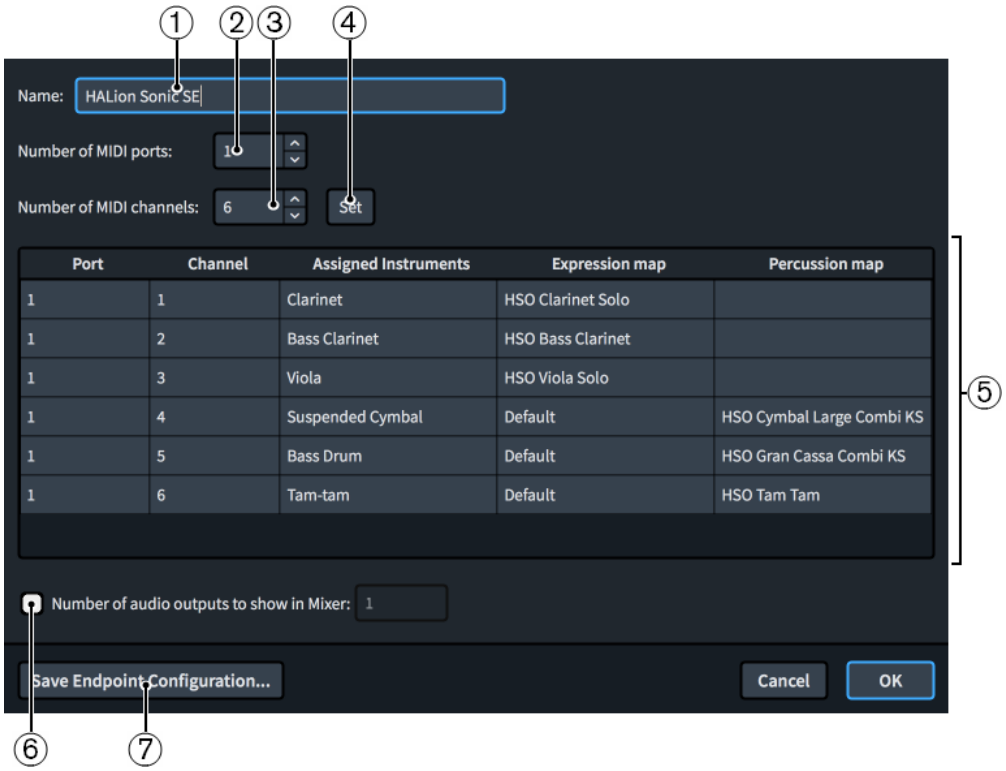
Any changes you make within plug-ins are not communicated to Dorico Elements, for example, changing a sound that the expression map expects to use a modulation wheel for dynamics to one that uses note velocity instead. This can lead to unexpected low notes sounding in playback because Dorico Elements is still using the expression and percussion maps for the original sounds. If you make changes in plug-ins, you must manually assign the correct expression and percussion maps to the appropriate endpoints.

You can then save your changes as a custom endpoint configuration if you want to reuse them in other projects.

## Endpoint Setup dialog

The **Endpoint Setup** dialog displays which expression and percussion maps are currently linked to each endpoint in the corresponding plug-in instance, and allows you to change these settings. It also allows you to save your current settings as custom endpoint configurations, which you can then include in custom playback templates.

- You can open the **Endpoint Setup** dialog by clicking **Endpoint Setup** in each plug-in instance in the VST and MIDI Instruments panel.




**Endpoint Setup** dialog

The **Endpoint Setup** dialog contains the following options and sections:

1 **Name**

Allows you to change the name of the selected plug-in instance. This affects the name shown in the VST and MIDI Instruments panel and in the Mixer.

2 **Number of MIDI ports**

Displays the number of MIDI ports the corresponding plug-in instance currently uses.

You can change the number of MIDI ports, for example, if you are using a plug-in that uses more than one port. Dorico Elements does not load multiple MIDI ports by default.

3 **Number of MIDI channels**

Displays the number of MIDI channels the corresponding plug-in instance currently uses.

You can change the number of channels, for example, if you have a monotimbral plug-in such as a piano sampler which only has one MIDI channel, or a multitimbral plug-in with 16 MIDI channels and 16 audio outputs.

4 **Set**

Sets the plug-in instance to have the number of MIDI ports and channels specified in the **Number of MIDI ports** and **Number of MIDI channels** value fields. This changes the number of rows in the table.

5 **Endpoint setup table**

Contains the settings for the corresponding plug-in instance, arranged into the following columns:

- **Port**: Displays the port used by the instrument in the corresponding row of the table.

  NOTE

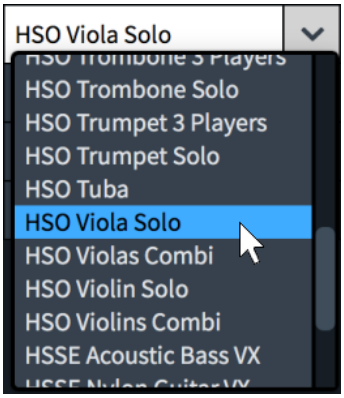
  You cannot change the port from within the **Endpoint Setup** dialog. You must change the port in the instrument track headers.

- **Channel**: Displays the channel used by the instrument in the corresponding row of the table.

  NOTE

  You cannot change the channel from within the **Endpoint Setup** dialog. You must change the channel in the instrument track headers.

- **Assigned Instruments**: Displays the full name of the instrument in the corresponding row, as set for that instrument in the **Edit Instrument Names** dialog.
- **Expression map**: Displays the expression map currently assigned to the instrument in the corresponding row. You can change the expression map by double-clicking it and selecting another expression map from the menu.




- **Percussion map**: Displays the percussion map currently assigned to the instrument in the corresponding row. You can change the percussion map by double-clicking it and selecting another percussion map from the menu.

6 **Number of audio outputs to show in Mixer**

Allows you to change the number of audio outputs shown in the Mixer, for example, if you want to hide unused outputs when using plug-ins that provide more audio outputs than Dorico Elements uses.

7 **Save Endpoint Configuration**

Opens the **Save Endpoint Configuration** dialog, which allows you to enter a name for the current endpoint configuration and save it as a custom endpoint configuration.

RELATED LINKS
Playback templates on page 425
Expression Maps dialog on page 440
Edit Instrument Names dialog on page 136

## Custom endpoint configurations

Custom endpoint configurations save the current state and settings of plug-ins in your project, such as the number and type of VST/MIDI instruments loaded and the instruments and expression/percussion maps assigned to endpoints.

You can save custom endpoint configurations that include the settings for all plug-ins currently loaded or only a single one.

Custom endpoint configurations are available in all projects you open or create on your computer.

NOTE

You cannot delete custom endpoint configurations within Dorico Elements.

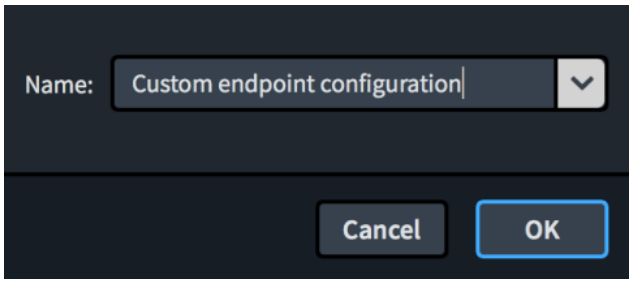
RELATED LINKS
Playback templates on page 425
Edit Playback Template dialog on page 428
Creating custom playback templates on page 431

## Save Endpoint Configuration dialog

The **Save Endpoint Configuration** dialog allows you to save the current state and settings of plug-ins in your project. Saving custom endpoint configurations allows you to re-use them in other projects and include them in custom playback templates.

You can open the **Save Endpoint Configuration** dialog in Play mode in any of the following ways:

- In the VST and MIDI Instruments panel, click **Save Endpoint Configuration** in the **VST Instruments** or **MIDI Instruments** action bar. This saves the current state of all plug-ins in the corresponding section of the panel.
- In the **Endpoint Setup** dialog, click **Save Endpoint Configuration**. This saves the current state of the selected plug-in only.




**Save Endpoint Configuration** dialog

The **Save Endpoint Configuration** dialog contains a **Name** field that allows you to enter a name for the endpoint configuration you are saving. The arrow at the end of the field allows you to select an existing custom endpoint configuration to use to populate the field.

If you enter a name that already exists, you can overwrite the existing custom endpoint configuration. When you overwrite existing custom endpoint configurations, Dorico Elements moves the previous version to your recycle bin.

RELATED LINKS
Playback templates on page 425

## Saving custom endpoint configurations

You can save any overrides you have made to endpoint configurations, such as changing the instruments and expression maps assigned to particular endpoints. This allows you to use these overrides in custom playback templates and re-use the same endpoint configurations in other projects.

PREREQUISITE

- You have opened a project containing all instruments and plug-ins that are necessary for the custom endpoint configuration.
- You have created any necessary expression maps and playback playing technique combinations.
- You have created any necessary custom playing techniques.

PROCEDURE

1. Load the plug-ins you want.

   You can do this by applying a playback template or by adding plug-in instances manually in the **VST Instruments** section of the VST and MIDI Instruments panel.

2. Change the settings for the endpoints as required.

   For example, change the instruments or expression maps assigned to each endpoint.

3. Open the **Save Endpoint Configuration** dialog in one of the following ways:

   - To save a custom endpoint configuration for only a single plug-in instance, open the **Endpoint Setup** dialog for that plug-in instance and click **Save Endpoint Configuration**.
   - To save a custom endpoint configuration that includes all plug-in instances, click **Save Endpoint Configuration** in the **VST Instruments** section of the VST and MIDI Instruments panel action bar.

4. Enter a name for your custom endpoint configuration in the **Name** field.

   NOTE

   If you enter a name that already exists, or select an existing custom endpoint configuration from the menu, the existing custom endpoint configuration is overwritten.

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

RESULT

The current state of either the selected plug-in instance or all plug-in instances in the section is saved as a custom endpoint configuration. This includes any custom playing techniques included in any of the expression/percussion maps.

RELATED LINKS

Playback templates on page 425
Creating custom playback templates on page 431
Creating new expression maps on page 447
Creating playback playing technique combinations on page 448

# Assigning instruments/voices to endpoints

You can assign instruments to any endpoint, for example, if you have loaded a plug-in with multiple ports and want to change the endpoint of an existing instrument to an endpoint on one of your new ports. For instruments with independent voice playback enabled, you can assign each voice to a different endpoint.

PREREQUISITE

- If you want to assign different voices belonging to the same instrument to different endpoints, you have enabled independent voice playback.
- If you want to assign instruments to endpoints in specific plug-in instances, you have loaded those plug-in instances. You can do this by applying a suitable playback template or by loading VST/MIDI instruments manually.

PROCEDURE

1. Expand the instrument track whose assigned endpoint you want to change.
2. Optional: For instruments with independent voice playback enabled, select the voice whose assigned endpoint you want to change from the **Voice** menu.

3. Optional: Change the flows to which you want your changes to apply in one of the following ways:
   - To change the assigned endpoint for the selected voice in the current flow only, click **Set for This Flow**.
   - To change the assigned endpoint for the selected voice in all flows, click **Set for All Flows**.

     NOTE

     This affects all voices in the same position in the **Voices** menu rather than by voice type.
4. Optional: To assign the instrument/voice to an endpoint in a different plug-in instance, select that plug-in instance from the menu in their track header.
5. In the instrument track header, select a new option from one or both of the following menus:
   - **Port**
   - **Ch.**

RESULT

The endpoint to which the instrument/voice is assigned is changed.

- Changing just the **Ch.** value changes the channel in the plug-in instance that the corresponding instrument uses.
- Changing both the **Port** and **Ch.** values changes both the port in the plug-in instance, and the channel in that port, that the corresponding instrument uses.

RELATED LINKS

Expression Maps dialog on page 440
Instrument tracks on page 381
Applying/Resetting playback templates on page 430
Loading VST/MIDI instruments manually on page 371
Enabling independent voice playback on page 413

# Assigning expression/percussion maps to endpoints

You can assign expression/percussion maps to the endpoints in your project, for example, if you have created a custom percussion map and must link it to the endpoint for the corresponding VST patch.

PREREQUISITE

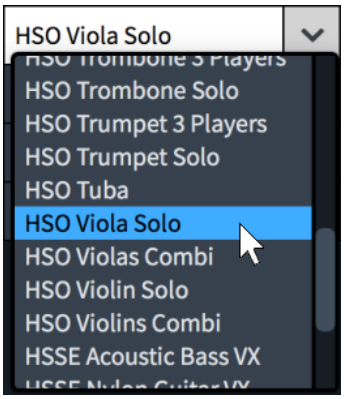
You have made or imported any expression/percussion maps that you require but do not exist on your computer.

PROCEDURE

1. In the VST and MIDI Instruments panel, click **Endpoint Setup** in the plug-in instance in which you want to change the expression/percussion maps assigned to endpoints to open the **Endpoint Setup** dialog.

   
2. Double-click the expression/percussion map you want to change.
3. Click the disclosure arrow to the right of the field.

   A menu appears containing all maps of the same type currently loaded in your project.




4. Select the expression/percussion map you want from the menu.
5. Press **Return**.
6. Optional: Repeat steps 2 to 5 for any other endpoints whose assigned expression/percussion maps you want to change.
7. Click **OK** to save your changes and close the dialog.

RELATED LINKS
Percussion maps on page 449

# Expression maps

Expression maps tell Dorico Elements how to use appropriately the patches and sounds in the VST instruments that you have loaded into your project.

Expressing a range of dynamics on instruments means changing the volume and attack of notes. Because the strength of attack changes the character of the start of sounds as well as their volume, loud sounds often require stronger attacks and quiet sounds often require softer attacks.

Different patches and instruments have different approaches to changing dynamics and volume in playback. For example, some patches only change the velocity whereas others use a controller in combination with changing the velocity.

Dorico Elements also uses expression maps to specify the playback playing techniques that are supported by each patch in your project. For example, string instruments such as the violin have different techniques, because they can play arco, pizzicato, and *col legno*, and their bow position can be anywhere between *sul ponticello* and *sul tasto*.

Dorico Elements supports the following ways of sending information to VST instruments:

- Key switches
- Controllers
- Program changes
- Channel changes

In addition to the HALion Symphonic Orchestra expression maps, there are the following expression maps in Dorico Elements:

- **CC11 Dynamics**: Uses MIDI controller 11 to play dynamics.

  NOTE

  This only applies to instruments that can change their dynamic while notes are sounding, such as violin or flute.

- **Default**: Uses note velocity to control dynamic volume.
- **Modulation Wheel Dynamics**: Uses a modulation wheel to control the dynamic volume.
- **Transpose down 1 octave**: Used by some instrument patches that sound an octave higher than written so that they can be played without needing a full range keyboard.
- **Transpose up 1 octave**: Allows the bottom octave of keyboards to be used for key switches instead of notes, but is also used by some bass instrument patches that sound an octave lower than written so that they can be played without needing a full range keyboard.

You can edit, create, and import/export expression maps in the **Expression Maps** dialog. Expression maps are saved as `.doricolib` files.

RELATED LINKS
Percussion maps on page 449

## Expression Maps dialog

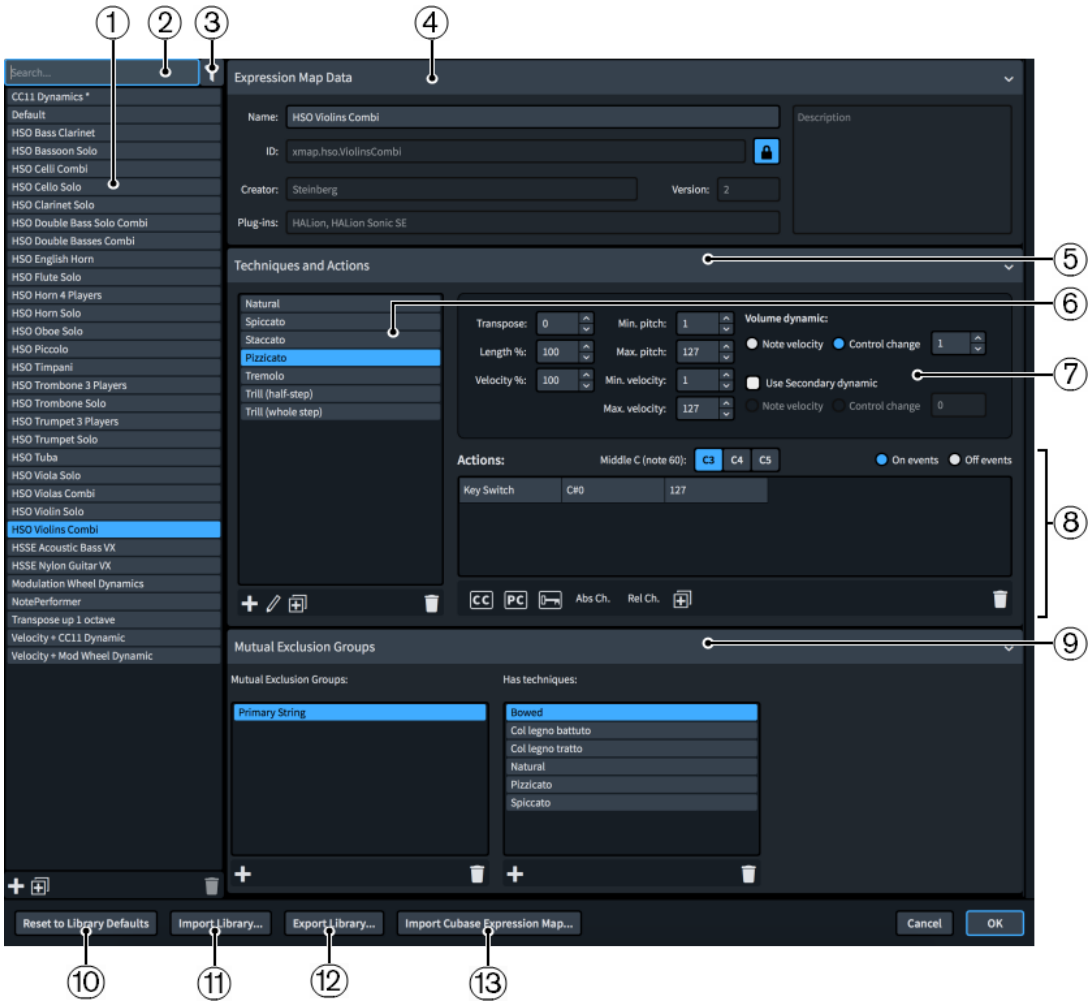
The **Expression Maps** dialog allows you to create new expression maps, edit existing expression maps, and import/export expression maps. You can also import expression maps made in Cubase.

- You can open the **Expression Maps** dialog in Play mode by choosing **Play** > **Expression Maps**.

Although the format of expression maps in Dorico Elements is similar to Cubase, Dorico Elements does not handle expression maps in exactly the same ways. For example, Dorico Elements allows you to use more playback playing techniques, but Cubase can reproduce more combinations of multiple playback playing techniques.

NOTE

During playback, Dorico Elements does not currently support all fields in the **Expression Maps** dialog, including some settings imported from Cubase. This is planned for future versions.




**Expression Maps** dialog

The **Expression Maps** dialog contains the following sections and options:

1 **Expression maps list**

Contains the expression maps currently available for your project.

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

- **Add Expression Map**: Adds a new expression map that contains no existing settings.

- **Duplicate**: Creates a copy of an existing expression map that you can edit separately from the original.

- **Delete Expression Map**: Deletes the selected expression maps.

  NOTE

  You can only delete custom expression maps. You cannot delete any default expression maps.

2 **Search field**

Allows you to search for expression maps by name.

3 **Show only expression maps used in this project**

Allows you to filter the expression maps list so it only includes expression maps used in the current project.

4 **Expression Map Data section**

Allows you to specify the following identifying information for the selected expression map:

- **Name**: Allows you to set the name of the expression map that appears in the program, for example, in the **Endpoint Setup** dialog.
- **ID**: Allows you to set the unique ID of the expression map. You can enter any content in the ID field.

  It can be useful to include the instrument and sound library for which you created the map, as well as your name, for example, **xmap.user.paulsmith.hso.violinpizz**.
- **Creator**: Allows you to name the creator if you are sharing your expression map with other users.
- **Version**: Allows you to indicate the expression map version so you can identify the most recent one.
- **Plug-ins**: Allows you to list the names of plug-ins to which the expression map applies, with each name separated by a comma. You can leave this field blank.
- **Description**: Allows you to add any other information about the expression map.

NOTE

All fields in the **Expression Map Data** section are locked by the **Lock Info** button. You must click this button in order to change the information in the fields.

You can hide/show the **Expression Map Data** section by clicking the section header.

5 **Techniques and Actions section**

Contains subsections that allow you to view, edit, and control the playback playing techniques in the selected expression map.

You can hide/show the **Techniques and Actions** section by clicking the section header.

6 **Techniques list**

Contains a list of playback playing techniques for the expression map currently selected.

In simple cases, entries in the Techniques list are individual playback playing techniques, such as **Staccato** or **Accent**. However, it is possible to combine multiple playback playing techniques for plug-ins that have separate samples for different combinations of playback playing techniques. For example, **Staccato + Accent** might require a separate set of key switches to **Staccato** and **Accent** individually.

NOTE

Most instruments have a “natural” playback playing technique, which is the most common way of playing the instrument. Dorico Elements requires every instrument to have a defined natural playback playing technique.

Selecting a playback playing technique in the Techniques list allows you to edit its controls and actions.

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

- **Add Technique**: Allows you to add a new playback playing technique or combination of playback playing techniques to the expression map from the available playback playing techniques in the **Playing Technique Combinations** dialog.

- **Edit Technique**: Opens the **Playing Technique Combinations** dialog, which allows you to edit the combination of playback playing techniques used in the selected playback playing technique.

  You can also edit existing playback playing techniques by double-clicking them in the Techniques list.
- **Duplicate**: Creates a copy of an existing playback playing technique that you can edit separately from the original.

  
- **Delete Technique**: Deletes the selected playback playing technique.

  NOTE

  You can only select one playback playing technique at a time in the Techniques list.

**7 Technique controls**

Contains controls that affect the playback playing technique selected in the Techniques list, such as **Velocity**. It also contains **Volume dynamic**, which allows you to choose whether the volume dynamic for the selected playback playing technique is controlled by its **Note velocity** or a **Control change**. For sound libraries that use both, you can use **Use Secondary dynamic** to define an additional volume control.

NOTE

If you choose **Control change** for **Volume dynamic**, you must specify the controller by number. You can consult the documentation for the VST instrument and/or MIDI controller you are using to find the appropriate controller number.

**8 Actions subsection**

Allows you to determine how the switch required to execute each playback playing technique is controlled. This subsection also contains the details of existing actions required to produce the selected playback playing technique.

Actions can be any of the following types:

- Control change
- Program change
- Key switch

NOTE

Depending on your plug-in, multiple types of actions can be required to change individual playback playing techniques.

Actions are displayed in a table with three columns.

| | | |
|---|---|---|
| Key Switch | C#0 | 127 |
| Control Change | 1 | 64 |
| Program Change | 1 | |

**Actions** table

The first column shows the type of action.

The second column controls the first parameter of the MIDI event. For note events, this indicates the pitch. For control changes, this indicates the control change number. For program changes, this indicates the program number.

The third column controls the second parameter of the MIDI event. For note events, this indicates the velocity. For control changes, this indicates the amount of control change within the range 0 to 127. Program changes do not have a second parameter.

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

- **Add Control Change Action**: Adds a control change action with default settings.

- **Add Program Change Action**: Adds a program change action with default settings.

- **Add Note Event Action**: Adds a key switch action with default settings.

- **Add Absolute Channel Change Action**: Adds an absolute channel change action with default settings.
- **Add Relative Channel Change Action**: Adds a relative channel change action with default settings.
- **Duplicate Action**: Creates a copy of an existing action that you can then edit separately from the original.

- **Delete Action**: Deletes the selected action.

  NOTE

  You can only select one action at a time in the **Actions** table.

The **Actions** subsection also allows you to specify which actions affect the start of notes and which affect the end of notes. For example, you might want an event that resets the playback playing technique back to normal to apply only to the end of notes.

- **On events** affects the start of notes.
- **Off events** affects the end of notes.

You can also use **Middle C (note 60)** to choose the pitch for middle C, as there are different conventions for this. We recommend that you consult the documentation for your sound libraries to check whether each one considers middle C to be C3, C4, or C5, and change this setting accordingly.

**9 Mutual Exclusion Groups section**

Allows you to specify playback playing techniques that are mutually exclusive, that is, cannot be in use concurrently. For example, players cannot play vibrato and non-vibrato at the same time. Putting playback playing techniques into the same exclusion group means only one can be used at a time.

Mutual exclusion groups apply only to the selected expression map. This allows you to set different mutual exclusion groups in each expression map, for example, if one of your sound libraries supports a particular playback playing technique combination for an instrument but another sound library does not.

The **Mutual Exclusion Groups** column allows you to add and delete mutual exclusion groups. The action bar at the bottom of the column contains the following options:

- **Add**: Opens a dialog that allows you to create a new mutual exclusion group and enter a name for it.

- **Delete**: Deletes the selected mutual exclusion group.

NOTE

You can only select one mutual exclusion group at a time.

The **Has techniques** column allows you to change the playback playing techniques included in the selected mutual exclusion group. The action bar at the bottom of the column contains the following options:

- **Add**: Opens the **Playing Technique Combinations** dialog that allows you to select playback playing techniques to add to the selected mutual exclusion group.

- **Delete**: Deletes the selected playback playing technique from the mutual exclusion group.

NOTE

You can only select one playback playing technique at a time.

You can hide/show the **Mutual Exclusion Groups** section by clicking the section header.

10 **Reset to Library Defaults**

Allows you to revert any changes you have made to the expression maps from the Default Library.

11 **Import Library**

Opens the File Explorer/macOS Finder, where you can select the `.doricolib` files that you want to import as expression maps.

12 **Export Library**

Opens the File Explorer/macOS Finder, where you can select the location to which you want to export the currently selected expression maps as a `.doricolib` file. You can then import the `.doricolib` file into other projects and share it with other users.

13 **Import Cubase Expression Map**

Opens the File Explorer/macOS Finder, where you can select the Cubase format expression maps you want to import.

NOTE

It is not currently possible to import all combinations of playback playing techniques. Cubase expression maps in Dorico Elements often require some editing to function correctly.

However, switch data is preserved.

RELATED LINKS

Endpoint Setup dialog on page 433

## Playing Technique Combinations dialog

The **Playing Technique Combinations** dialog allows you to create combinations of playback playing techniques that you want to apply simultaneously. Playback playing techniques are used by expression maps to assign the correct sounds to the required playing techniques in the music.

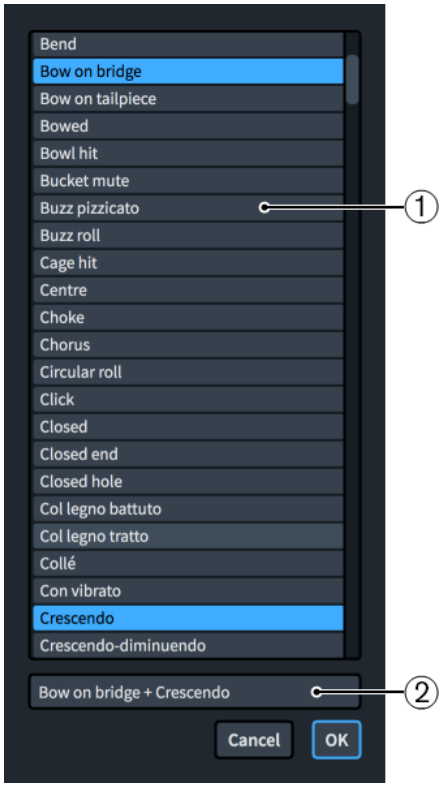
You can open the **Playing Technique Combinations** dialog in the following ways:

- In the **Expression Maps** dialog, click **Add Technique** in the **Techniques** action bar.

- In the **Expression Maps** dialog, select an existing playback playing technique in the Techniques list and click **Edit Technique** in the **Techniques** action bar. You can also double-click the playback playing technique.




**Playing Technique Combinations** dialog

**1 Techniques list**

Allows you to select existing playback playing techniques to include in a new playback playing technique or to edit an existing one.

You can select multiple playback playing techniques to combine by **Ctrl/Cmd**-clicking each playback playing technique.

**2 Name**

Displays the name of the selected playback playing technique. If you select multiple playback playing techniques, each name is automatically separated by a + symbol.

You cannot change the name of playback playing techniques.

RELATED LINKS

Creating playback playing technique combinations on page 448

# Creating new expression maps

You can create new expression maps from scratch and you can duplicate existing expression maps and edit the settings, for example, when using third-party sound libraries or MIDI devices that do not provide expression maps.

PROCEDURE

1. Choose **Play** > **Expression Maps** to open the **Expression Maps** dialog.
2. Create a new expression map in one of the following ways:
   - To create an empty expression map, click **Add Expression Map** in the action bar.

     
   - To create a copy of an existing expression map, select it in the expression maps list and click **Duplicate Expression Map** in the action bar.

     
3. In the **Expression Map Data** section, click **Lock Info** to unlock the fields.

   
   Locked

   
   Unlocked
4. In the **Expression Map Data** section, enter information for your expression map in the relevant fields.
5. Optional: In the Techniques list in the **Techniques and Actions** section, add a new playback playing technique in one of the following ways:
   - Click **Add Technique**.

     
   - Select an existing playback playing technique and click **Duplicate Technique**.

     
6. Optional: If playback playing technique combinations you require do not exist in the expression map, create them in the **Playing Technique Combinations** dialog.
7. In the Techniques list, select a playback playing technique.
8. In the **Techniques and Actions** section, change any of the options relevant to the selected playback playing technique.

   For example, choose whether the volume of the selected technique is controlled by its **Note velocity** or a **Control change**.
9. In the **Actions** subsection, add an action for the currently selected playback playing technique in one of the following ways:
   - Click **Add Note Event**.
   - Click **Add Control Change**.
   - Click **Add Program Change**.
   - Select an existing action and click **Duplicate**.
10. Choose the type of event from one of the following options:
    - **On events**
    - **Off events**
11. Optional: Repeat steps 9 and 10 for each action you require for each technique.

12. Optional: To change the values for actions, double-click them and change their values.
13. Optional: If you want to define mutual exclusion groups in your new expression map, add the mutual exclusion groups you want in the **Mutual Exclusion Groups** section.
14. Optional: If you added mutual exclusion groups, add the necessary playback playing techniques to each mutual exclusion group.
15. Click **OK** to save your changes and close the dialog.

RELATED LINKS
Expression Maps dialog on page 440
Endpoint Setup dialog on page 433
Playing Technique Combinations dialog on page 446

# Creating playback playing technique combinations

You can create combinations of playback playing techniques for a single expression map, for example, if the expression map requires a different set of key switches for **Staccato + Accent** compared to **Staccato** and **Accent** individually.

PROCEDURE

1. Choose **Play** > **Expression Maps** to open the **Expression Maps** dialog.
2. In the expression maps list, select the expression map to which you want to add new playback playing technique combinations.
3. Open the **Playing Technique Combinations** dialog to change the combination for a playback playing technique in one of the following ways:
   - To create a new playback playing technique, click **Add Techniques** in the Techniques list action bar.

     
   - To change the combination for an existing playback playing technique, select the playback playing technique and click **Edit Technique** in the Techniques list action bar.

     
4. In the **Playing Technique Combinations** dialog, select the playback playing techniques you want to combine.

   You can **Ctrl/Cmd**-click multiple playback playing techniques, but you can also only select a single playback playing technique.
5. Click **OK** to save your changes and close the dialog.

   The **Playing Technique Combinations** dialog closes.

RESULT

A new playback playing technique combination is created and becomes available in the Techniques list for the selected expression map in the **Expression Maps** dialog.

RELATED LINKS
Playing Technique Combinations dialog on page 446
Expression Maps dialog on page 440

## Importing expression maps

You can import expression maps into projects. Expression maps are saved as `.doricolib` files.

PROCEDURE

1. Choose **Play** > **Expression Maps** to open the **Expression Maps** dialog.
2. Click **Import Library** to open the File Explorer/macOS Finder.
3. In the File Explorer/macOS Finder, locate and select the expression map file you want to import.
4. Click **Open**.

RESULT

The selected expression map is imported into your project. It appears in the expression maps list.

## Exporting expression maps

You can export expression maps so you can use them in other projects. Expression maps are saved as `.doricolib` files.

PROCEDURE

1. Choose **Play** > **Expression Maps** to open the **Expression Maps** dialog.
2. In the expression maps list, select the expression maps you want to export.
3. Click **Export Library** to open the File Explorer/macOS Finder.
4. In the File Explorer/macOS Finder, specify a name and location for the library file.
5. Click **Save**.

RESULT

The selected expression maps are exported as a library file and saved in the selected location.

# Percussion maps

Unpitched percussion instruments are played back using patches that map unpitched sounds onto different MIDI notes. The pitches required to produce different unpitched sounds vary by device, sound library, manufacturer, and so on, and have no connection to the position of percussion instruments on five-line staves.

The following list contains some examples of unpitched percussion instruments from the General MIDI percussion map.

- Bass drum: C2 (MIDI note 36, two octaves below middle C)
- Kick drum: D2 (MIDI note 38)
- Closed hi-hat: F♯2 (MIDI note 42)
- Cowbell: G♯3 (MIDI note 56)
- Open triangle: A5 (MIDI note 81)

Dorico Elements uses percussion maps to connect the written representation of notes and playing techniques for percussion instruments to the samples required to play those sounds back.

NOTE

A percussion map describes which unpitched percussion instruments and their playback playing techniques are present in a particular patch, and how to play them back. For example, it describes which MIDI note to play, and if another MIDI note is needed as a key switch to trigger particular playing techniques.

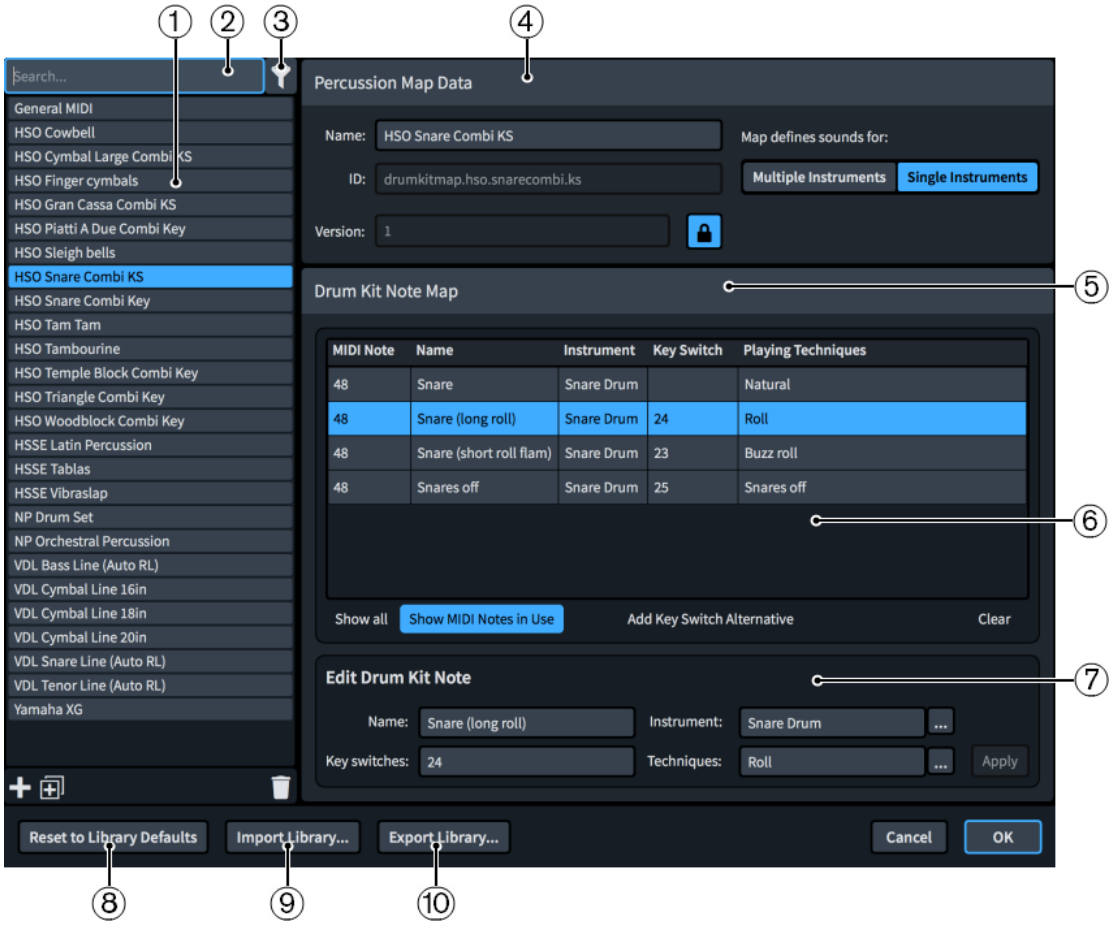
A set of percussion maps for the unpitched percussion patches that are part of theHALion Symphonic Orchestra and HALion Sonic SE factory libraries is provided with Dorico Elements. They are automatically chosen when you add percussion instruments to your project.

You can define custom percussion maps for third-party sound libraries or MIDI devices in the **Percussion Maps** dialog, in order to obtain correct playback.

# Percussion Maps dialog

In the **Percussion Maps** dialog, you can define custom percussion maps for third-party sound libraries or MIDI devices in order to obtain correct playback.

- You can open the **Percussion Maps** dialog in Play mode by choosing **Play** > **Percussion Maps**.




**Percussion Maps** dialog

The **Percussion Maps** dialog is divided into the following sections:

1 **Percussion maps list**

Contains the percussion maps currently available in your project.

You can add and delete percussion maps using the following buttons in the action bar at the bottom of the percussion maps list:

- **Add Percussion Map**: Adds a new percussion map that contains no existing settings.

- **Duplicate**: Creates a copy of an existing percussion map that you can edit separately from the original.

- **Delete Percussion Map**: Deletes the selected percussion maps.

NOTE

You can only delete custom percussion maps. You cannot delete any default percussion maps.

**2 Search field**

Allows you to search for percussion maps by name.

**3 Show only percussion maps used in this project**

Allows you to filter the percussion maps list so it only includes percussion maps used in the current project.

**4 Percussion Map Data section**

Allows you to specify the following identifying information for the selected percussion map:

- **Name**: Allows you to specify the displayed name for the percussion map that appears in the **Endpoint Setup** dialog.
- **ID**: Allows you to set the unique ID of the percussion map. You can enter any content in the ID field.

  It can be useful to include the instrument and sound library for which you created the map, as well as your name, for example, **xmap.user.paulsmith.hso.cowbell**.
- **Version**: Allows you to indicate the percussion map version so you can identify the most recent one.

NOTE

- All fields in the **Percussion Map Data** section are locked by the **Lock Info** button. You must click this button in order to change the information in the fields.
- The **Endpoint Setup** dialog is where you set which percussion map Dorico Elements uses for each channel on your VST instrument or MIDI output device.

You can choose one of the options for **Map defines sounds for**, as appropriate for the current percussion map:

- **Multiple Instruments**: Choose this if the patch for which you are creating a map contains many different percussion instruments, such as the General MIDI drum map.
- **Single Instruments**: Choose this if the patch for which you are creating a map contains only a single percussion instrument, perhaps with multiple playback playing techniques for that instrument. For example, a snare drumline patch in Virtual Drumline or another specialist sound library.

  This can also be useful when your VST instrument has several patches that have the same playback playing technique mappings. For example, there are both large and small cymbal patches in HALion Symphonic Orchestra which provide natural strike and roll

sounds. Creating a single individual instrument percussion map allows you to use the same mapping for these sounds for multiple patches.

5 **Drum Kit Note Map section**

Contains subsections that allow you to view, edit, and control the drum kit notes in the selected percussion map.

6 **Drum Kit Note Map** table

By default, the table shows the drum kit notes in use by the selected percussion map in numerical order. The table also contains the following columns, which display the corresponding available data about the selected drum kit note:

- **MIDI Note**
- **Name**
- **Instrument**
- **Key Switch**
- **Playing Techniques**

At the bottom of the table there are the following options:

- **Show all**: Shows all MIDI notes from 0 to 127.
- **Show MIDI Notes in Use**: Only shows the MIDI notes in use by the selected percussion map.
- **Add Key Switch Alternative**: Duplicates the selected drum kit note.
- **Clear**: Deletes the selected drum kit note.

You can change the data for the currently selected drum kit note in the **Edit Drum Kit Note** subsection.

7 **Edit Drum Kit Note subsection**

Allows you to specify data in the following fields for the drum kit note currently selected in the **Drum Kit Note Map** table:

- **Name**: The displayed name for the specific combination of instrument and playback playing technique. You may choose to input the name used in the manufacturer's documentation for your VST instrument or MIDI output device.
- **Instrument**: Allows you to select an instrument for the drum kit note selected in the **Drum Kit Note Map** section from a list of all the unpitched percussion instruments you can create in Dorico Elements.
- **Key switches**: Allows you to specify the MIDI note number of the key you want to use as a key switch if this sound requires another MIDI note to be played to trigger this specific combination of instrument and playback playing techniques.

  NOTE

  Key switches are not compulsory.

- **Techniques**: Allows you to select a playback playing technique to apply to the instrument selected in the **Instrument** field from a list of the available playback playing techniques.

8 **Reset to Library Defaults**

Allows you to revert any changes you have made to the percussion maps from the Default Library.

9 **Import Library**

Opens the File Explorer/macOS Finder, where you can select the `.doricolib` files that you want to import as percussion maps.

10 **Export Library**

Opens the File Explorer/macOS Finder, where you can select the location to which you want to export the currently selected percussion maps as a `.doricolib` file. You can then import the `.doricolib` file into other projects and share it with other users.

## Creating new percussion maps

You can create new percussion maps from scratch and you can duplicate existing percussion maps and edit the settings, for example, to obtain correct playback when using third-party sound libraries or MIDI devices.

PROCEDURE

1. Choose **Play** > **Percussion Maps** to open the **Percussion Maps** dialog.
2. Create a new percussion map in any of the following ways:
   - To create an empty percussion map, click **Add Percussion Map** in the action bar.

     
   - To create a copy of an existing percussion map, select it in the percussion maps list and click **Duplicate Percussion Map** in the action bar.

     
3. In the **Percussion Map Data** section, click **Lock Info** to unlock the fields.

   
   Locked

   
   Unlocked
4. Enter the display name you want for the percussion map in the **Name** field.

   This name appears in the **Endpoint Setup** dialog.
5. Enter any unique identification name in the **ID** field.

   It can be useful to include the instrument and sound library for which you created the map, as well as your name, in the identification name for percussion maps, for example, **xmap.user.paulsmith.hso.cowbell**.
6. Choose one of the following options for **Map defines sounds for**, as appropriate for the current percussion map:
   - **Multiple Instruments**
   - **Single Instruments**
7. In the **Drum Kit Note Map** section, click **Show all** to show unmapped notes.
8. Select the row corresponding to the MIDI note for which you want to create a new mapping.
9. In the **Edit Drum Kit Note** subsection, click the following button beside the **Instrument** field to open a dialog containing a list of percussion instruments.

   
10. Select the instrument that corresponds to the sound produced by the selected MIDI note.
11. Click **OK**.
12. In the **Edit Drum Kit Note** subsection, click the following button beside the **Techniques** field to open the **Playing Technique Combinations** dialog.

    
13. Select the appropriate playback playing techniques for the sound produced by the selected MIDI note.

    For example, **Ctrl/Cmd**-click **Buzz roll** and **Rim**.

14. Click **OK**.
15. In the **Edit Drum Kit Note** subsection, enter the display name you want for this combination of instrument and playing technique in the **Name** field.
16. In the **Key switches** field, specify the MIDI note number of the key switch if this sound requires one.
17. Click **Apply**.
18. Optional: Repeat these steps for each MIDI note until you have created all the required mappings for your project.
19. Click **OK** to save your changes and close the dialog.

RESULT

Your new percussion map is created.

AFTER COMPLETING THIS TASK

You must assign percussion maps to the same endpoints as the VST instruments or MIDI devices that provide the corresponding patches.

You can export the percussion map if you want to use it in other projects.

RELATED LINKS

Percussion maps on page 449
Assigning expression/percussion maps to endpoints on page 438
Endpoint Setup dialog on page 433

## Importing percussion maps

You can import percussion maps into projects. Percussion maps are saved as `.doricolib` files.

PROCEDURE

1. Choose **Play** > **Percussion Maps** to open the **Percussion Maps** dialog.
2. Click **Import Library** to open the File Explorer/macOS Finder.
3. In the File Explorer/macOS Finder, locate and select the percussion map file you want to import.
4. Click **Open**.

RESULT

The selected percussion map is imported into your project. It appears in the percussion maps list.

## Exporting percussion maps

You can export percussion maps so you can use them in other projects. Percussion maps are saved as `.doricolib` files.

PROCEDURE

1. Choose **Play** > **Percussion Maps** to open the **Percussion Maps** dialog.
2. In the percussion maps list, select the percussion maps you want to export.
3. Click **Export Library** to open the File Explorer/macOS Finder.
4. In the File Explorer/macOS Finder, specify a name and location for the library file.
5. Click **Save**.

RESULT

The selected percussion maps are exported as a library file and saved in the selected location.

# Defining how combinations of articulations and single-note tremolos sound in playback

You can define specific playback behaviors for particular combinations of articulations and single-note tremolos in playing technique-specific noteheads for unpitched percussion instruments.

PROCEDURE

1. In Setup mode, open the **Percussion Instrument Playing Techniques** dialog in any of the following ways:
   - For an individual percussion instrument: In the **Players** panel, expand the card of the player holding the instrument, click the arrow in the instrument label, and choose **Edit Percussion Playing Techniques** from the menu.
   - For percussion instruments that are part of percussion kits: In the **Players** panel, click the arrow in the kit instrument label, and choose **Edit Percussion Kit** to open the **Edit Percussion Kit** dialog, select the instrument whose playing techniques you want to edit in the main editing area, and click **Edit Percussion Playing Techniques**.
2. Select the playing technique-specific notehead whose playback behaviors you want to define in the list at the top of the dialog.
3. Click **Add Technique** in the action bar at the bottom left of the dialog.

   
4. Click **Choose Playing Techniques** beside the **Playback playing technique** field.

   
5. Select the playback playing technique you want from the list in the dialog that opens.

   You can select multiple playback playing techniques by holding down **Ctrl/Cmd** and clicking the playback playing techniques you want.
6. Choose one of the following options:
   - **Replace**: Allows you to use this playing technique instead of the default playing technique defined for this combination of notehead and staff position.
   - **Add**: Allows you to add this playing technique on top of the default playing technique defined for this combination of notehead and staff position.
7. Choose any articulations and the tremolo stroke that you want from the available options.
8. Click **OK** to save your changes and close the dialog.

RESULT

The behavior of the selected playing technique in playback is changed.

RELATED LINKS

Percussion Instrument Playing Techniques dialog on page 876
Creating new playing technique-specific noteheads for unpitched percussion instruments on page 878

# Played vs. notated note durations

You can show notes in the piano roll editor in Play mode with their played duration or notated duration.

## Played duration

When **Played Durations** in the Play toolbox is selected, note events in the piano roll editor are each shown with two components:

- A filled, light-colored rectangle showing the played duration of the note.
- A thin, darker rod showing the notated duration of the note.

For example, notes with staccato articulations are played for less time than their notated duration, whereas notes under slurs are played for longer than their notated duration.

By default in Dorico Elements, notes in the piano roll editor in Play mode are shown with their played duration.

NOTE

Editing the played duration of notes causes them to appear in a darker color in the piano roll editor to notes whose played duration you have not changed.

## Notated duration

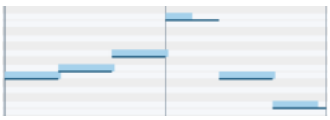
You can select **Notated Durations** in the Play toolbox to see note events as single rectangles, which span the full width that corresponds to the notated duration of the note.

You can change the notated duration of notes in the piano roll editor when **Notated Durations** is selected.

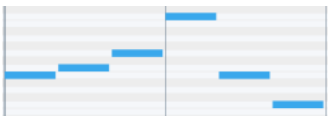
EXAMPLE

The following examples all contain the same musical phrase, shown in different ways.

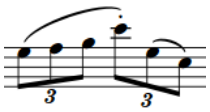
**Played duration**



**Notated duration**



**Score**




RELATED LINKS

Slurs in playback on page 791

# Changing the played duration of notes

You can change the played duration of notes individually, both at the start and end of notes. For example, you can make notes sound for longer or start sounding later.

PREREQUISITE

- **Played Durations** is selected in the Play toolbox.
- **Object Selection** is selected in the Play toolbox.

PROCEDURE

1. In the piano roll editor, select the notes whose played duration you want to change.
2. Click and drag the end of one of the notes to the right/left.
   Your mouse pointer becomes a two-way arrow when you are in the correct position.
3. Optional: Repeat step 2 for the start of the notes.

RESULT

The played duration of the selected notes is changed.

RELATED LINKS

Play toolbox on page 367

## Resetting playback overrides

You can remove all changes made to how individual notes play back, for example, if you previously changed the played duration of notes and want to revert them to their default start position, length, and velocity.

Removing playback overrides also removes any offsets to the start and end position of notes imported from MIDI files with preserved note positions.

NOTE

Any note velocities that are set on notes are reflected in playback, for example, from imported MIDI files or MIDI recording. If you want dynamics you input in Write mode to be reflected in playback instead, you must remove playback overrides.

PROCEDURE

1. In the piano roll editor or drum editor, select the notes whose playback overrides you want to reset.
2. Choose **Play** > **Reset Playback Overrides**.

RESULT

All playback overrides are removed from the selected notes.

NOTE

The played duration of the selected notes initially appears to revert to match their notated duration. However, starting playback or switching modes refreshes their appearance to their default played duration. For example, if the notes are staccato, their played duration is half their notated duration by default.

RELATED LINKS

Velocity lanes on page 390
MIDI recording on page 195
Importing MIDI on page 77
MIDI Import Options dialog on page 78

# Print mode

Print mode allows you to print your layouts or to export them as graphics files, such as PDF and SVG.

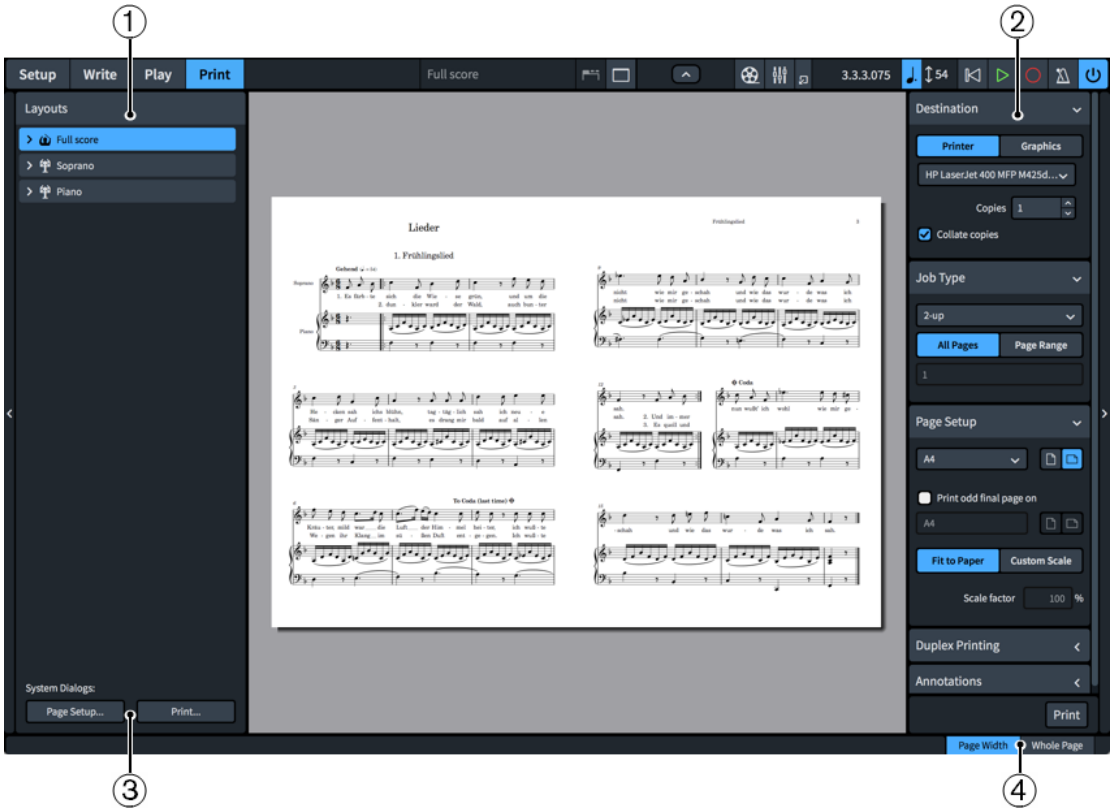
- When printing layouts, you can specify the paper size and other options, such as duplex or booklet printing.
- When exporting layouts, you can specify different graphics file types and the information you want to include in their exported file names.

## Project window in Print mode

The project window in Print mode contains the default toolbar and the print preview area as well as panels and sections that provide all the tools and functions that allow you to prepare printing or exporting your layouts.

You can switch to Print mode in any of the following ways:

- Press **Ctrl/Cmd-5**.
- Click **Print** in the toolbar.
- Choose **Window** > **Print**.




Panels and sections in Print mode

The following panels and sections are available in Print mode:

**1 Layouts panel**

Shows a list of all layouts in your project and allows you to select what to print or export.

NOTE

The layout selector in the toolbar is disabled in Print mode. If you want to see a different layout in the print preview area, select it in the **Layouts** panel.

2 **Print Options panel**

Contains options for printing or exporting your layouts.

3 **System Dialogs** (macOS only)

Contains macOS-specific printing options.

4 **View options**

Allows you to change the print preview area to show pages in one of the following views:

- **Page Width**: The page fills the width of the print preview area, which might not show the whole page depending on the orientation and format of the page.
- **Whole Page**: Shows the whole page in the print preview area.

TIP

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

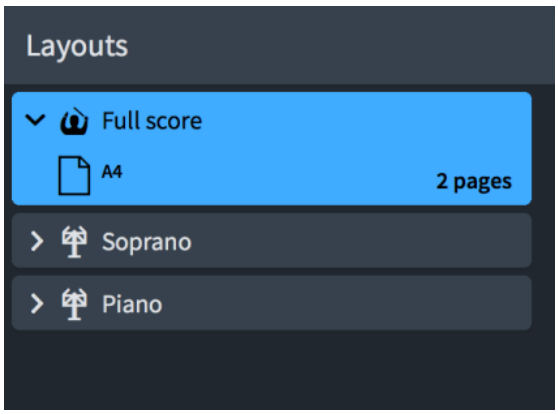
RELATED LINKS
Toolbar on page 39
Print preview area on page 45
Key Commands page in the Preferences dialog on page 59

# Layouts panel (Print mode)

In Print mode, the **Layouts** panel shows a list of all layouts in your project and allows you to select layouts to print or export. It is located on the left of the window.

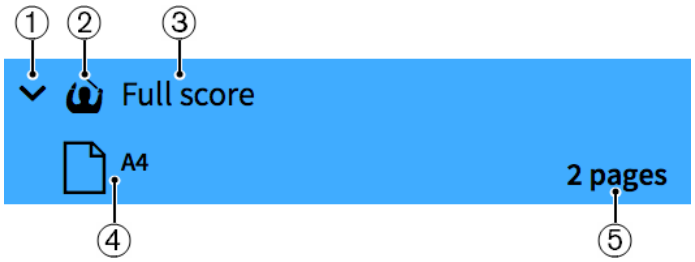
You can hide/show the **Layouts** panel in Print mode in any of the following ways:

- Press **Ctrl/Cmd-7**.
- Click the disclosure arrow on the left edge of the main window.
- Choose **Window** > **Show Left Panel**.




**Layouts** panel in Print mode

The **Layouts** panel contains all the layouts in your project, displayed as cards. Each layout card shows the following:




1 **Disclosure arrow**

Expands/Collapses the layout card.

2 **Layout type**

Shows the type of layout from the following options:

- Full score layout

- Instrumental part layout

- Custom score layout

3 **Layout name**

Shows the name of the layout. Dorico Elements automatically adds default names depending on the name of the instrument that is assigned to a player and on the type of layout that is added. For example, if you assign a flute to a player, the instrumental part layout automatically gets the same name. If you add an empty instrumental part layout, the layout name shows **Empty part** and an incremental number if you add multiple empty part layouts.

4 **Page size and orientation**

Shows the size and orientation of the layout as set on the **Page Setup** page in **Setup** > **Layout Options**.

5 **Layout length**

Shows the number of pages in the layout. You can use this in combination with its page size and orientation to determine the best job type for printing/exporting.

TIP

A layout with two pages might best be printed as 2-up, while a layout with five pages might best be printed as spreads with the final page printed on a different paper size. A layout with 12 pages might best be printed as a booklet.

The selected layouts are printed/exported when you click **Print** or **Export**. If you have selected some layouts set to print and some set to export graphics, the button reads **Print and Export**.

RELATED LINKS

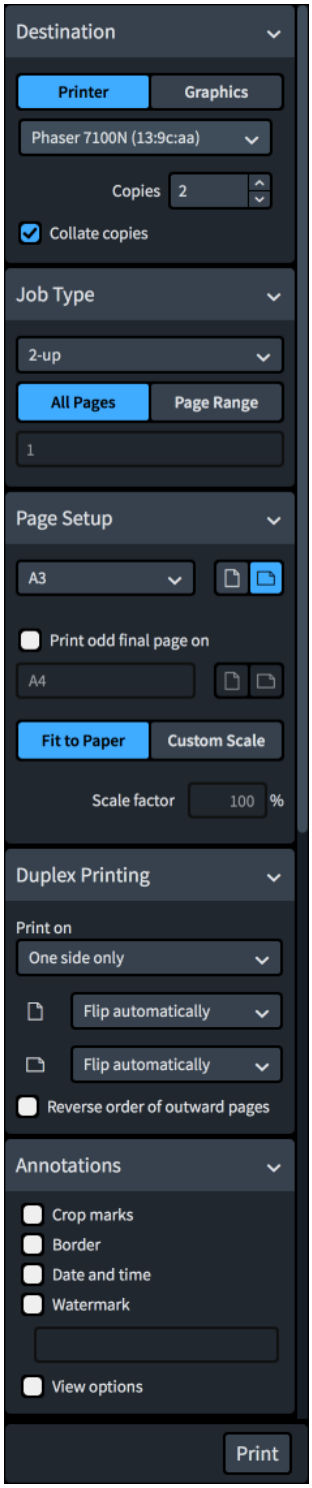
Page arrangements for printing/exporting on page 470
Booklet printing on page 471

## Print Options panel

The Print Options panel contains options for printing or exporting your layouts. It is located on the right of the window in Print mode.

You can hide/show the Print Options panel in any of the following ways:

- Press **Ctrl/Cmd-9**.
- Click the disclosure arrow on the right edge of the main window.
- Choose **Window** > **Show Right Panel**.




All the options that you set in the Print Options panel are saved with your project. The options are divided into the following sections:

**Destination**

Allows you to select a physical printer for printing or a file location for exporting a graphics file. If you print your work, you can choose how many copies you want to

print. If you choose to export a graphics file, you can specify the format, file name, and directory of the saved file.

Depending on the destination type selected, the button at the bottom of the panel reads either **Print** or **Export**. If you have selected some layouts set to print and some set to export graphics, the button reads **Print and Export**.

**Job Type**

Allows you to choose the range of pages to be printed or exported and how they are arranged.

**Page Setup**

Allows you to set the paper size and orientation. You can specify the scale factor of the image to be printed or exported.

**Duplex Printing**

Allows you to specify whether to print on one or on both sides of each sheet of paper. This option is only available if you select **Printer** in the **Destination** section.

**Annotations**

Allows you to activate options that are often required by publishing houses or printing agencies, such as crop marks or a border around the printed image.

**Print button**

Allows you to print/export selected layouts according to the settings you have set in the Print Options panel.

Depending on your selection, the print button can appear in one of the following ways:

- **Print**
- **Export**
- **Print and Export**

For example, if you selected layouts that are all set to print, **Print** is shown. If you selected some layouts set to export graphics and some layouts set to print, **Print and Export** is shown.

RELATED LINKS
Duplex printing on page 472
Page arrangements for printing/exporting on page 470

# Printing layouts

You can print layouts individually or multiple layouts together. You can specify print settings for each layout independently, for example, you can select different printers for different layouts in the same project.

Dorico Elements uses settings for layouts to create automatic print settings, so you might find that many print options are already appropriate for the layouts you want to print. For example, if you are connected to a printer that can print A3 paper and the page size of your full score layout is set to A3 in **Layout Options**, Dorico Elements automatically selects A3 in the **Page Setup** section of the Print Options panel.

PROCEDURE

1. In the **Layouts** panel, select the layouts that you want to print.

   NOTE

   The layout selector in the toolbar is disabled in Print mode. If you want to see a different layout in the print preview area, select it in the **Layouts** panel.

2. In the Print Options panel, enter the number of copies you want into the **Copies** field in the **Destination** section.

   NOTE

   - Changing the **Copies** value changes the number of copies for all currently selected layouts. However, you can change the number of copies for layouts individually. For example, you can select a full score layout and set it to print **3** copies and leave the part layouts to print only **1** copy. You can then select all layouts to print them together and the previously set values are followed.
   - The **Copies** field appears blank when you have selected layouts with different values.

3. Activate/Deactivate **Collate copies**.
4. In the **Destination** section, choose **Printer** and select a printer from the menu.
5. In the **Job Type** section, select the page arrangement you want from the menu.
6. Optional: If you only want to print a specified range of pages, choose **Page Range** in the **Job Type** section.
7. Optional: If you selected **Page Range**, enter the pages you want into the value field.
   - To specify a range, enter the first page and last page separated with a dash, such as **1-4**.
   - To specify individual pages or separate ranges, enter each page/range separated with commas, such as **1,3,5-8**.
8. In the **Page Setup** section, select a paper size from the menu.
9. Choose the paper orientation you want.
10. Optional: If you selected **Spreads** or **2-up** for the job type, activate/deactivate **Print odd final page on** to specify the paper size on which you want to print final pages for layouts with odd numbers of pages.
11. Select a paper size and paper orientation for the odd final page.
12. Choose one of the following size options:
    - **Fit to Paper**
    - **Custom Scale**
13. Optional: If you selected **Custom Scale**, enter the scale factor you want into the **Scale factor** field.
14. In the **Duplex Printing** section, select one of the printing options from the **Print on** menu.
15. Optional: If you selected a duplex printing option, use the bottom two menus to select how the printed image is flipped when printing on the reverse side of the paper.
16. In the **Annotations** section, activate each annotation you want to add to the selected layouts.
17. Click **Print**.

RESULT

The selected layouts are printed according to the print settings you have applied.

If your selection included part layouts set to concert pitch, Dorico Elements shows a warning and offers to switch them all to transposed pitch before printing/exporting. You can also select which layouts you want to switch to transposed pitch or proceed anyway with no changes.

TIP

- You can select individual layouts and set up their printing options without printing straight away. Once you have set up the printing options you want for multiple layouts, you can then select all the layouts you want to print and click **Print**. Your existing print settings are applied, even if your selection contains layouts with different print settings.

- You can assign key commands to different printing and exporting commands on the **Key Commands** page in **Preferences**.

RELATED LINKS
Key Commands page in the Preferences dialog on page 59
Printers on page 470
Paper size and orientation setup on page 474
Export File Names dialog on page 467
Page arrangements for printing/exporting on page 470
Print Options panel on page 460
Duplex printing on page 472
Annotations on page 476
Changing the page size and orientation on page 332

## Printing/Exporting a page range

By default, Dorico Elements prints/exports all pages of the selected layouts. You can specify a specific page range to print/export.

NOTE

You can only print booklets using the complete range of pages. You cannot define any page ranges.

PROCEDURE

1. In the **Layouts** panel, select the layouts from which you want to print/export a range of pages.
2. Optional: In the **Destination** section, check the layouts are set to print/export using the printer/graphics file formats you want.
3. In the **Job Type** section, choose **Page Range**.
4. Enter the pages you want into the value field.
   - To specify a range, enter the first page and last page separated with a dash, such as **1-4**.
   - To specify individual pages or separate ranges, enter each page/range separated with commas, such as **1,3,5-8**.

     NOTE

     Separate ranges are exported as separate files.
5. Click **Print**/**Export**/**Print and Export**.

RESULT
The specified pages in the selected layouts are printed/exported. Exported files use the file name recipe set for their graphics file format in the **Export File Names** dialog.

RELATED LINKS
Export File Names dialog on page 467
Page arrangements for printing/exporting on page 470

## Specifying printing options (macOS only)

Dorico Elements allows you to access the standard printing options of your operating system.

NOTE

If you use the standard printing options of your operating system, the settings in the Print Options panel are ignored. macOS-specific print settings are not saved with your project. These must be set each time you want to print, whereas the Dorico Elements print options are always saved with your project.

PROCEDURE

1. In the **Layouts** panel, click **Page Setup** in the **OS X Dialogs** section to open the macOS **Page Setup** dialog.
2. In the **Page Setup** dialog, set the paper size.
3. Click **OK**.
4. In the **OS X Dialogs** section, click **Print** to open the macOS **Print**.
5. In the **Print** dialog, set up the printing options you want.

# Exporting layouts as graphics files

You can export individual layouts as a variety of graphics files, such as PDF or PNG.

PROCEDURE

1. In the **Layouts** panel, select the layouts you want to export.
2. In the Print Options panel, choose **Graphics** in the **Destination** section.
3. Choose a color mode.
   - **Mono** exports the graphic in black and white.
   - **Color** exports the graphic in full color.

   NOTE

   - If you export a graphics file with a resolution of 72 dpi, we recommend that you select **Color**. If you select **Mono**, staff lines can disappear.
   - If you want to export layouts with watermarks, you must choose **Color**.
4. Select a graphics file format from the menu.
5. Optional: If you selected **PNG** or **TIFF**, select a resolution from the **Resolution** menu.

   TIP

   The **Resolution** setting does not affect **PDF** and **SVG** files as they are vector formats.
6. Optional: Specify an export path.
7. Optional: If you want to change the file name recipe, click **File Name Options** to open the **Export File Names** dialog.
8. Optional: In the **Export File Names** dialog, change the file name recipe for your selected graphics file formats.
9. Optional: If you only want to export a specified range of pages, choose **Page Range** in the **Job Type** section.
10. Optional: If you selected **Page Range**, enter the pages you want into the value field.
    - To specify a range, enter the first page and last page separated with a dash, such as **1-4**.

- To specify individual pages or separate ranges, enter each page/range separated with commas, such as **1,3,5-8**.

  NOTE

  Separate ranges are exported as separate files.

11. In the **Page Setup** section, choose the page orientation you want.
12. In the **Annotations** section, activate each annotation you want to add to the selected layouts.

    NOTE

    Watermarks are only included in layouts exported as **Color** graphics.

13. Click **Export**.

RESULT

The selected layouts are exported as the selected graphics format using the file name recipe set for their graphics file format in the **Export File Names** dialog. They are saved in the folder set in the **Destination folder** field, or in the same folder as the project file if the set export path is no longer accessible.

If your selection included part layouts set to concert pitch, Dorico Elements shows a warning and offers to switch them all to transposed pitch before printing/exporting. You can also select which layouts you want to switch to transposed pitch or proceed anyway with no changes.

TIP

You can assign key commands to different printing and exporting commands on the **Key Commands** page in **Preferences**.

RELATED LINKS

Printing/Exporting a page range on page 464
Export File Names dialog on page 467
Graphics file formats on page 475
Image resolution on page 475
Key Commands page in the Preferences dialog on page 59
Annotations on page 476

## Specifying an export path for graphics files

You can specify a path to any folder to which you want to export graphics files. You can specify a different export path for each layout and still export them all simultaneously.

By default, Dorico Elements exports graphics files into the same folder as your project file. If you have not saved your project yet, graphics files are saved in the default user folder of your operating system.

PROCEDURE

1. In the **Layouts** list, select the layouts whose export path you want to change.
2. In the **Destination** section of the Print Options panel, click **Choose Folder** beside the **Destination folder** field to open the File Explorer/macOS Finder.

3. In the File Explorer/macOS Finder, locate and select the destination folder you want.

4. Click **Select Folder** (Windows)/**Open** (macOS) to insert the new path in the **Destination folder** field.
5. Optional: Repeat steps 1 to 4 for other layouts whose export path you want to change.
6. Optional: If you want to change the file name recipe, click **File Name Options** to open the **Export File Names** dialog.
7. Optional: In the **Export File Names** dialog, change the file name recipe for your selected graphics file formats.

RESULT

The export path for the selected layouts is changed. When exported, the layouts use the file name recipe set for their graphics file format in the **Export File Names** dialog.

NOTE

If the export path specified is no longer accessible, such as if you receive a project from someone who uses a different operating system, Dorico Elements automatically updates the export path to the same location as the project file.

## Export File Names dialog

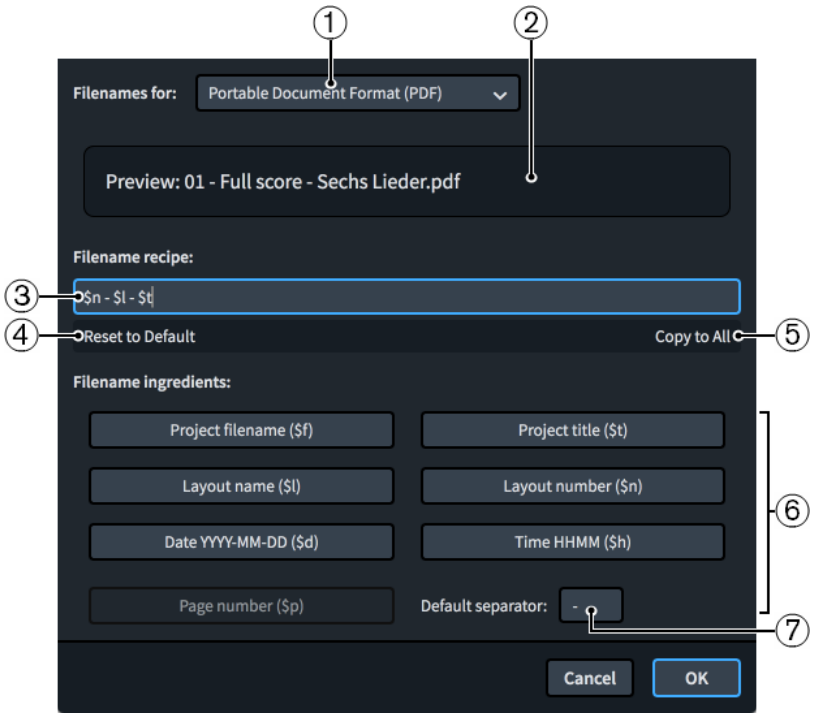
The **Export File Names** dialog allows you to determine the contents of file names for each graphics file format independently. You can use universal ingredients that update to show the correct information for each layout automatically, and you can enter text that is the same for all layouts.

You can open the **Export File Names** dialog in any of the following ways:

- Click **File Name Options** in the **Destination** section of the Print Options panel in Print mode when the currently selected layout is set to **Graphics**.
- Click **Edit** in the **Exporting Files** subsection of the **General** page in **Preferences**.

NOTE

Your settings are linked between both ways of accessing the dialog and are saved as the default for all future projects.




The **Export File Names** dialog contains the following options:

1 **File names for**

Allows you to select different graphics file formats. You can set different file name recipes for each graphics file format.

2 **Preview**

Displays an example file name based on the current recipe. The layout used for the preview is the one shown in the layout selector in the toolbar.

For example, the preview for a full score PDF file name using the default recipe might be `01 - Full score - Lieder.pdf`

3 **File name recipe**

Displays the recipe for the selected graphics file format. You can enter text directly into this field, and click ingredients to add them automatically.

For example, the default PDF file name recipe is **$n - $l - $t**.

4 **Reset to Default**

Resets the file name recipe to the default for the selected graphics file format.

5 **Copy to All**

Copies the file name recipe to all layouts in the project.

6 **File name ingredients**

Allow you to add ingredients to the file name recipe quickly that are automatically populated as appropriate for each layout. For example, the ingredient **$l** becomes `Piano` when used to export a piano part layout.

The buttons for each ingredient display both the information to which the ingredient refers and the characters for it.

When you click file name ingredients, they are added to the end of the file name recipe. They are automatically separated from the previous ingredient using the default separator.

NOTE

The page number ingredient is not available for the PDF file name recipe as it is a multi-page format.

7 **Default separator**

Allows you to set the characters used to separate ingredients in the file name recipe by default.

RELATED LINKS
Exporting layouts as graphics files on page 465

## Monochrome and color graphics processing

Dorico Elements applies different settings when you export monochrome and color graphics. The most appropriate setting depends on your intended purpose for the graphics.

Most musical scores are monochrome, meaning they use only black ink and are normally printed on white/near-white paper. Some educational books occasionally use colors to highlight particular notations, for example, to identify clefs, or to color notes according to their pitch. If you export graphics files and print them with your own printer, you can leave **Color** selected in the **Destination** section.

However, if you export graphics files in PDF format for direct printing on a platesetter or for further production work in a page layout program, select **Mono**, unless your layout actually contains colored elements. If you select **Mono**, Dorico Elements uses a different color space for the resulting PDF, ensuring that the printed image only uses black ink. If you choose **Color**, then the black items in your layout are exported as rich black, that is, black produced by combining multiple colored inks. This can cause problems in production when making color separations at the pre-press stage.

Dorico Elements specifies colors using the RGB color model, rather than the CMYK color model that is used by platesetters and other professional printing machines. If you have colored objects in your layouts and your layouts are printed professionally, you must post-process the graphics files that are exported from Dorico Elements in another graphics application to convert the colors from RGB to CMYK.

RELATED LINKS
Exporting layouts as graphics files on page 465

## Embedding of fonts in PDF and SVG files

How fonts are handled in PDF and SVG files mainly depends on the fonts that you use in the project.

**PDF Files**

The music and text fonts, and their sub-sets, that are supplied with Dorico Elements are embedded in PDF files during the export. If you open the PDF files on a different computer, they look the same, even if that computer does not have the fonts installed that are used in the document. If you use different fonts, make sure that these permit embedding.

**SVG Files**

SVG (Scalable Vector Graphics) files do not embed fonts directly. Some font characters, such as note heads, articulations, and accidentals, are converted into outlines, so that they do not depend on the font from which they are taken. Other font characters, such as time signature and tuplet digits, are only encoded using references to the font from which they are taken. The latter also applies to regular text, such as staff labels, tempo instructions, and dynamics. This means that the SVG file looks incorrect if rendered by a web browser on a computer that does not have the fonts installed. The appearance of SVG files depends on the browser or the rendering software, and on the fonts that are installed on the computer.

To ensure that the SVG file appears correctly if embedded in a web page, you can open the SVG file in an illustration program and convert all font characters to outline paths, then re-export the SVG file and embed that file. Alternatively, you can use web fonts to ensure that the necessary fonts are available on the web server.

SVG graphics that are exported from Dorico Elements conform to the SVG Tiny 1.1 specification, which defines a subset of features in the full SVG specification.

For information about using web fonts with SVG, refer to the Help Center on the Steinberg website.

# Printers

You can print layouts from Dorico Elements projects to any printer to which your computer is connected.

You can select different printers for each layout in your project. This allows you to send layouts to the most appropriate printer for their requirements. You can select a printer when **Printer** is chosen in the **Destination** section of the Print Options panel.

Dorico Elements uses the same printer as designated by the operating system by default, unless you specify another printer. In this case, the settings in the following sections in the Print Options panel can change:

- In the **Page Setup** section, the list of available paper sizes lists only paper sizes that the chosen printer provides.
- In the **Duplex Printing** section, the option for automatic duplex printing is only available if the chosen printer has this function.

NOTE

The printer menu in the **Destination** section only shows the name of a printer if all currently selected layouts are set to print to the same printer. If you select a new printer from the menu, all selected layouts are set to print to that printer.

RELATED LINKS
Print Options panel on page 460
Printing layouts on page 462

# Page arrangements for printing/exporting

Dorico Elements provides several page arrangements that you can use for printing/exporting your layouts.

In the **Job Type** section of the Print Options panel, you can specify how you want the layouts to be printed/exported. You can select the following job types from the **Job Type** menu:

**Normal**

Prints one page on each sheet of paper. This produces single-sided pages, for example, for instrumental parts that do not have regular page turns and must be bound in a continuous line.

**Spreads**

Prints two pages on each sheet of paper, with odd-numbered pages on the right-hand side and even-numbered pages on the left-hand side.

You can also specify a paper size on which to print odd final pages, for example, if you are printing a layout containing five pages.

**2-up**

Prints two pages on each sheet of paper. The first page in the range is printed on the left-hand side of the first sheet of paper. This can be useful for printing instrument parts as it reduces the number of edges that must be bound, because pages can also be folded in half.

You can also specify a paper size on which to print odd final pages, for example, if you are printing a layout containing five pages.

**Booklet**

Prints two pages on each sheet of paper according to imposition requirements. This means that if the paper is folded, the pages are laid out like a book. This can be useful for scores and choir parts in particular as they often contain more pages than instrumental parts.

NOTE

You can only print booklets using the complete range of pages. You cannot define any page ranges.

NOTE

- Depending on the job type that you choose, Dorico Elements switches the page orientation automatically. The changed orientation is immediately displayed in the music area. If this is not what you want, you can override the orientation in the **Page Setup** section.
- All of the job types allow printing either onto a single side of each sheet of paper or on both sides of the paper.
- It is usual to print booklets, spreads, and 2-up onto paper in landscape orientation. Printing one page to each sheet typically uses portrait orientation, unless the layout itself uses landscape orientation.

Also in the **Job Type** section, you can choose which pages you want to print/export.

**All Pages**

Allows you to print/export all pages of the selected layouts.

**Page Range**

Allows you to set a range of pages to be printed. Choosing **Page Range** makes the value field available.

- To specify a range, enter the first page and last page separated with a dash, such as **1-4**.
- To specify individual pages or separate ranges, enter each page/range separated with commas, such as **1,3,5-8**.

RELATED LINKS
Paper size and orientation setup on page 474
Printing/Exporting a page range on page 464

# Booklet printing

Booklets are documents printed on both sides of the paper and folded to resemble the pages in a book. When printed as a booklet, pages are reordered so that you can fold the printed pages and read the content in the same order as they were in the project.

Printing layouts as a booklet can be much quicker than printing pages single-sided or double-sided. For example, if your full score is twenty pages long and you print it on both sides automatically, you must then bind one edge of the printed pages in order to keep them together.

However, if you print the full score as a booklet, you can simply fold the printed pages in the middle.

Booklet printing settings reorder pages so that they appear in the correct order on the printed page. For example, a layout containing four pages printed as a booklet is laid out as follows:

- First side: page four on the left, page one on the right
- Reverse side: page two on the left, page three on the right

If the layout you are printing as a booklet contains an odd number of pages, Dorico Elements automatically places any empty last pages at the end of the booklet. This follows the convention of showing odd-numbered pages on the right. For example, if you print a layout containing six pages as a booklet, a total of eight pages are printed with the last two pages in the booklet left blank. If you want the empty pages to be positioned differently, you can add extra pages to the layout, for example, a title page.

NOTE

- You can only print booklets using the complete range of pages. You cannot define any page ranges.
- If the order of inward pages is incorrect when you are printing booklets using manual duplexing, you can activate **Reverse order of outward pages** in the **Duplex Printing** section of the Print Options panel, which instructs Dorico Elements to output the first set of pages in the opposite order.

RELATED LINKS
Printing layouts on page 462
Duplex printing on page 472

# Duplex printing

Dorico Elements allows duplex printing, which means that you can print on both sides of each sheet of paper.

If your printer supports automatic duplex printing, you can use this function in Dorico Elements. If your printer can only print on one side of each sheet of paper, there is a manual duplex printing option.

The **Print on** menu in the **Duplex Printing** section of the Print Options panel contains the following options:

**One side only**

Prints on one side of each sheet of paper.

**Both sides manually**

Prints on both sides of each sheet of paper. Use this option if you printer lacks an automatic duplex printing function. After all outward pages have been sent to the printer, a message box informs you to turn over the stack of printed pages and put them back into the printer. Click **OK** to continue printing the inward pages.

**Both sides automatically**

Prints on both sides of each sheet of paper automatically. This option is only available if your printer supports this type of printing.

The other menus in the **Duplex Printing** section allow you to set how the printed image is flipped when printing on the reverse side of the paper.

**Flip image (portrait)**

Determines how the image is flipped for reverse side printing in portrait orientation.

- **Flip automatically** uses the printer's default settings for printing on the reverse side. If you find that the printer flips on a different edge than expected, use one of the other options.
- **Flip long side** sets the printer to flip the pages on the long edge.
- **Flip short side** sets the printer to flip the pages on the short edge.

**Flip image (landscape)**

Determines how the image is flipped for reverse side printing in landscape orientation.

- **Flip automatically** uses the printer's default settings for printing on the reverse side. If you find that the printer flips on a different edge than expected, use one of the other options.
- **Flip long side** sets the printer to flip the pages on the long edge.
- **Flip short side** sets the printer to flip the pages on the short edge.

**Reverse order of outward pages** at the bottom of the section instructs Dorico Elements, when activated, to output the first set of pages in the opposite order when printing booklets using manual duplexing. This is necessary for some printers so that you do not have to reverse sort the pages manually before returning them to the printer to print the other sides.

RELATED LINKS
Printing layouts on page 462

# Page sizes and paper sizes

In Dorico Elements, page sizes and paper sizes use different settings. This means that you can print layouts with any page size onto paper with a different paper size.

For each layout in your project, you can define a page size on the **Page Setup** page in **Setup** > **Layout Options**. This means that you define the dimensions of the layout. For printing your layout, you must usually choose a paper size that is provided by the printer that you are using.

Normally, the layout's page size and the printed paper size match. However, if you define a layout with an unusual page size that is not supported by your printer, such as 10" x 13", one of the standard page sizes for instrumental parts, you may have to print the layout onto a different paper size. You can change the paper size in the **Page Setup** section of the Print Options panel according to your needs. As long as your printer supports sufficiently large paper for your page size settings, and they match a standard paper size, your dimensions are included in the menu. Changing the paper size has no effect on your layout's page size, and does not, therefore, affect the way the music is laid out.

If you do not select a specific paper size, Dorico Elements automatically chooses a paper size that is based on your computer's locale settings. For example, if these are set to a European country, an international ISO standard might be used, such as A4. If they are set to a North American country, one of their typical standards might be used, such as US Letter.

If you have defined a page size for your layout that is larger than a typical standard, Dorico Elements automatically chooses the next larger paper size, provided that your printer supports this. For example, if the layout's page size is larger than A4/US Letter, A3/Tabloid is used.

If you print to a different paper size than the layout's page size, Dorico Elements automatically scales the image to fit the paper. You can change this setting by specifying a custom scale factor in the **Page Setup** section.

# Paper orientation

Paper orientation is the direction of rectangular paper for viewing and printing. Paper can have either landscape or portrait orientation.

Instrumental parts are most often printed using portrait orientation, as this allows two or three pages to be spread out at a time on most music stands.

Full scores for conductors are also commonly printed using portrait orientation, as this allows more staves to fit on the page than with landscape orientation. However, full scores for small ensembles might use landscape orientation as fewer staves have to fit on the page. Having more horizontal room on the page allows more bars to fit on each page, reducing the number of page turns required.

In Dorico Elements, you can set the orientation of pages independently of the paper orientation, for example, you can print portrait pages on landscape paper. You can also separately set the paper orientation of the odd final page in layouts using the **Spreads** and **2-up** page arrangements.

RELATED LINKS
Changing the page size and orientation on page 332

# Paper size and orientation setup

Layouts can have different paper sizes and orientation settings.

NOTE

If you have selected **Graphics** in the **Destination** section of the Print Options panel, you can only change the paper orientation. No other options are available.

The **Page Setup** section of the Print Options panel contains the following options when you have chosen **Printer** in the **Destination** section:

**Paper size**

Allows you to select one of the available paper sizes from the menu. The paper sizes available depend on the capabilities of the selected printer.

**Paper orientation**

You can choose one of the following paper orientation options:

- **Portrait**

- **Landscape**

**Print odd final page on**

For **Spreads** and **2-up** job types only: If this is activated, you can select a different paper size or orientation for the odd final page.

This setting is useful when printing layouts with an odd number of pages on A3 paper in landscape orientation. For example, if your layout contains five pages, the first four pages fit onto two sheets of A3, while the fifth page would occupy only the left-hand side of a third sheet of A3. This setting allows you to print the odd final page on A4 paper in portrait orientation instead.

**Fit to Paper**

The whole page is scaled to fit the paper size selected. For example, if you select a layout with a page size of A4 and select a paper size of A3, pages in the layout are enlarged to fit the larger paper size.

**Custom Scale**

The page is scaled to the set percentage of its original size. For example, if you are printing a layout with a page size of A3, select a paper size of A4, and set **Custom Scale** to **100**, the original page remains at its original size, exceeding the boundaries of the A4 paper.

RELATED LINKS
Page arrangements for printing/exporting on page 470
Changing the page size and orientation on page 332

# Graphics file formats

Dorico Elements supports multiple graphics file formats as which you can export your layouts.

**PDF**

Stands for Portable Document Format. Exporting layouts to PDF allows you to create a platform-independent document that contains a fixed version of each layout, for example, to send to someone who does not have access to Dorico Elements.

**PNG**

Stands for Portable Network Graphics. PNG files are losslessly compressed, meaning they produce high-quality images.

**SVG**

Stands for Scalable Vector Graphics. Because SVG is an XML-based text format, it can be scaled to any size without any loss of quality. Dorico Elements renders SVG graphics using drawing instructions rather than rasterizing them, resulting in better resolutions and smaller file sizes.

**TIFF**

Stands for Tagged Image File Format. TIFF files are not compressed, which means their file sizes can be larger than other formats and the quality of the image is not reduced.

RELATED LINKS
Exporting layouts as graphics files on page 465

## Image resolution

Image resolution refers to the number of pixels contained in an image. The larger the number of pixels, the sharper and clearer the image appears.

In Dorico Elements, you can export PNG and TIFF files with different image resolutions. The image resolution is measured in dots per inch, or “dpi”.

- **72**
- **150**
- **300**
- **600**
- **1200**

NOTE

A resolution of 72 dpi is suitable for display on screen so that you can embed the graphic in an e-mail or on a web page. If you choose 300, 600, or 1200 dpi, a high-resolution image is saved that you can include as an illustration in a word processing or desktop publishing document.

RELATED LINKS
Exporting layouts as graphics files on page 465

# Annotations

Annotations provide additional information for printed or exported documents, such as the date and time it was printed. Publishers and printing agencies can use these to identify and register printed images correctly or to embed exported graphics files into a desktop publishing application.

When printing/exporting your layouts for publication, you can include typical annotations. You can also allow Dorico Elements to print or export any view options that you have activated in your project.

NOTE

Crop marks and the border can only be printed if the page size is smaller than the paper size.

The **Annotations** section of the Print Options panel contains the following options:

**Crop marks**
Adds short vertical and horizontal lines at each of the four corners of the page.

**Border**
Adds an outline around the edge of the page dimensions.

**Date and time**
Adds the date and time of printing at the bottom of each page.

**Watermark**
Adds large translucent text across the middle of each page. This is useful for indicating that this version is a draft, proof, or perusal score.

In the **Watermark** field at the bottom of the section, you can enter the text that you want to show on each page.

TIP

Watermarks are only included in layouts exported as **Color** graphics.

**View options**
Adds all active view options, such as signposts, comments, and note and rest colors, to the printout or exported graphic.

RELATED LINKS
Signposts on page 314
Comments on page 321
Printing layouts on page 462
Exporting layouts as graphics files on page 465

# Notation reference

# Introduction

This notation reference contains information about the accepted conventions for presenting different notations and how to change their appearance and placement in Dorico Elements, both for individual items and by changing default settings.

It also contains instructions for inputting more complex notations, such as cross-staff glissando lines, which are described in the corresponding chapter.

Tasks in the notation reference outline the default per-layout changes you can make in **Setup** > **Layout Options**, such as changing the frequency of bar numbers, and the individual changes you can make to items, which often involve using properties in the Properties panel.

More detailed default options, such as how notes should be beamed in different meters or spacing gaps between different items, are available in Dorico Pro.

You can find basic input methods for notations in the Write mode chapter.

RELATED LINKS

Write mode on page 148

# Accidentals

Accidentals are shown beside notes to indicate their pitch, both when notated on a staff and written out in text. In music based in Western tonality, they usually show that the pitch of a note has been altered so that it does not conform to the current prevailing key signature.

In Dorico Elements, each note has its own fixed pitch that is independent of the prevailing key signature, and accidentals are automatically hidden and shown as appropriate. For example, if you input F♮s and then add a D major key signature before them, they do not turn into F♯s; they remain F♮s and show natural accidentals. However, if you input the D major key signature first, any Fs you then input without stating an accidental are input as F♯s.

There are different conventions for accidental duration rules, such as not repeating the same accidental on subsequent notes of the same pitch in the same bar. In music that has no key signatures, some or all notes might require accidentals, depending on the notation convention in use.

RELATED LINKS
Accidental duration rules on page 483
Inputting notes on page 164
Inputting accidentals on page 180

## Deleting accidentals

You can delete accidentals according to their type and you can delete all accidentals from a selection of notes with different accidentals at the same time. This changes the pitch of the selected notes.

NOTE

These steps do not apply to cautionary accidentals, such as those shown on natural notes that follow the same notes with an accidental but in a different octave. In Dorico Elements, you can only hide, show, or parenthesize cautionary accidentals individually.

PROCEDURE

1. In Write mode, select the notes whose accidentals you want to delete.
2. Delete accidentals in any of the following ways:
   - Press **0** to delete naturals.
   - Press **-** to delete flats.
   - Press **=** to delete sharps.
   - Click the button of the accidental in the Notes panel.

RESULT

The corresponding accidentals are deleted from the selected notes. This changes their pitch. For example, deleting the sharp from a G♯ turns it into G♮.

NOTE

- Deleting accidentals causes accidentals to appear on any subsequent notes of the same pitch in the same bar. You can check the pitch of notes by selecting them and looking in the status bar.
- To delete accidentals from a selection of notes with different accidentals, we recommend that you revert them all to natural by pressing **0** or clicking **Natural** in the Notes panel. This is because re-inputting an accidental over a selection of notes with different accidentals adds that accidental to every note in the selection. For example, two G♯s followed by two G♭s become four G♯s if you re-input a sharp. If you click **Sharp** or press **=** twice, all accidentals are deleted.

RELATED LINKS
Inputting accidentals on page 180
Changing the pitch of individual notes on page 191
Status bar on page 48

# Hiding/Showing or parenthesizing accidentals

You can show individual accidentals in round or square brackets and hide/show accidentals individually, including cautionary accidentals shown by default.

PROCEDURE

1. Select the notes whose accidentals you want to hide/show or parenthesize.
2. In the Properties panel, activate **Accidental** in the **Notes and Rests** group.
3. Select one of the following options from the menu:
   - **Hide**
   - **Show**
   - **Round brackets**
   - **Square brackets**

RESULT

Accidentals on the selected notes are shown, hidden, or shown in round or square brackets.

NOTE

- Hiding accidentals does not affect the pitch of notes in playback.
- You can assign key commands for different accidental hiding, showing, and parenthesizing commands on the **Key Commands** page in **Preferences**.

AFTER COMPLETING THIS TASK

You can also hide/show or parenthesize accidentals on artificial harmonics shown using diamond noteheads, independently of the normal noteheads that indicate the stopped pitch.

RELATED LINKS
Preferences dialog on page 58
Hiding/Showing or parenthesizing harmonic accidentals on page 648
Deleting accidentals on page 479

# Stacking of accidentals

If multiple accidentals are required for a chord in a single voice, or for notes in multiple voices at the same rhythmic position, they are stacked to the left of the chord in columns.

For chords with multiple accidentals, accidentals are generally stacked as follows:

1. The highest accidental is inserted in the first column immediately to the left of the notes.
2. The lowest accidental is added to the same column, provided that it does not collide with the first accidental.
3. The remaining highest and lowest accidentals are alternated in successive columns located further left from the chord.

In Dorico Elements, additional rules help to produce a stack of accidentals that uses as few columns as possible. The following list contains some of the rules that are applied:

- Columns closer to the notes contain more accidentals than columns further from the notes.
- Accidentals on notes that are an octave apart are stacked in the same column. This also applies to accidentals that are a sixth or more apart, depending on the combination of accidentals.
- Accidentals in the same column never collide. The minimum interval between accidentals that is required to prevent collisions depends on the types of accidentals.
- Accidentals that are a second apart are arranged in adjacent columns, with the higher accidental in the right-hand column.

These rules minimize the amount of extra space that is required between successive notes or chords and ensure that accidentals appear as close as possible to the noteheads to which they apply. At the same time, they produce a contour that resembles a C-curve on the left-hand side of the chord.

## Accidental stacking rules for dense chords

Dorico Elements uses special stacking calculations in dense chords with multiple accidentals to ensure legibility. Chords are considered dense when they have six or more accidentals within the span of an octave.

For dense chords, accidentals are stacked as follows:

1. The highest accidental is inserted in the first column to the left of the notes.
2. The next accidental on a note that is located at least a seventh below the highest note is stacked into the same column. This continues with the remaining notes until no more accidentals fit into the first column.
3. Steps 1 and 2 are repeated for the following columns until all accidentals are stacked.
4. The columns are grouped, interspersed, and re-stacked. This results in a stack with alternating accidentals, reminiscent of the way accidentals are arranged in a key signature.

NOTE

By default for dense chords, Dorico Elements uses a lattice arrangement of accidentals rather than the usual zig-zag arrangement. In very dense chords, the lattice arrangement can be wider and require more columns.

## Kerning of accidental columns

Dorico Elements applies kerning to accidental columns to ensure that the columns to the left of a chord occupy as little horizontal space as possible.

In typography, kerning adjusts the space between individual characters to increase legibility. In Dorico Elements, as well as in music engraving in general, kerning allows accidentals to interlock.

EXAMPLE

If a low note is followed by a high note with an accidental, the accidental can be tucked above the low note to prevent the note spacing from being distorted.

Similarly, in the case of multiple columns of accidentals on a chord, the overall width of the stack of accidentals is reduced if, for example, a flat in the second column is kerned underneath a sharp in the first column belonging to a note a third higher. This also reduces the need to distort note spacing to accommodate accidentals.

# Altered unisons

Altered unisons occur when two or more notes of the same name in the same octave have different accidentals in the same chord, such as D♯ and D♭.

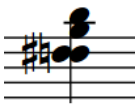
In Dorico Elements, this is notated with a split stem by default. Split stems show the main body of a chord with a stem branch coming off the main stem that connects noteheads in altered unisons to the chord. This allows all notes to appear with their corresponding accidental directly beside them. A split stem is also known as a “cherry stalk” or a “tree”.

You can change individual altered unisons appear with a single stem, meaning noteheads appear directly beside each other, and the two accidentals are shown beside each other to the left of the chord.

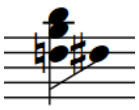
NOTE

If a chord contains notes a second interval apart and one of those notes has an altered unison, it is always shown with a split stem, regardless of your setting. This is to ensure clarity in clusters.

EXAMPLE



A single stem altered unison



A split stem altered unison

RELATED LINKS
Inputting chords on page 185

## Changing how altered unisons appear

You can change how individual altered unisons appear, including within chords containing other altered unisons.

PROCEDURE

1. Select the altered unison notes whose appearance you want to change.

2. In the Properties panel, activate **Split stem** in the **Notes and Rests** group.
3. Activate/Deactivate the corresponding checkbox.

RESULT

The selected altered unison notes are shown with split stems when the checkbox is activated, and with single stems when the checkbox is deactivated.

TIP

**Split stem** applies to individual notes. You can have altered unisons appear differently within the same chord by setting their properties independently.

# Microtonal accidentals

Microtonal accidentals indicate pitches beyond the standard accepted chromatic scale in Western tonality, such as a quarter sharp or quarter flat. Microtonal accidentals are only shown in Dorico Elements if you open a project that already contains them. They are available for input only where the corresponding key signature and tonality system apply.

# Accidental duration rules

Accidental duration rules determine how long accidentals apply, such as within a bar, at a different octave, or just for a single note. Dorico Elements uses the common practice accidental duration rule.

**Common practice**

In common practice, an accidental applies for the duration of a bar and only to the pitch at which it is written, meaning each octave requires a separate accidental.

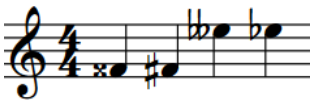
RELATED LINKS

Common practice accidental duration rule on page 484

## Double accidental cancellation

There are two generally accepted practices for the cancellation of double accidentals, which are archaic and modern.

By default, Dorico Elements uses modern cancellation. This means that if a double sharp is cancelled by a single sharp, or a double flat is cancelled by a single flat, then no natural sign is shown in front of the single sharp or single flat, as these accidentals are unambiguous.



Modern cancellation

# Common practice accidental duration rule

In common practice, an accidental affects all notes of the same pitch in the same octave within the same bar, unless it is cancelled by another accidental. If it is not cancelled, it is automatically cancelled in the following bar.

NOTE

To ensure that the cancellation is unambiguous, it is customary to add a cautionary accidental to the first note of the same pitch in the following bar.

In Dorico Elements, the common practice accidental duration rule is used by default.

In common practice, the accidental of a note in one bar is automatically cancelled in the following bar. For example, in the key of G major, if an F♯ is in one bar, an F in the following bar shows a sharp sign, even though the sharp is already implied by the key signature.

When using the common practice accidental duration rule by default, Dorico Elements also displays cautionary accidentals, which are restatements of an earlier accidental. They are considered optional; that is, they are neither explicit confirmations nor cancellations, but help to eliminate ambiguities. Cautionary accidentals are also known as “courtesy accidentals”.

Cautionary accidentals are shown in the following circumstances:

- Subsequent notes within the same bar have the same note name in different octaves.
- Subsequent notes in the following bar have the same note name in the same octave.
- The first occurring note in the following bar has the same note name in any octave.
- Augmented/Diminished or double-diminished/augmented intervals are identified within the same bar.

For each of these situations, you can choose whether cautionary accidentals are shown in parentheses, shown without parentheses, or not shown at all.

# Articulations

Articulations are markings that are drawn above or below notes and chords. Articulations tell a performer how to attack a note or how long to play a note relative to its notated duration.

In Dorico Elements, articulations are defined as something that alters the way a note is played, in a way that is consistent across all instruments.

As instructions like bowing directions, harmonics, or tonguing apply to different instrument groups, in Dorico Elements such directions are defined as playing techniques, and can be found in the Notations panel on the right of the window.

Articulations are categorized into the following types:

**Articulations of force**

Indicate a stronger attack at the start of notes, and include articulations such as accent and marcato. Marcato is also sometimes known as a "strong accent". Dorico Elements shows these articulations at the start of a note or tie chain by default.

**Articulations of duration**

Indicate a shorter duration than notated, and include articulations such as staccatissimo, staccato, tenuto, and staccato-tenuto. Staccato-tenuto is also sometimes known as a "louré". If a note includes ties, Dorico Elements shows articulations of duration above the last note in the chain by default.

**Articulations of stress**

Indicate notes that should be emphasized or not emphasized where that contradicts the prevailing meter, using stressed and unstressed marks. Dorico Elements shows these articulations at the start of a note or tie chain by default.

You can find articulations at the bottom of the Notes panel in Write mode.

Dorico Elements positions articulations automatically on the notehead or stem side of notes and chords, according to the musical context. A note or chord can display one of each of the three types of articulations.

RELATED LINKS

Inputting articulations on page 201

## Copying articulations

Articulations are automatically included if you copy notes, but they cannot be copied and pasted independently of notes.

PROCEDURE

1. In Write mode, select the notes with articulations you want to copy.
2. Copy the notes in one of the following ways:

- Press **R** to repeat the material directly after itself.
- Press **Ctrl/Cmd-C**, select the position where you want to copy the selected notes, then press **Ctrl/Cmd-V**.
- **Alt/Opt**-click the position where you want to copy the selected notes with articulations.

AFTER COMPLETING THIS TASK

If you want the copied notes to have the same rhythm but different pitches, you can repitch the notes.

RELATED LINKS

Repitching notes without changing their rhythm on page 193

# Changing articulations

You can change the articulations on notes after they have been input.

PROCEDURE

1. In Write mode, select the note whose articulation you want to change.
2. Change the articulation in any of the following ways:
   - Press the key command of the articulation you want. For example, press **]** for staccato.
   - Click the new articulation you want in the Notes panel.

RESULT

The new articulation is added. This replaces any existing articulation of the same type.

RELATED LINKS

Inputting articulations on page 201
Key commands for articulations on page 201

# Deleting articulations

Individual articulation markings cannot be selected and deleted separately from their notehead in Write mode, so articulations must be deleted by selecting the note or notes to which they are attached, and deselecting the articulation.

PROCEDURE

1. In Write mode, select the notes whose articulations you want to delete.
2. Deselect the articulations in any of the following ways:
   - Press the key commands of the articulations you want to delete.
   - Click the articulations you want to delete in the Notes panel.

# Positions of articulations

There are established conventions for the position and placement of articulations relative to notes, the staff, and staff lines, which ensure articulations are always clearly visible. For the smallest articulations, such as staccato marks, correct placement relative to staff lines in particular is vital.

Articulations are placed on the notehead side by default, with the following exceptions:

- In single-voice contexts, marcato is always placed above the staff, regardless of the stem direction of the note or chord on which it is used. In multiple-voice contexts, marcato can also be placed below the staff.
- If multiple voices are active, articulations are placed at the end of the stem side of a note or chord. This clarifies which articulations belong to the up-stemmed notes and which to the down-stemmed notes.
- If a note is placed on the middle staff line or on the space immediately on either side, articulations that are less than a space in height are centered in the next unoccupied space. This normally only applies to staccato and tenuto. If a note in the middle of the staff has a staccato-tenuto articulation, the component parts of the articulation are split up and placed in separate spaces.
- If an articulation cannot fit within a staff space, or if the note is placed high or low on the staff, the articulation is placed outside the staff.
- If a note or chord is tied and the tie is placed above or below the notehead, articulations that are placed on the notehead side of a note or chord are offset by an additional 1/4 space in order to avoid the end of the tie.

Articulations on the notehead side are always centered horizontally on the notehead. This also applies to articulations on the stem side, except if the only articulation is a staccato or staccatissimo. In this case, the articulation is centered on the stem.

RELATED LINKS
Changing the placement of articulations individually on page 488

# Order of articulations

If there are multiple articulations on the same notes, their vertical position and proximity to noteheads/stems depends on their type.

Articulations are positioned in the following order:

1. Articulations of duration are positioned closest to notehead/stems.
2. Articulations of force are positioned outside articulations of duration.
3. Articulations of stress are positioned furthest from noteheads/stems.

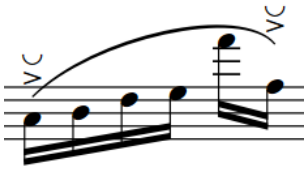
## Order of articulations in relation to slurs

Articulations of duration are positioned as follows:

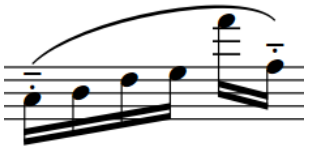
- Inside slurs that start/end on a note or chord with an articulation.
- Inside the curvature of a slur.
- Inside tuplet brackets.

Articulations of force are positioned as follows:

- Outside slurs that start/end on a note or chord with an articulation, except if they can be positioned within the staff.
- Inside the curvature of a slur if they fit between the slur and the note or stem, to which they belong, without colliding.
- Outside tuplet brackets.




Force and stress articulations outside the ends of the slur



Duration articulations inside the ends of the slur

## Changing the positions of articulations on tie chains

You can change where in tie chains articulations appear individually. By default, articulations of force and stress are shown on the first note/chord in tie chains, while articulations of duration are shown on the last note/chord.

PROCEDURE

1. Select the tied notes/chords whose articulation position you want to change.
2. In the **Articulations** group of the Properties panel, activate **Pos. in tie chain** under the corresponding heading for the articulation whose position you want to change.

   For example, activate **Pos. in tie chain** under the **Articulations of force** heading to change the position of accents.
3. Choose one of the following options:
   - **First note**
   - **Last note**

RESULT

The position of articulations in the selected tie chains is changed.

## Changing the placement of articulations individually

You can change whether individual articulations are placed on the notehead side or stem side of notes.

PROCEDURE

1. Select the notes/chords whose articulation placement you want to change.
2. In the **Articulations** group of the Properties panel, activate **Placement** under the corresponding heading for the articulations whose placement you want to change.

   For example, activate **Placement** under the **Articulations of force** heading to change the placement of accents.
3. Select one of the following options from the menu:
   - **Notehead side**
   - **Stem side**

RESULT

The articulation is placed on the selected side of the notes or chords. If this creates a collision with other markings, such as playing techniques, Dorico Elements automatically makes adjustments to make sure all markings are clear and legible.

# Articulations in playback

Adding articulations affects how notes sound in playback.

If you do not have a sound library, Dorico Elements still changes how a note sounds in playback if you have put an articulation on it. For example, a staccato mark causes a note to sound shorter than normal, and an accent causes a note to sound louder than normal.

If you do have a sound library, Dorico Elements loads the specific sample for an articulation if such a sample is included in your sound library for that instrument.

As the articulation applies to the whole note, the sample is triggered at the start of a note. This includes notes that are tie chains.

TIP

You can enable independent voice playback for individual instruments, for example, if you have slurs in one voice and staccatos in another voice.

RELATED LINKS

Enabling independent voice playback on page 413

# Bars

Bars indicate a usually regular segment of time according to the number of beats, which is usually determined by the prevailing time signature. Bars are separated from other bars to the left and the right by vertical barlines.

Bars are usually the same length and at the same position for all players, but in some music, bars of different lengths may coincide, and there are situations where some players may have no bars indicated at all.

Each bar has a number, allowing players to keep track of their place in the music and aiding rehearsal. This is especially important in music for multiple players.

RELATED LINKS

Bar numbers on page 499
Input methods for bars and barlines on page 222

## Deleting bars/beats

You can delete whole bars and specific beats from your project completely by using the bars and barlines popover.

PROCEDURE

1. In Write mode, select one of the following:
   - The first bar you want to delete, or the first note or rest in that bar.
   - An item at the rhythmic position from which you want to delete beats
2. Press **Shift-B** to open the bars and barlines popover.
3. Enter **–** (minus), followed by the number of bars or beats you want to delete into the popover.

   For example, enter **–6** to delete six bars, meaning the bar you selected and the subsequent five bars, or **-2q** to delete two quarter note beats, starting from the selected rhythmic position.
4. Press **Return** to close the popover.

RESULT

The number of bars or beats specified is deleted.

RELATED LINKS

Bars and barlines popover on page 222

## Deleting bars/beats with the system track

You can delete whole bars and selected beats from your project completely using the system track, for example, if you want to delete the last beat in the final bar for flows that begin with a pick-up bar.

PREREQUISITE

The system track is shown.

PROCEDURE

1. In the system track in Write mode, select the region that you want to delete.
2. Click **Delete** in the system track. It can also appear above the system track if your selection is narrow.

**Delete** button in the system track

The system track changes color when you hover over the **Delete** button.

RESULT

The selected region is deleted. Just as when Insert mode is active, music to the right of the selection moves up to fill in the gap.

NOTE

Any signposts in the selection are also deleted.

RELATED LINKS

System track on page 304
Hiding/Showing the system track on page 305

## Deleting empty bars at the end of flows

You can trim flows by deleting any empty bars left at the end.

PROCEDURE

1. In Write mode, select an item in the flow you want to trim.
2. Press **Shift-B** to open the bars and barlines popover.
3. Enter **trim** into the popover.
4. Press **Return** to close the popover.

RESULT

Empty bars at the end of the selected flow are deleted.

RELATED LINKS

Bars and barlines popover on page 222
Splitting flows on page 320

## Deleting the contents of bars

You can delete just the contents of bars without deleting barlines or the bars themselves.

PROCEDURE

1. In Write mode, select the bars whose contents you want to delete.

   TIP

   Notes, rests, and other objects are highlighted orange when selected.

2. Press **Backspace or Delete**.

RESULT

The contents of the selected bars are deleted.

RELATED LINKS

Large selections on page 303
Filters on page 307

# Changes to the length of bars

You can change the length of a bar so that its duration is longer or shorter.

You can change the length of a bar by changing its time signature. You can later hide the time signature, for example, if you are writing music with an irregular meter and you require barlines only to group material together, but not to imply any sense of meter.

RELATED LINKS

Input methods for time signatures on page 210
Hiding/Showing time signatures on page 852

# Splits in bars

You can split bars rhythmically by changing the number of beats in each bar. You can split bars visually across systems or frame breaks, which might be required in music with an irregular meter or in passages of polymeter.

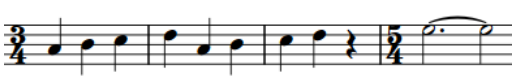
## Splitting bars by inputting new time signatures

You can split bars into two or more bars by changing the time signature. New time signatures apply until the next existing time signature or the end of the flow, whichever comes first.

If the new time signature does not fit completely into the given space, for example, if you wanted to replace two 4/4 bars (eight quarter notes) with either two 3/4 bars or three 3/4 bars (either six or nine quarter notes), then Dorico Elements does not override your existing time signature. Instead, the final bar is made shorter.

For example, replacing a 4/4 time signature with a 3/4 time signature two bars before an existing time signature creates two 3/4 bars and the equivalent of a 2/4 bar, as shown in this example.

However, in Insert mode, Dorico Elements inserts time at the end of the final bar of the new time signature to make sure the final bar is the correct length. For example, in the same scenario as above but with Insert mode activated, two 4/4 bars become three 3/4 bars, with the extra beat required to fill the third 3/4 bar added at the end of the phrase.



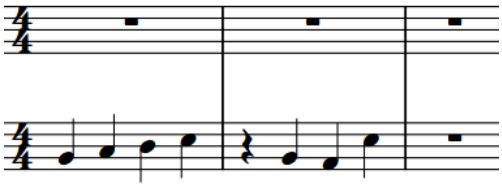
### Splitting bars by inputting new barlines

You can also split bars by inputting new barlines that are not normal (single) barlines anywhere within a bar without affecting the time signature.

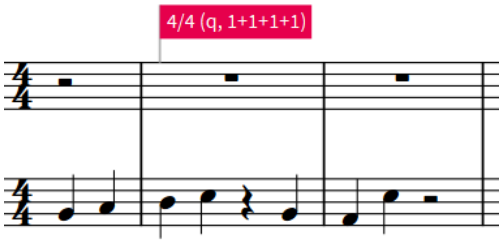
However, inputting a normal (single) barline anywhere within an existing bar resets the pattern of the time signature from that point onwards.

For example, selecting the third quarter note (crotchet) in a 4/4 bar and inserting a new barline causes a new 4/4 bar to start from the added barline. This leaves the equivalent of a 2/4 bar without a time signature to the left of the barline, but the bars to the right of the added barline are in 4/4 and continue to be in 4/4 until the next time signature or the end of the flow, whichever comes first.

After a normal (single) barline is added, a signpost appears to show how it affects the time signature.



Two 4/4 bars with quarter notes




Adding a normal barline halfway through the first 4/4 bar restarts the time signature from that point.

RELATED LINKS
Input methods for time signatures on page 210
Input methods for bars and barlines on page 222
Inserting system breaks on page 346
Inserting frame breaks on page 345
Inputting notes in Insert mode on page 175

## Combining bars

You can combine two or more bars into one, longer bar by deleting the barline between them.

PROCEDURE

1. In Write mode, select the barline you want to delete.
2. Press **Backspace or Delete**.

RESULT

The bars on either side of the deleted barline combine into one bar. If required, the notes inside are automatically re-beamed appropriately.

NOTE

Deleting a barline does not automatically change the time signature. To avoid confusion, we recommend that you input a new time signature to reflect the new rhythmic duration of the bar.

RELATED LINKS
Deleting barlines on page 496

Input methods for time signatures on page 210
Hiding/Showing multi-bar rests on page 777

# Barlines

Barlines are vertical lines that cross staves in order to show how music is divided into bars, according to the time signature.

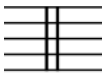
There are a number of different types of barlines that are used in different contexts:

**Normal (Single)**

A standard single barline that spans the entire height of the staff. For single-line staves, the barline extends one space above and below the staff line by default.

**Double**

A double barline consists of two lines, both the width of a single barline, positioned half a space apart by default. It is often used to denote significant changes in the music, or to mark the placement of rehearsal marks, key signature changes, and tempo changes.



**Final**

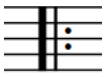
A final barline consists of two lines: one of normal width, the other thick. It marks where the music ends.

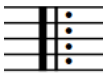
**Start repeat**

A start repeat line consists of a thick barline, followed by a normal barline, followed by one of the following arrangements of dots:

- Two dots, one each in the middle two spaces of a five-line staff
- Four dots, one each in all four spaces of a five-line staff

It shows the start of a repeated section. It is used alongside end repeat lines, which show the end of a repeated section.

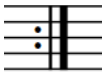




**End repeat**

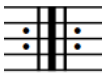
An end repeat line is the mirror of a start repeat line, so it consists of either two or four dots, followed by a normal barline, followed by a thick barline. It shows the end of a

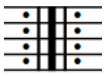
repeated section. It is used alongside start repeat lines, which show the start of a repeated section.

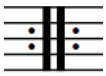


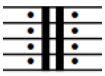
**End/Start repeat**

This line combines the start repeat and end repeat barlines, with either two single barlines with a single shared thick barline in the middle, or two thick barlines and no single barlines. On either side, there are either two or four repeat dots. It is used when a repeated section is immediately followed by another, separate repeated section.









RELATED LINKS

Input methods for bars and barlines on page 222
Repeats in playback on page 417

# Deleting barlines

You can delete barlines without affecting the rhythmic positions of notes. For example, you might delete existing barlines and input new ones if you want to change where a barline occurs.

PROCEDURE

1. In Write mode, select the barlines you want to delete.

   NOTE

   You must select barlines directly, not their signposts.

2. Press **Backspace or Delete**.

RESULT

The barline is deleted. The two bars either side of the barline combine into one bar, containing the same number of beats but without changing the time signature. This might cause note, rest, and beam groupings to change.

AFTER COMPLETING THIS TASK

- To avoid confusion, you can add a new time signature to reflect the new rhythmic duration of the bar.
- If you deleted barlines because you want to change where they occur, you can input new barlines at the new positions.

RELATED LINKS

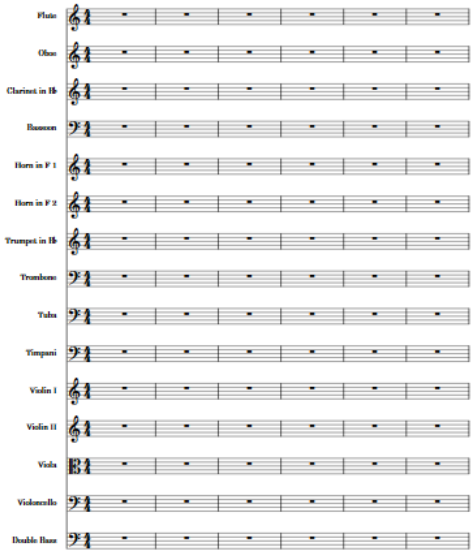
Input methods for time signatures on page 210
Input methods for bars and barlines on page 222

# Barlines across staff groups

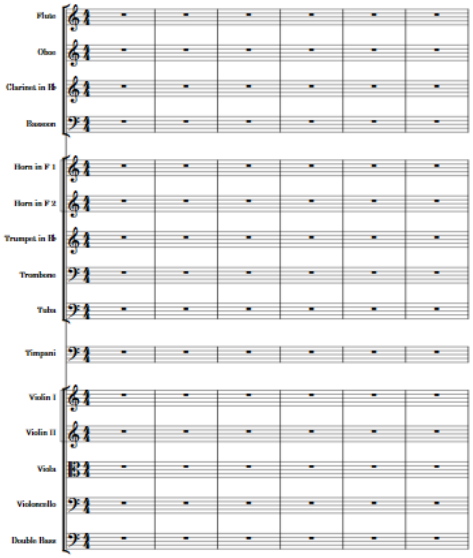
In order to make it easier to find a particular instrument within a score, barlines can extend across instrumental and staff groups.

## Barlines across default staff groups

When a barline only appears on individual staves, it is much harder to locate individual lines at a glance. However, when barlines continue across instrumental groups in the score, instrument families are shown as blocks, which makes finding an instrument much easier.




Barlines on individual staves




Barlines across instrumental groups

Barlines extend across staff groups automatically when they are joined by a bracket. Which staves are included in a bracket depends on the instrumentation and context, but usually staves for instruments from the same family, such as woodwind or strings, are bracketed together.

Dorico Elements automatically brackets staves according to the ensemble type set for each layout.

## Barlines across grand staff instruments

Dorico Elements automatically joins barlines across grand staff instrument staves as they are braced. Because staves cannot be bracketed and braced simultaneously, grand staff instruments are excluded from brackets and therefore are not joined with barlines to any other staves.

## Custom barline groups

You can create custom barline joins and bracket groups by manually arranging your players into groups. If one or more players included in your group were previously in another group, any remaining instruments in their previous group remain grouped.

You can put a single player in its own player group so they appear separately, for example, to separate the soloist from the remainder of the ensemble in a concerto.

RELATED LINKS
Brackets according to ensemble type on page 528
Adding player groups on page 126
Adding players to groups on page 127

Deleting player groups on page 127

## Showing barlines across all staves at time signature changes

You can join all staves with a barline at time signature changes in individual layouts, regardless of your bracketing style.

PROCEDURE

1. Select the time signature changes where you want to join all staves with a barline.
2. In the Properties panel, activate **Barline joins all staves** in the **Time Signatures** group.

RESULT

All staves in the layout currently open in the music area are joined by a barline at the selected time signature changes.

# Bar numbers

Bar numbers provide a crucial reference point for music that has multiple players, and make the chronological sequence of the music clear. They indicate where players are in the piece, which allows them to co-ordinate themselves easily in rehearsals and concerts.

Bar numbers can also be useful when preparing parts and scores, as you can use bar numbers and rehearsal marks to help you quickly compare a part to the score and check the music is correct.

In Dorico Elements, bar numbers appear automatically, following the most common practice of showing a bar number at the start of each system in all layouts by default. You can hide and show bar numbers in each layout independently, including showing them at a specified regular interval or in every bar, which is frequently used in film music scores.

TIP

The majority of options relating to bar numbers are on the **Bar Numbers** page in **Setup** > **Layout Options**. This is because it is very common to display bar numbers differently in different layouts, such as in every bar in full score layouts but only at the start of each system in part layouts.

RELATED LINKS

Positions of bar numbers on page 502
Layout Options dialog on page 100

## Hiding/Showing bar numbers

You can hide/show bar numbers in each layout independently, including showing them at different frequencies. For example, you can show bar numbers every bar in full score layouts but only at the start of each system in part layouts.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to hide/show bar numbers.

   By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Bar Numbers** in the page list.
4. In the **Frequency** subsection, choose one of the following options for **Show bar numbers**:
   - **Every system**
   - **Every n bars**
   - **Every bar**
   - **None**
5. Optional: If you chose **Every n bars**, set a custom frequency for bar numbers by changing the value for **Interval**.
6. Click **Apply**, then **Close**.

RESULT

Bar numbers are hidden in the selected layouts when you choose **None**, and shown at the corresponding frequency when you choose any other option.

Changing the **Interval** value changes how frequently bar numbers are shown. For example, setting an interval value of **10** means that bar numbers are shown every tenth bar.

TIP

You can also hide individual bar numbers in layouts where bar numbers are shown by selecting them and activating **Hide bar number** in the **Time Signatures** group of the Properties panel.

RELATED LINKS

Hiding/Showing bar number ranges on multi-bar rests on page 501
Showing bar numbers above specific staves on page 503
Hiding/Showing guide bar numbers on page 501
Positions of bar numbers on page 502

# Hiding/Showing bar number enclosures

You can optionally show bar numbers in either a rectangular or circular enclosure in each layout independently, for example, if you want bar numbers to appear with rectangle enclosures in the full score layout so the conductor can easily see them but with no enclosures in part layouts, where pages tend to be less busy.

Bar numbers in enclosures automatically erase their backgrounds.

PROCEDURE

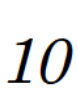
1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to change the bar number enclosure type.

   By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Bar Numbers** in the page list.
4. In the **Appearance** subsection, choose one of the following options for **Enclosure type**:
   - **None**
   - **Rectangle**
   - **Circle**
5. Click **Apply**, then **Close**.

RESULT

Bar numbers in the selected layouts are shown within your selected enclosure type. The size of the enclosure is relative to the font size of the bar numbers, but the size and shape of the enclosure are also determined by your padding values.

EXAMPLE




Bar number with no enclosure


Bar number with a rectangle enclosure


Bar number with a circle enclosure

RELATED LINKS
Layout Options dialog on page 100

# Hiding/Showing bar number ranges on multi-bar rests

You can hide/show bar number ranges on multi-bar rests, for example, so it is clear in part layouts which bars the player does not play. Multi-bar rests can include bar repeat regions, if you have chosen to consolidate bar repeat regions as well as empty bars into multi-bar rests.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to hide/show bar number ranges on multi-bar rests.

   By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Bar Numbers** in the page list.
4. In the **Showing and Hiding** subsection, activate/deactivate **Show ranges of bar numbers under multi-bar rests and consolidated bar repeats**.
5. Click **Apply**, then **Close**.

RESULT

Bar number ranges are shown beneath multi-bar rests and consolidated bar repeats in the selected layouts when the option is activated, and hidden when it is deactivated.

RELATED LINKS
Hiding/Showing bar numbers on page 499
Hiding/Showing multi-bar rests on page 777

# Hiding/Showing guide bar numbers

You can hide/show guide bar numbers on every bar and above every system in page view and galley view independently, for example, to make it easier to check the bar number in scores with many staves. Guide bar numbers are not printed.

PROCEDURE

- Hide/Show guide bar numbers in any of the following ways:
  - To hide/show guide bar numbers in page view, choose **View** > **Bar Numbers** > **Page View**.

- To hide/show guide bar numbers in galley view, choose **View** > **Bar Numbers** > **Galley View**.

RESULT

Guide bar numbers are shown for every bar and above every staff in the corresponding view type when a tick appears beside the corresponding option in the menu, and hidden when no tick appears.

# Changing the bar number paragraph style used in layouts

You can choose which paragraph style is used for bar numbers in each layout independently. By default, full score layouts and part layouts use different paragraph styles for bar numbers.

PREREQUISITE

If you want to use a custom paragraph style for bar numbers in some layouts, you have created it in the **Paragraph Styles** dialog.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to change the paragraph style used for bar numbers.

   By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Bar Numbers** in the page list.
4. In the **Appearance** subsection, select a paragraph style from the **Paragraph style** menu.
5. Click **Apply**, then **Close**.

RESULT

The selected paragraph style is used for all bar numbers in the selected layouts.

# Positions of bar numbers

Bar numbers are typically shown at the start of each system, above the staff, and aligned with the initial barline.

You can change the default positions and frequency of bar numbers in each layout independently on the **Bar Numbers** page in **Layout Options**. For example, you might want to show bar numbers every bar in full score layouts but only at the start of each system in part layouts.

## Changing the horizontal position of bar numbers

You can change the horizontal position of bar numbers in each layout independently. For example, you can have bar numbers centered in the middle of bars in full score layouts but centered on barlines in part layouts.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to change the horizontal position of bar numbers.

By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.

3. Click **Bar Numbers** in the page list.
4. In the **Horizontal Position** subsection, choose one of the following options for **Horizontal position**:
   - **Centered on barline**
   - **Centered on bar**
5. Click **Apply**, then **Close**.

RESULT

The horizontal position of bar numbers is changed in the selected layouts.

- **Centered on barline** shows bar numbers above barlines, at the top left of the bar.
- **Centered on bar** shows bar numbers above the staff, in the middle of the bar.

RELATED LINKS

Showing bar numbers above specific staves on page 503

## Showing bar numbers above specific staves

You can change the staves above which bar numbers appear, which allows you to show bar numbers at multiple vertical positions in each system. For example, in large orchestral scores, you might show bar numbers both at the top of the system and above the string section.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to change the vertical position of bar numbers.

   By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Bar Numbers** in the page list.
4. In the **Placement** subsection, activate the checkbox for each player in the **Show above specific players** list above whose top staff you want to show bar numbers.
5. Click **Apply**, then **Close**.

RESULT

The vertical positions of bar numbers are changed in the selected layouts. For players holding multiple instruments, bar numbers appear above their top instrument staff.

NOTE

You can change the distances between bar numbers and the staff/other objects and your vertical spacing settings for the gaps between staves in order to accommodate bar numbers shown between staves.

RELATED LINKS

Changing the default staff/system spacing on page 333
Per-layout vertical spacing options on page 363
Moving instruments on page 114

# Changing the distance between bar numbers and the staff/other objects

You can change the minimum distance between bar numbers and the staff, and set a separate value for the distance between bar numbers and other objects, in each layout independently. For example, you can position bar numbers further from the staff/other objects in full score layouts than in part layouts.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to change the minimum distance of bar numbers from the staff.

   By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Bar Numbers** in the page list.
4. Optional: In the **Placement** subsection, change the value for **Minimum distance from staff**.

   The default value is 2 spaces.
5. Optional: In the **Placement** subsection, change the value for **Minimum distance from other objects**.

   The default value is 3/4 of a space.
6. Click **Apply**, then **Close**.

RESULT

If you increase the values, bar numbers are positioned further away from the staff and/or other objects, either above or below the staff depending on your setting for **Placement relative to staff**. If you decrease the values, bar numbers are positioned closer to the staff and/or other objects.

NOTE

These options affect the minimum distance between bar numbers and the staff and other objects, so bar numbers might be positioned further away than this to avoid collisions.

# Changing the system-relative placement of bar numbers

You can show bar numbers either above or below each system in each layout independently. For example, bar numbers can appear below the system in full score layouts but above the system in individual part layouts.

NOTE

This does not affect the placement of bar numbers shown above specific staves.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to change the bar number placement.

   By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Bar Numbers** in the page list.

4. In the **Placement** subsection, choose one of the following options for **Placement relative to system**:
   - **Show above top staff of system**
   - **Show below bottom staff of system**
5. Click **Apply**, then **Close**.

RESULT

The placement of bar numbers relative to the system is changed in the selected layouts.

## Hiding bar numbers at time signatures shown at system object positions

You can choose to hide bar numbers at the same rhythmic position as time signatures shown at system object positions, as the resulting collision can be difficult to resolve in a visually clear way when bar numbers are centered on barlines.

PROCEDURE

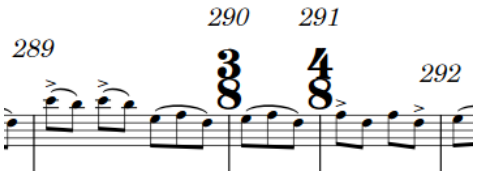
1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to hide bar numbers at time signatures shown at system object positions.

   By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Bar Numbers** in the page list.
4. In the **Showing and Hiding** subsection, activate/deactivate **Show bar numbers at time signatures at system object positions**.
5. Click **Apply**, then **Close**.

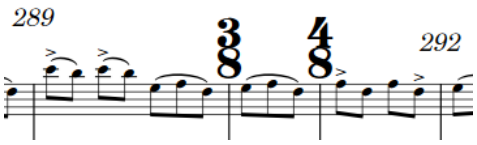
RESULT

Bar numbers are shown at time signatures shown at system object positions when the option is activated, and hidden when it is deactivated.

EXAMPLE




Bar numbers shown at time signatures at system object positions




Bar numbers hidden at time signatures at system object positions

RELATED LINKS

Time signatures on page 841
Large time signatures on page 846

# Bar number changes

Bar numbers follow a continuous sequence, with each bar having a unique bar number that continues from the previous bar number. However, you can make manual changes to the bar number sequence, including changing to a subordinate sequence.

In Dorico Elements, you can make the following types of changes to bar number sequences using the **Insert Bar Number Change** dialog:

**Primary**

Adds a change to the main bar number sequence, which the bars in your project follow in a continuous sequence in each flow separately by default.

**Subordinate**

Adds a secondary bar number sequence that uses letters rather than numbers to indicate the sequence. This can be useful in situations where a new version of a piece has been created with more bars inserted, but the original bar numbers are required.

**Don't Include**

Excludes the selected bar from the current bar number sequence. If bar numbers are shown every bar, no bar number is shown in bars in which you have chosen **Don't Include**.

**Continue Primary**

Returns the bar number sequence to the **Primary** sequence without counting intervening bars, for example, after a section of bars following the **Subordinate** bar number sequence.

RELATED LINKS
Subordinate bar numbers on page 507

# Adding bar number changes

You can manually add bar number changes to bar number sequences, for example, if you want bar numbers in the second flow in your project to appear to continue the sequence from the first flow, rather than start again from bar one.

PROCEDURE

1. Select one of the following:
   - An item in the bar from the beginning of which you want to change the bar number sequence.
   - An existing bar number or barline from which you want to change the bar number sequence.
2. Choose **Edit** > **Bar Numbers** > **Add Bar Number Change** to open the **Insert Bar Number Change** dialog. You can also choose this option from the context menu.
3. Choose one of the following options for **Type**:
   - **Primary**
   - **Subordinate**
   - **Don't Include**
   - **Continue Primary**
4. Optional: If you chose **Primary** or **Subordinate**, change the bar number where you want the bar number sequence change to start by changing the value in the corresponding value field.
5. Click **OK** to save your changes and close the dialog.

RESULT

The bar number sequence changes, starting from the beginning of the bar in which you selected an item, or from the position of a selected bar number or barline.

This affects the corresponding bar number sequence from the changed bar number until the next bar number change, or until the end of the flow.

## Deleting bar number changes

You can delete any bar number changes you have added.

PROCEDURE

1. In Write mode, select the bar number changes you want to delete.
2. Press **Backspace or Delete**.

RESULT

The bar number changes are deleted. Subsequent bars follow the previous bar number sequence until the next bar number change, or until the end of the flow.

# Subordinate bar numbers

Subordinate bar numbers are useful for numbering repeat endings, and for situations when the music is being altered, but the original bar numbers cannot be changed.

For example, you can use subordinate bar numbers to show where music has been added if a previous, shorter version has already been rehearsed. In this situation, players have likely started to associate certain parts of the piece with particular bar numbers, so if four bars need to be added after bar **10**, they would be numbered **10a** to **10d**. The bar number of the following bar then continues from **11** exactly as it did before the new bars were added.

They might also be useful if you want different bar numbers for a repeat ending.

Subordinate bar numbers are shown with lowercase letters.


Lowercase subordinate bar number

## Adding subordinate bar numbers

You can create a subordinate bar number sequence that is independent of your primary bar number sequence. This can be useful if you want to insert new bars without changing the bar numbers of existing subsequent bars.

PROCEDURE

1. Select one of the following:
   - An item in the bar from the beginning of which you want subordinate bar numbers to start.
   - An existing bar number or barline from which you want subordinate bar numbers to start.
2. Choose **Edit** > **Bar Numbers** > **Add Bar Number Change** to open the **Insert Bar Number Change** dialog. You can also choose this option from the context menu.

3. Choose **Subordinate** for **Type** to activate the **Subordinate** value field.
4. Change the first letter in the subordinate bar number sequence by changing the value in the **Subordinate** value field.

   The corresponding alphabetical letter is shown to the right of the value field. For example, entering **1** into the value field is shown as **a**, **2** appears as **b**, and so on.
5. Click **OK** to save your changes and close the dialog.

RESULT

The subordinate bar number sequence starts from the bar in which you selected an item, or from the position of a selected bar number or barline. It has the same bar number as the bar immediately before, but with subordinate alphabetical letters.

For example, if you start a subordinate bar number sequence from what was originally bar 5, the sequence starts from 4a and continues until the next specified bar number change, or until the end of the flow.

## Returning to the primary bar number sequence

You can specify the point where you want to return to the primary bar number sequence after a section of subordinate bar numbers.

PROCEDURE

1. Select one of the following:
   - An item in the bar from the beginning of which you want to return to the primary bar number sequence.
   - An existing bar number or barline from which you want to return to the primary bar number sequence.
2. Choose **Edit** > **Bar Numbers** > **Add Bar Number Change** to open the **Insert Bar Number Change** dialog. You can also choose this option from the context menu.
3. Choose **Continue Primary** for **Type**.

   Text indicating the new bar number appears below the value fields for **Primary** and **Subordinate**. For example, **Primary sequence will continue from bar 5**.
4. Click **OK** to save your changes and close the dialog.

RESULT

The primary bar number sequence resumes from the bar in which you selected an item, or from the position of a selected bar number or barline.

TIP

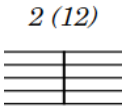
You do not have to add subordinate bar number changes in chronological order. You can enter a return to the primary bar number sequence first, before adding the subordinate bar number sequence.

# Bar numbers and repeats

By default in Dorico Elements, repeats are not included in the bar number count. For example, if the first ending ends in bar 10, the second ending starts in bar 11, even though the first section is repeated and therefore more than ten bars have been played.

Including repeats in the bar number count, so that bar numbers reflect the total number of bars played rather than the number of bars written on the page, can make music with multiple

playthroughs clearer, as you can refer to a specific bar number for each playthrough instead of, for example, “bar eight the third time round”.




Bar number for subsequent repeat shown in parentheses beside the initial bar number

In Dorico Elements, you cannot automatically include repeats in the bar number count. However, you can add bar number changes manually if you want bar numbers to reflect the total number of bars played.

RELATED LINKS

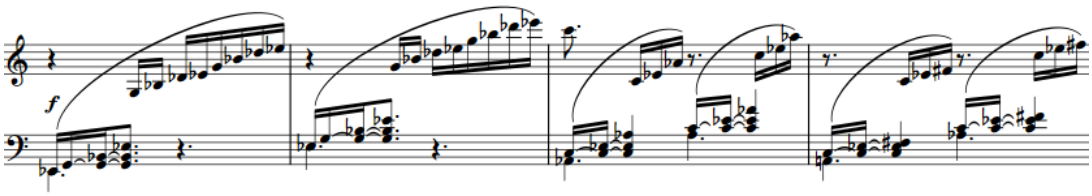
Adding bar number changes on page 506

# Beaming

A beam is a line that connects notes with tails to show rhythmic grouping, which varies according to the metrical structure of the current time signature.

This way of grouping notes helps performers calculate quickly exactly how to play their given rhythm and helps them follow both their part and, if applicable, the conductor.

If appropriate for the current meter and position in the bar, beams are automatically formed in Dorico Elements when you input two or more adjacent notes or chords that are an eighth note (quaver) or shorter in duration.



Multiple beam groups in a 6/8 time signature

RELATED LINKS
Inputting notes on page 164

## Beam groups

Notes are commonly beamed as regular groups to help reflect the meter. You can control how notes are beamed in multiple ways in Dorico Elements.

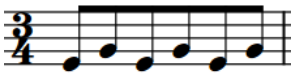
- You can set beam groups by controlling subdivisions of time signatures.
- You can change beam groups individually using properties in the Properties panel, and by choosing **Edit** > **Beaming** and selecting one of the available options.

RELATED LINKS
Beaming notes together manually on page 512

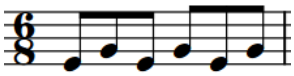
## Beam grouping according to meters

According to accepted conventions, notes are beamed differently in different time signatures to make the meter clear and easily readable. In Dorico Elements, default beam groupings are determined by time signatures.

Dorico Elements has default beaming settings for common time signatures, based on general conventions. For example, although the time signatures of 3/4 and 6/8 contain the same number of beats, they imply different meters and so are beamed differently. In 3/4, phrases of eighth notes are beamed together within each bar and phrases of other durations are beamed in quarter notes (crotchets) by default, but in 6/8, phrases are beamed in dotted quarter notes.

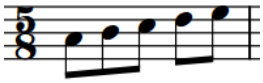


Default eighth note beam grouping in 3/4

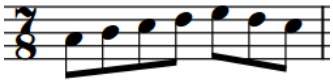


Default eighth note beam grouping in 6/8

Dorico Elements groups and beams notes in irregular time signatures, such as 5/8 or 7/8, according to the most common practices for those time signatures.



Default beam grouping in 5/8



Default beam grouping in 7/8

For situations where you want to control the beat grouping in more detail, you can input a custom time signature with an explicit rhythmic subdivision. Dorico Elements then automatically beams phrases according to this subdivision. For example, entering **[7]/8** into the time signatures popover means all seven eighth notes (quavers) are beamed together, whereas entering **[2+2+3]/8** subdivides the seven eighth notes into two, then two, then three.

RELATED LINKS
Note and rest grouping on page 524
Creating custom beat groupings for meters on page 524

## Splitting beam groups

You can split beams and secondary beams into two beam groups at specific rhythmic positions. You can also split secondary beams within beamed groups.

PROCEDURE

1. Select the noteheads to the right of where you want to split beams.
2. Split the beam or secondary beam in one of the following ways:
   - Choose **Edit** > **Beaming** > **Split Beam**.
   - Choose **Edit** > **Beaming** > **Split Secondary Beam**.

   TIP

   You can also choose these options from the context menu.

RESULT

Beams/Secondary beams are split to the left of each selected note, but the notes either side of the split remain grouped if there are at least two beamed notes on each side that can be in a beam group.

NOTE

To unbeam the entire selection and give all notes in the group individual tails, you can make all notes unbeamed.

RELATED LINKS
Unbeaming notes on page 512

## Resetting beam grouping

You can remove all changes made to the beam grouping of notes and chords. This can also be useful if, for example, MusicXML files you have imported have incorrect beaming.

PROCEDURE

1. Select the notes/chords whose beaming you want to reset.
2. Choose **Edit** > **Beaming** > **Reset Beaming**. You can also choose this option from the context menu.

RESULT

Beam grouping is reset to the default settings.

# Beaming notes together manually

You can beam notes together manually, including notes across barlines as well as system/frame breaks, for example, if you want to beam a phrase differently to how it is usually beamed in the current time signature.

Beams by default stay within bars and systems, so to have beams cross barlines, system breaks, and frame breaks, you must force the phrase to beam together.

PROCEDURE

1. Select the notes you want to beam together.
2. Choose **Edit** > **Beaming** > **Beam Together**. You can also choose this option from the context menu.

RESULT

The selected notes are beamed together, even if they cross barlines or system/frame breaks.

If there are notes either side of the new beam group that were previously beamed to part or all of your selection, they either beam together as separate beams, or appear unbeamed. This depends on how many notes are left either side in the bar.

NOTE

Even if part of the beamed group previously had a centered beam, the new beam is not centered.

RELATED LINKS

Allowing/Disallowing tuplets to span barlines on page 861

## Unbeaming notes

You can separate all notes in a beamed group so that each note shows its own tail, for example, when fast rhythms have syllabic text settings.

PROCEDURE

1. Select the notes you want to make unbeamed.
2. Choose **Edit** > **Beaming** > **Make Unbeamed**. You can also choose this option from the context menu.

# Changing the direction of partial beams

Dorico Elements automatically inputs a partial beam if one is required. You can change on which side of stems individual partial beams appear.

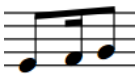
PROCEDURE

1. Select the notes whose partial beam direction you want to change.
2. In the Properties panel, activate **Partial beam direction** in the **Beaming** group.
3. Choose one of the following options:
   - **Left**
   - **Right**

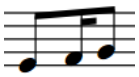
RESULT

The partial beam appears on the corresponding side of the stem.

EXAMPLE



Partial beam direction **Left**



Partial beam direction **Right**

# Beam placement relative to the staff

The default staff-relative placement of beams is determined by the staff positions of the notes within the beamed group and their resulting stem directions.

This means that the note furthest from the middle line of the staff determines the placement of the beam, although there are exceptions to this rule and other considerations that can influence the staff-relative placement of beams.

Changing the staff-relative placement of beams involves changing the direction of the stems in the beam. Therefore, Dorico Elements categorizes changing the staff-relative placement of beams as a stem change.

## Changing the staff-relative placement of beams

You can change the side of the staff on which beams appear by forcing the stem direction to change.

PROCEDURE

1. Select at least one note in each of the beamed phrases whose staff-relative placement you want to change.
2. Force the stem direction of notes in the selected beams in any of the following ways:
   - Choose **Edit** > **Stem** > **Force Stem Up**.
   - Choose **Edit** > **Stem** > **Force Stem Down**.

   TIP

   - You can also choose these options from the context menu.

- You can also change the staff-relative placement of selected beams by pressing **F**.

RESULT

The beam appears on the side of the staff that corresponds to its forced stem direction.

## Removing beam placement changes

You can undo changes to the staff-relative placement of beams in order to remove the stem direction change. This reverts selected beams to their default placement.

PROCEDURE

1. Select at least one note in each of the beamed phrases whose staff-relative placement change you want to remove.
2. Choose **Edit** > **Stem** > **Remove Forced Stem**. You can also choose this option from the context menu.

RESULT

The selected beams revert to their default staff-relative placement.

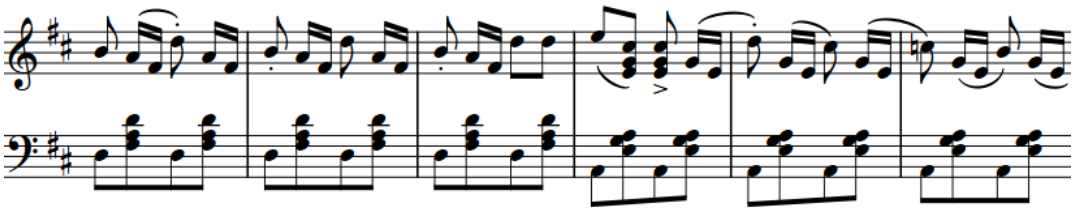
# Beam slants

The slant of a beam controls how steeply the beam deviates from horizontal, according to the pitches of the notes within the beamed group.

- When the last note of the phrase is higher than the first, the beam slants upwards.
- When the last note of the phrase is lower than the first, the beam slants downwards.
- If the group makes a concave shape, where inner notes are closer to the beam than the outer ones at either end of the beam, then the beaming is horizontal by default.

  Beams are also horizontal if all the pitches are the same, or for certain patterns of repeated pitches.

When a beam is drawn inside the staff, each end of the beam, meaning the end of the stem of the note at either end of the beam, must be snapped to a staff line position. A beam line may sit on a staff line, be centered on a staff line, or hang from a staff line. Ted Ross describes these three positions as “sit”, “straddle”, and “hang” respectively in “Teach Yourself the Art and Practice of Music Engraving”.



A phrase containing multiple different beam slants and directions

The amount by which a beam slants is typically determined by the interval between the first and last note in the beamed group, provided the pattern of notes in the beam does not dictate a horizontal beam instead. Smaller intervals require a shallower slant and larger intervals require a steeper one.

However, the desired amount of slant is not the only factor that must be considered. The innermost beam line should not come too close to the innermost notehead, and the beam itself, if possible, should be positioned relative to the staff lines such that it does not form a wedge. A

wedge is a tiny triangle formed by the horizontal staff line, the vertical stem, and the angled line of the slanted beam, which can be visually confusing.

Determination of the amount of slant for a beam is therefore a balancing act that must weigh up several factors: the desired amount of slant, valid snapping positions for each end of the beam, ensuring a minimum distance between the note closest to the beam and the innermost beam line, and avoiding wedges where possible.

In Dorico Elements, you can change the beam slants of individual beams.

## Changing beam slants

You can change the slants, or angles, of individual beams.

PROCEDURE

1. Select at least one note in each beam group whose slant you want to change.
2. In the Properties panel, activate **Beam direction** in the **Beaming** group.
3. Select one of the following options from the menu:
    - **Flat**
    - **Up**
    - **Down**

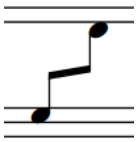
RESULT

The slants of the selected beams are changed while retaining correct positions relative to staff lines.

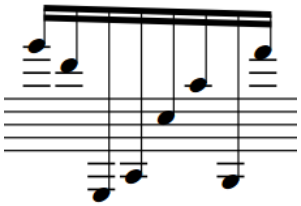
# Centered beams

Centered beams are positioned between high and low notes within the same beamed group, typically drawn in the middle of the staff or between the staves of grand staff instruments.

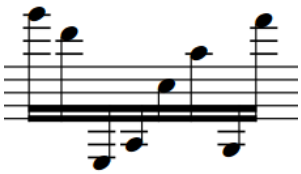
Centered beams are also known as “kneed” or “elbowed” beams due to their often angular shape.



When a beamed phrase spans a large pitch range, normal beams are often positioned very close to some notes in the phrase but very far from other notes in the phrase, making some stems very long. Having a centered beam in a phrase that spans a large pitch range can reduce the maximum distance between noteheads and the beam, but can also place the beam within the staff, which can obscure staff lines.



A phrase with high and low notes with default beaming



The same phrase with high and low notes, but with a centered beam

RELATED LINKS
Changing the staff-relative placement of beams on page 513

## Creating centered beams

You can make beams appear in the middle of staves, with high notes above the beam and lower notes below the beam.

NOTE

As this action requires changing the direction of some stems in order to appear correctly, it is located in the **Stem** submenu rather than **Beaming** in the **Edit** menu.

PROCEDURE

1. Select at least one note in each of the beams you want to center.
2. Choose **Edit** > **Stem** > **Force Centered Beam**. You can also choose this option from the context menu.

RESULT

Beams are centered between the notes in the selected beam groups.

If you select notes in multiple beams, each beam is centered separately. If you want to create a single centered beam, you can beam the notes in those beam groups together. You can do this both before and after centering the beams.

NOTE

Dorico Elements automatically angles the beam based on the shape of the phrase, but you can change the angles or slants of beams manually.

RELATED LINKS
Beaming notes together manually on page 512
Changing beam slants on page 515

## Removing centered beams

You can remove centered beams and revert beams to their default placements either above or below the phrase.

PROCEDURE

1. Select at least one note in each centered beam that you want to revert to the default placement.

2. Choose **Edit** > **Stem** > **Remove Centered Beam**. You can also choose this option from the context menu.

RESULT

The centered beams are removed.

# Creating cross-staff beams

Cross-staff beams work in a similar way to normal beams, but allow a phrase that covers a wide pitch range to be shown on two staves. You can create cross-staff beams by inputting all notes in the phrase on one staff and crossing some notes to appear on another staff.

PREREQUISITE

You have input a phrase on one staff.

PROCEDURE

1. Select the notes you want to cross to another staff.

   NOTE

   You can only cross notes to other staves in multi-staff instruments.

2. Cross the notes to other staves in any of the following ways:
   - To cross notes to the staff above, press **N**.
   - To cross notes to the staff below, press **M**.

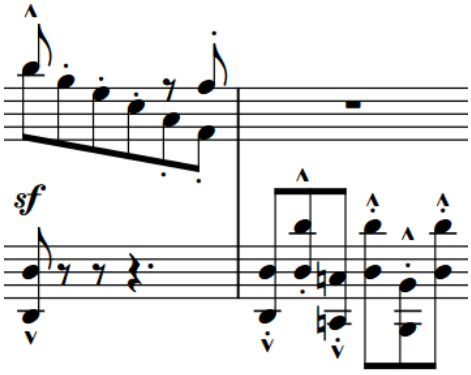
RESULT

The selected notes are shown on a different staff, with a cross-staff beam shown if the notes are part of a beam group. This does not change the staff to which the notes belong.

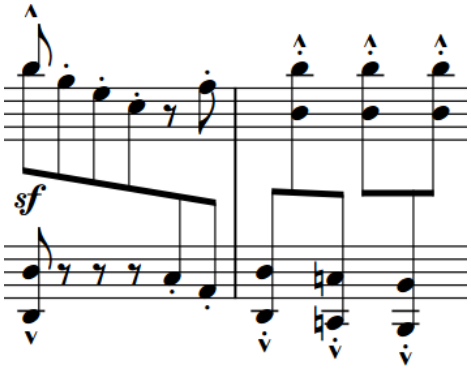
NOTE

- When crossing notes to a staff that already contains notes, the stem direction of the existing notes on the staff can change. This is due to how multiple voices at the same rhythmic position are handled. Therefore, you may have to change the stem direction of notes manually.
- You can reset notes to appear on their default staff by selecting them and choosing **Edit** > **Cross Staff** > **Reset to Original Staff**.
- If you want notes to belong to a different staff, you can move them to another staff.

EXAMPLE




Notes shown on their original staves



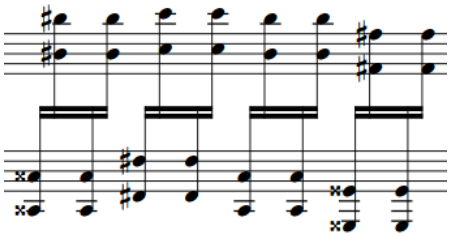

Cross-staff beams created by crossing some notes to the other staff

RELATED LINKS

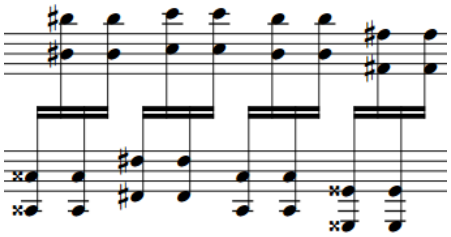
Moving notes to other staves on page 318
Notes crossed to staves with existing notes in other voices on page 889
Note positions in multiple-voice contexts on page 886
Changing the stem direction of notes on page 816

## Optical spacing for cross-staff beams

Normally, the human eye perceives the evenness of rhythmic spacing according to the distance between noteheads. However, for cross-staff beams we consider the distance between stems, rather than the noteheads, to be even/uneven.



Default spacing: The distance between noteheads is optimized.



Optical spacing for cross-staff beaming: the distance between stems is optimized.

### Changing to optical cross-staff beam spacing

You can make the stems in cross-staff beams, rather than the noteheads, evenly spaced in each layout independently.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts that you want to change to optical cross-staff beam spacing.

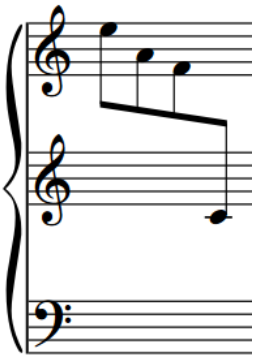
By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.

3. Click **Note Spacing** in the page list.
4. Activate **Use optical spacing for beams between staves**.
5. Click **Apply**, then **Close**.

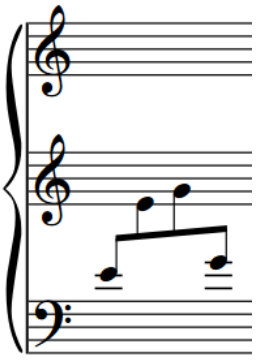
## Cross-staff beam placement in multiple staves

When instruments have three or more staves, cross-staff beams can be placed in multiple ways. For example, the beam can be placed between the top and the middle staves, and also between the middle and bottom staves.

If a beam only crosses two staves, the cross-staff beam goes between those two staves.

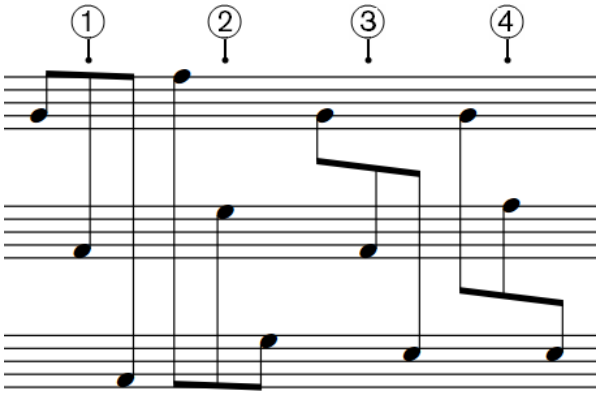


A cross-staff beam across the upper two staves on an instrument with three staves



A cross-staff beam across the lower two staves on an instrument with three staves

If a beam group contains notes on all three staves, the placement of the beam depends on the stem directions of the notes in each staff.




**1** If all notes in the beam group are stem-up, the beam is placed above the top staff.

**2** If all notes in the beam group are stem-down, the beam is placed below the bottom staff.

**3** If notes are stem-down on the top staff and stem-up on the bottom two staves, the beam is placed between the top and middle staves.

**4** If notes are stem-down on the top two staves and stem-up on the bottom staff, the beam is placed between the bottom and middle staves.

NOTE

If you have not specified stem directions, Dorico Elements might place the beam above/below the staff into which the notes were originally input, even if the stem directions mean it should be placed between other staves.

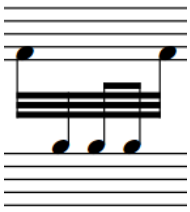
If you want the beam to be placed between specific staves, you can change the stem directions of notes in the beam group.

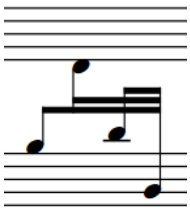
RELATED LINKS
Changing the stem direction of notes on page 816

# Beam corners

Beam corners can occur when a change of stem direction within a beam is combined with a break in the secondary beam group. This can be at the end of a subdivision or at a change in rhythmic speed.

Beam corners do not follow accepted rules regarding the order and rhythmic meaning of secondary beams, and can be confusing for the reader.





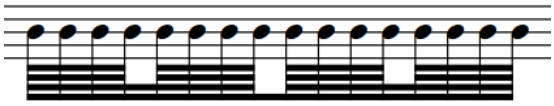
Dorico Elements avoids beam corners by analyzing the pitches and stems within a phrase, and implementing stem directions that avoid a beam corner.

# Secondary beams

Secondary beams are the lines that are added between the primary beam and the notehead as the rhythmic division gets smaller.

The primary beam is the outermost beam line that joins all of the notes in the beamed group. Depending on the durations of the notes in the beamed group, the primary beam may in fact be two or more lines; that is, for notes of a 16th or shorter in duration.

Secondary beams are additional beam lines that join only some of the notes in the group, creating subdivisions of the beam in order to make the metrical groupings of the beam clearer.



A phrase of 64th notes, with secondary beams subdivided to show 16th and eighth note groups

## Changing the number of beam lines in secondary beams

You can change the number of beam lines shown in secondary beams individually.

PROCEDURE

1. Select the notes to the right of where you want to change the number of secondary beaming lines.
2. Optional: If any of the notes you selected do not immediately follow existing splits in the secondary beam, split the secondary beams in any of the following ways:
   - In the Properties panel, activate **Split secondary beam** in the **Beaming** group.

     NOTE

     The **Beaming** group is only shown in the Properties panel if your selection only contains notes.

   - Choose **Edit** > **Beaming** > **Split Secondary Beam**. You can also choose this option from the context menu.
3. In the Properties panel, select the note value that corresponds to the number of beam lines you want shown from the **Split secondary beam** menu.

RESULT

The number of beam lines shown immediately to the left of each selected note is changed.

NOTE

The number of beam lines shown at a split in the secondary beam cannot be the same or greater than the number of beam lines in the secondary beam. For example, if you split a secondary beam containing 64th notes, the maximum number of beam lines shown at the split in that beam is three, the equivalent of 32nd notes.

## Resetting changes to the number of secondary beam lines

You can reset any changes you have made to the number of beam lines shown in secondary beams and return them to their default appearance.

PROCEDURE

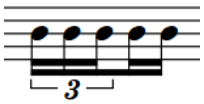
1. Select the notes to the right of where you want to reset the number of secondary beam lines.
2. Reset your changes to the number of secondary beam lines in any of the following ways:
   - In the Properties panel, deactivate **Split secondary beam** in the **Beaming** group.
   - Choose **Edit** > **Beaming** > **Reset Beaming**. You can also choose this option from the context menu.

# Tuplets within beams

Tuplets that contain notes that produce beams are also beamed together, but special beam grouping rules apply to tuplets within beams that also contain non-tuplet notes.

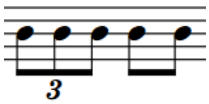
The default setting for a tuplet in a beamed group with secondary beams is to split the secondary beam and to show the tuplet with a bracket. The primary beam is not split.

You can alter the appearance of the bracket by selecting the bracket and changing relevant properties in the **Tuplets** group of the Properties panel.



Tuplets in beam groups with secondary beams are beamed together with a split secondary beam by default.

The default setting for a tuplet in a beamed group with only a primary beam is to separate the tuplet entirely.



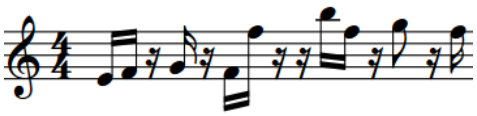
Eighth note (quaver) tuplets are not beamed together with subsequent non-tuplet eighth notes by default.

RELATED LINKS
Tuplets on page 858

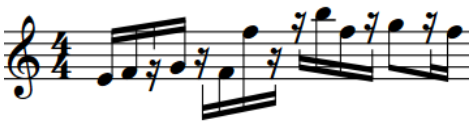
# Stemlets

Stemlets are short stems that extend from beams to rests within beam groups. They can help make music easier to read, as they help to maintain a regular pattern of stems within beams.

In the examples, beaming all notes and rests together to show the boundaries of quarter note (crotchet) beats makes the syncopation of the notes easier to read. The stemlets on the rests help make clear where within the quarter note beats each note occurs.



A syncopated phrase without stemlets



The same phrase with stemlets

In Dorico Elements, you cannot add stemlets or change where they are shown. However, stemlets are shown if you import or open a project that contains them.

# Fanned beams

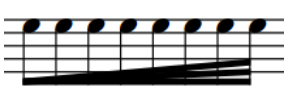
Fanned beams show either an *accelerando* or *rallentando* by having multiple beam lines either converging on, or diverging from, a single beam line at the other end. Fanned beams are also known as “feathered beams”.

A single fanned beam can have multiple changes of direction within it.

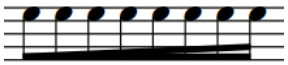
The grouping can use either two or three beams, with three beams indicating a greater change of speed than two beams. The slowest part of the phrase is where the beams converge, and the fastest is where the beams are the most spread out.

In Dorico Elements, you cannot create fanned beams or change their direction. However, fanned beams are shown if you import or open a project that contains them.

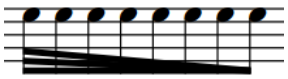
EXAMPLE



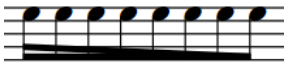
Fanned beam accelerando with three lines



Fanned beam accelerando with two lines



Fanned beam rallentando with three lines

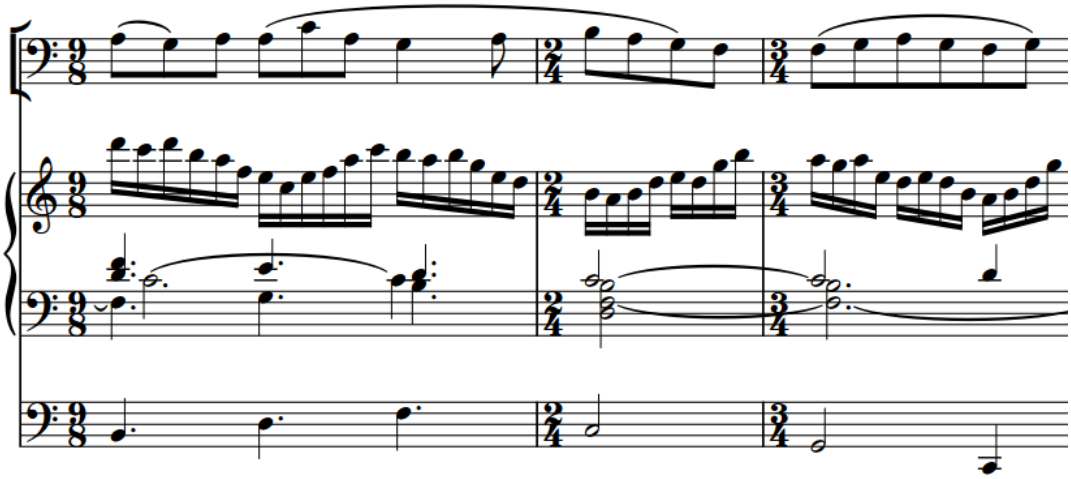


Fanned beam rallentando with two lines

# Note and rest grouping

There are generally accepted conventions for how notes and rests of different durations are notated and grouped in different contexts and meters. In Dorico Elements, notes are automatically notated to fit within bars.

Depending on the prevailing time signature, there can be many different ways to beam notes together. For example, you might want to beam all notes in the bar together in time signatures that cannot be divided in half and are often not divided at all, such as 3/4.



A passage containing different meters. Notes are grouped and beamed differently in the different meters, and the durations of tied notes that cross the second barline are automatically correct.

There are also different conventions for how notes within tie chains should be divided to indicate significant beat boundaries within bars, and in which contexts they can cross beat boundaries.

Similar options apply to dotted notes, which are often notated as a single dotted note if they start at the beginning of bars, but as a tie chain that shows significant beat boundaries in the bar if they start part-way through bars.

RELATED LINKS

Beaming on page 510
Beam grouping according to meters on page 510

## Creating custom beat groupings for meters

If your music requires a different beat grouping for a particular meter than the default setting for that time signature, you can specify your preferred beat grouping within the time signature. You can choose whether or not the time signature shows this custom beat grouping.

PROCEDURE

1. In Write mode, select an item at the rhythmic position where you want to input a time signature with a custom beam grouping.
2. Press **Shift-M** to open the time signatures popover.
3. Enter the division you want in square brackets into the popover.

For example, to divide a 7/8 time signature into 2+3+2, enter **[2+3+2]/8** into the popover. To divide a 5/4 time signature into 2+3 rather than 3+2, enter **[2+3]/4** into the popover.

4. Input the time signature and close the popover in one of the following ways:
   - To input a time signature on all staves, press **Return**.
   - To input a time signature on the selected staff only, press **Alt/Opt-Return**.

RESULT

The time signature specified is input and beam and beat grouping in subsequent bars follows the division you specified.

TIP

You can change the appearance of numerators in individual time signatures so that they show a single number or beat groups.

RELATED LINKS

Beam grouping according to meters on page 510
Time signature styles on page 848
Changing the numerator style of time signatures on page 848

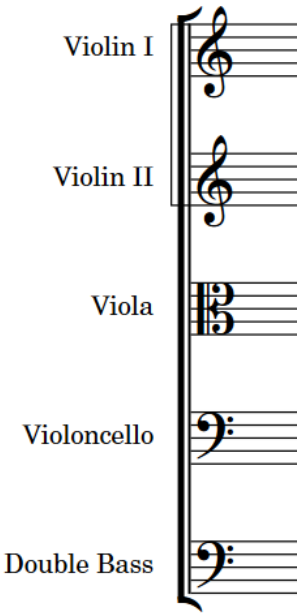
# Brackets and braces

Brackets and braces are thick straight and curved lines in the left-hand margin that show instrument groupings.

## Brackets

A bracket is a thick black line, the width of a beam, that groups staves together, most commonly according to instrument family. It often has winged ends that point inwards towards the score.

It is always positioned directly to the left of a systemic barline. If secondary brackets are used in addition to a bracket, they are positioned further away from the start of the system to allow space for the bracket.




An example of a bracket, connecting instruments in the string family. A sub-bracket connects the two violin lines.

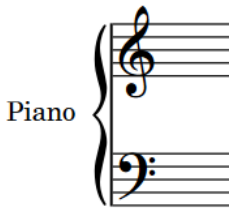
In Dorico Elements, barlines join the same staves that are joined by brackets and braces, meaning that bracketed groups of staves and braced pairs of staves appear with barlines extending across the group.

## Braces

A brace is a wavy or curly line that joins multiple staves belonging to the same instrument, usually a grand staff instrument such as the piano or harp. If necessary, a brace can extend to three or more staves, although two is most common.

The brace is also sometimes used instead of a sub-bracket to show groupings of identical instruments within a family whose staves are joined by a bracket.

It is positioned outside the systemic barline, and if used in place of a sub-bracket, outside of the bracket as well.




A brace connecting two piano staves

NOTE

- Staves cannot be bracketed and braced simultaneously. Therefore, braced staves are excluded from bracketed groups. They also cannot show sub-brackets or sub-sub-brackets.
- System objects are only shown above instrument families that are bracketed or braced together.

RELATED LINKS

Barlines across staff groups on page 497
Player groups on page 125
Adding player groups on page 126
Brackets according to ensemble type on page 528
Changing bracket grouping according to ensemble type on page 527
System objects on page 805

# Changing bracket grouping according to ensemble type

You can change which staves are included in brackets by changing the ensemble type for each layout independently, for example, if a part layout containing all percussion players requires different bracketing than used for percussion staves in the full score layout.

The default setting is **Orchestral**. We recommend that you change this setting for projects containing small ensembles.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to change the ensemble type for bracket grouping.

   By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Brackets and Braces** in the page list.
4. Choose one of the following options for **Ensemble type**:
   - **No brackets**
   - **Orchestral**
   - **Small ensemble**
   - **Wind band**
   - **Big band**
   - **British brass band**
5. Click **Apply**, then **Close**.

RESULT

The default bracket grouping is changed in the selected layouts.

TIP

- There are further options for bracketing on the **Brackets and Braces** page, such as hiding/showing brackets when there is only a single instrument in the bracket group and hiding/showing braces when only a single staff is shown.
- You can also input custom bracket/brace grouping for specific staves, independently of the bracket grouping setting in the layout.

## Brackets according to ensemble type

In Dorico Elements, default staff grouping is determined by the ensemble type chosen for each layout. This affects which staves are bracketed together and joined by barlines.

The following ensemble types are available on the **Brackets and Braces** page in **Setup** > **Layout Options**:

**No brackets**

All staves appear separately, with no brackets. Grand staff instruments are still shown with braces.

This is the default setting for full score layouts in projects started from **Solo** and small **Jazz** project templates.

**Orchestral**

Staves are bracketed according to their instrument family. For example, adjacent string instruments are bracketed together separately from adjacent woodwind instruments. However, vocal staves are not joined by barlines.

This is the default setting for all layouts in new projects and projects started from **Orchestral**, **Choral and Vocal**, and **Concert band** project templates, and for custom score and part layouts in projects started from all other project templates.

**Small ensemble**

All staves in the project are bracketed together, regardless of their instrument family, excluding braced staves.

This is the default setting for full score layouts in projects started from **Chamber** and **Pit band** project templates.

**Wind band**

Staves are bracketed according to their instrument type. For example, Flute 1 and Flute 2 are bracketed together, but separately from the other woodwind instruments.

**Big band**

Staves are bracketed according to their instrument family, except for brass instruments, which are all bracketed according to their instrument type.

Rhythm section instruments are bracketed together.

Percussion and timpani are bracketed together.

**British brass band**

Brass instruments are bracketed according to their instrument type, except for horns and trumpets, which are bracketed together.

Any other instruments in the score are bracketed according to their instrument family.

Percussion and timpani are bracketed separately.

This is the default setting for full score layouts in projects started from the **Big band** project template.

NOTE

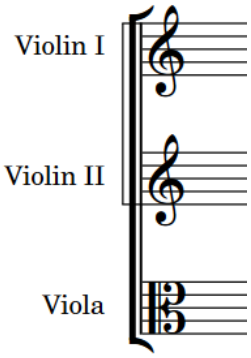
- Staves cannot be bracketed and braced simultaneously. Therefore, braced staves, such as the piano and other grand staff instruments, are excluded from brackets. They also split brackets if they are placed within a bracketed group.
- By default, there must be at least two adjacent instruments to show a bracket. You can choose to show brackets on single instruments in each layout independently on the **Brackets and Braces** page in **Setup** > **Layout Options**.
- Vocal staves are never joined by barlines, even when bracketed together.
- System objects are only shown above instrument families that are bracketed or braced together.

RELATED LINKS
Project template categories on page 67
System objects on page 805

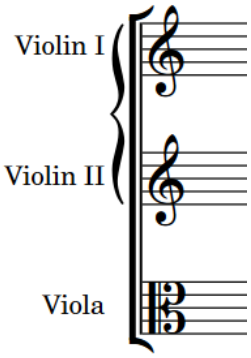
# Secondary brackets

Secondary brackets are a second level of staff grouping. They are positioned to the left of brackets and allow you to mark groups of staves within a bracketed group. In Dorico Elements, secondary brackets can appear as a brace or as a sub-bracket.

By default, secondary brackets appear as sub-brackets: thin lines with square corners that extend beyond the bracket. You can change the appearance of secondary brackets and hide/show them for adjacent identical instruments in bracketed groups in each layout independently.




Secondary bracket as a sub-bracket




Secondary bracket as a brace

NOTE

You cannot show sub-sub-brackets in addition to braces, you can only show sub-sub-brackets in addition to sub-brackets.

## Hiding/Showing secondary brackets

You can hide/show secondary brackets for adjacent identical instruments in bracketed groups in each layout independently.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.

2. In the **Layouts** list, select the layouts in which you want to hide/show secondary brackets.

   By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Brackets and Braces** in the page list.
4. Choose one of the following options for **Instruments of the same kind within a bracketed group**:
   - **Use secondary brackets**
   - **No secondary brackets**
5. Click **Apply**, then **Close**.

RESULT

Secondary brackets are shown in the selected layouts when you choose **Use secondary brackets**, and hidden when you choose **No secondary brackets**.

## Showing secondary brackets as sub-brackets/braces

Secondary brackets extend beyond brackets, allowing you to mark groups of staves within a bracketed group. You can show secondary brackets as either braces positioned outside the bracket or as sub-brackets in each layout independently.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to change the appearance of secondary brackets.

   By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Brackets and Braces** in the page list.
4. Choose one of the following options for **Secondary bracket appearance**:
   - **Brace**
   - **Sub-bracket**
5. Click **Apply**, then **Close**.

RESULT

The appearance of all secondary brackets in the selected layouts is changed.

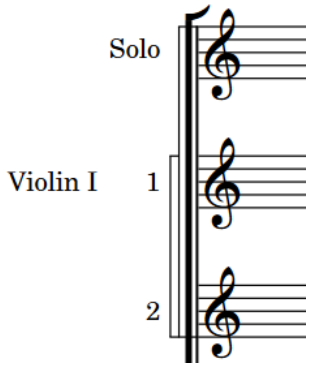
NOTE

Because you cannot show sub-sub-brackets in addition to braces, sub-sub-brackets are not shown in layouts where sub-brackets appear as braces.

# Sub-sub-brackets

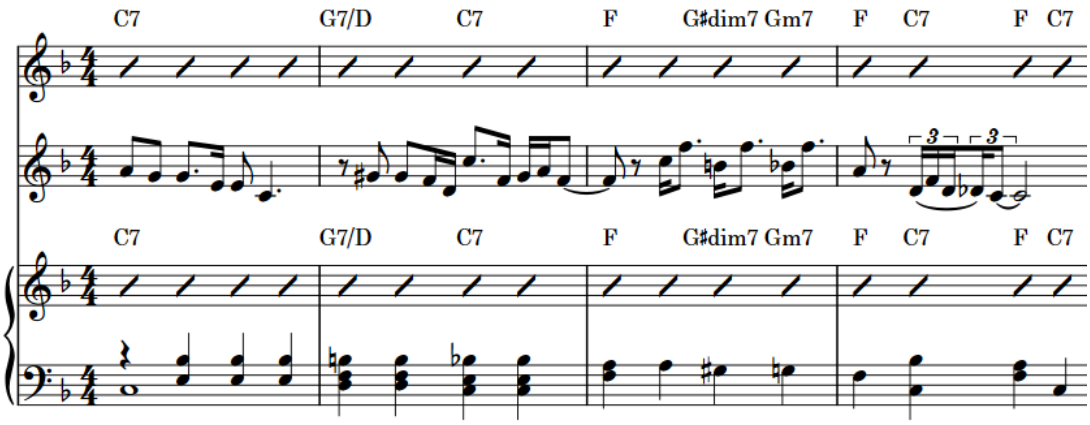
Sub-sub-brackets are a tertiary level of staff grouping with the same design as sub-brackets. They are positioned outside of both brackets and sub-brackets, allowing you to mark groups of staves within bracketed and sub-bracketed groups. Sub-sub-brackets can only appear as brackets in Dorico Elements.

Sub-sub-brackets cannot extend beyond their sub-bracket and cannot be shown on staves with a brace as either the primary or secondary group.


Solo
Violin I
1
2

# Chord symbols

Chord symbols describe the vertical harmony of the music at a specific moment. They are frequently used in jazz and pop music, where players often improvise around chord progressions.




Chord symbols shown above slashes on the Clarinet and Piano staves to help the players improvise around the notated Cornet melody.

In Dorico Elements, chord symbols exist globally at their rhythmic position by default. This means that you must only input chord symbols once, but they can appear above multiple or no staves as required. However, in some circumstances it is necessary to show different chord symbols for different players at the same rhythmic position. In such cases, you can input local chord symbols.

You can hide/show chord symbols project-wide above specific instrument staves, including if multiple instruments belong to the same player, and in different layouts. You can also show chord symbols only within chord symbol/slash regions and hide/show individual chord symbols.

If you have input chord symbols but no players in the current layout are set to show them, they are indicated by signposts.

Depending on the style of music, there are different conventions regarding how to present chord names.

Dorico Elements provides a single default chord symbol appearance preset that applies to all chord symbols.

RELATED LINKS
Input methods for chord symbols on page 234
Hiding/Showing chord symbols on page 534
Hiding/Showing signposts on page 315

## Chord components

Chord symbols consist of a root and a quality, with intervals, alterations, and an altered bass note included if required.

**Root**

The root note of the chord, expressed either as a note name or as a specific degree of a scale.

**Quality**

Defines the type of chord, such as major, minor, diminished, augmented, half-diminished, or with added note, such as six or nine.

**Interval**

Chord symbols can include one or more added intervals, such as a major seventh or ninth. Intervals in chord symbols are also known as “extensions”.

**Alterations**

Define notes in chords that are different to what is normally expected of that chord. For example, a sharpened fifth, flattened ninth, suspensions, or omissions.

**Altered bass note**

A chord symbol has an altered bass note if the lowest pitch of a chord is not its root note, such as Cm7♭5/E♭.

# Transposing chord symbols

You can transpose chord symbols after you have input them, independently of any notes.

NOTE

Dorico Elements automatically shows the appropriate chord symbols for transposing instruments in transposing layouts.

PROCEDURE

1. In Write mode, select the chord symbols you want to transpose.
2. Choose **Write** > **Transpose** to open the **Transpose** dialog.
3. Adjust the parameters required for your transposition, such as interval and quality.

   TIP

   - We recommend using the **Calculate interval** section to determine your required settings, for example, if you want to transpose from G♭ major to G major.
   - Different intervals have different possible qualities. For example, you can specify a major third but not a major octave. Therefore, if you want to set your transposition parameters manually, we recommend selecting the interval before the quality.
4. Click **OK** to save your changes and close the dialog.

RESULT

The selected chord symbols are transposed.

RELATED LINKS

Transpose dialog on page 194
Concert vs. transposed pitch on page 134
Making layouts transposing/concert pitch on page 133
Respelling chord symbols on page 538

# Hiding/Showing chord symbols

You can hide/show chord symbols above particular staves or only within chord symbol/slash regions project-wide on a per-player basis. By default, chord symbols appear above rhythm section instrument staves, such as keyboards, guitars, and bass guitars.

PROCEDURE

1. In Setup mode, select a player in the **Players** panel for whom you want to hide/show chord symbols.
2. Right-click the player and choose one of the following options from the context menu:
   - To show chord symbols above all instrument staves held by the player, choose **Chord Symbols** > **Show For All Instruments**.
   - To show chord symbols only above rhythm section instrument staves held by the player, choose **Chord Symbols** > **Show For Rhythm Section Instruments**.
   - To show chord symbols only in chord symbol/slash regions on instrument staves held by the player, choose **Chord Symbols** > **Show in Chord Symbol and Slash Regions**.
   - To hide chord symbols above all instrument staves held by the player, choose **Chord Symbols** > **Hide For All Instruments**.

RESULT

Chord symbols are hidden/shown above the corresponding instrument staves held by the selected player, depending on the layouts in which chord symbols are shown for that player in your project.

TIP

You can also hide/show individual chord symbols in layouts where chord symbols are shown by selecting them and activating **Hidden** in the **Chord Symbols** group of the Properties panel. Signposts are shown at the position of each hidden chord symbol. However, signposts are not printed by default.

You can assign a key command for **Hide/Show Item** on the **Key Commands** page in **Preferences**, which applies to chord symbols, playing techniques, and time signatures.

RELATED LINKS

Chord symbol regions on page 535
Inputting chord symbol regions on page 241
Signposts on page 314
Hiding/Showing chord diagrams on page 542

# Hiding/Showing chord symbols in layouts

You can hide/show chord symbols in different types of layouts. By default, chord symbols appear in all applicable layouts for rhythm section instruments.

NOTE

If chord symbols are hidden for all instruments in the current layout, signposts are shown above the top staff.

PROCEDURE

1. In Setup mode, select a player in the **Players** panel.
2. Right-click the player and choose one of the following options from the context menu:

- To show chord symbols for the selected player in all layouts, choose **Chord Symbols** > **Show in Full Score and Parts**.
- To show chord symbols for the selected player only in full score/custom score layouts and not in part layouts, choose **Chord Symbols** > **Show in Full Score Only**.
- To show chord symbols for the selected player only in part layouts and not in full score/custom score layouts, choose **Chord Symbols** > **Show in Parts Only**

# Hiding/Showing the root and quality of chord symbols

You can hide the root and quality of chord symbols if they follow another chord symbol with the same root and quality, but have a different altered bass note.

PROCEDURE

1. Select the chord symbols whose root and quality you want to hide.
2. In the Properties panel, activate **Hide root and quality** in the **Chord Symbols** group.
3. Activate/Deactivate the corresponding checkbox.

RESULT

The root and quality of the selected chord symbols are hidden when the checkbox is activated, and shown when the checkbox is deactivated.

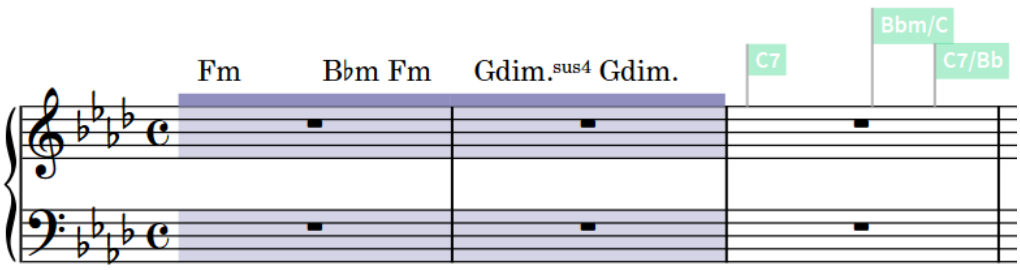
# Chord symbol regions

Chord symbol regions specify passages where you want to show chord symbols. They are particularly useful for players and layouts that do not need chord symbols for most of the project but have improvisation sections that require chord symbols to be shown.

Chord symbol regions allow you to show chord symbols only where players require them, instead of showing chord symbols throughout the project and manually hiding the ones you do not want to show.

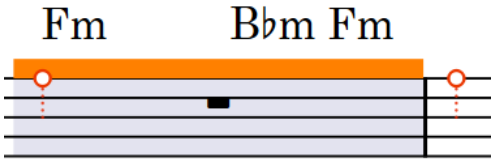
When you input chord symbol regions in Dorico Elements, the corresponding players are automatically set to show chord symbols in chord symbol/slash regions. This is because it is common to use both slashes and chord symbols to aid players in improvisation sections. Any chord symbols outside chord symbol/slash regions are automatically hidden and are indicated by signposts.

By default, chord symbol regions are highlighted with a solid colored line above the top staff line and a colored background. As you zoom out, the colored backgrounds become more opaque, which is especially useful when viewing full score layouts in galley view. These highlights are considered annotations, are not printed by default, and you can hide and show them.




Chord symbol region followed by chord symbol signposts after the end of the chord symbol region

In Write mode, each region has a handle at the start and end, which you can use to move and lengthen/shorten regions.




Handles on a selected chord symbol region

RELATED LINKS
Inputting chord symbol regions on page 241
Hiding/Showing chord symbols on page 534
Slash regions on page 763
Hiding/Showing signposts on page 315
Annotations on page 476

## Moving chord symbol regions

You can move chord symbol regions to different rhythmic positions after they have been input.

PROCEDURE

1. In Write mode, select the chord symbol regions you want to move.

   NOTE

   When using the mouse, you can only move one chord symbol region at a time.

2. Move the chord symbol regions to the right/left in any of the following ways:
   - Press **Alt/Opt-Right Arrow** to move them to the right.
   - Press **Alt/Opt-Left Arrow** to move them to the left.
   - Click and drag the chord symbol region to the right/left.

RESULT

The selected chord symbol regions are moved to new rhythmic positions according to the current rhythmic grid resolution.

NOTE

Only one chord symbol region can exist at each rhythmic position. If any part of a selected chord symbol region collides with any part of another chord symbol region as part of its move, the other chord symbol region is shortened to accommodate the one you moved.

You can undo this action and restore the previous length of the other chord symbol region. However, if you moved a chord symbol region using the mouse and it overwrote another chord symbol region completely, the other chord symbol region is permanently deleted.

## Lengthening/Shortening chord symbol regions

You can lengthen/shorten chord symbol regions after they have been input.

PROCEDURE

1. In Write mode, select the chord symbol regions you want to lengthen/shorten.

NOTE

When using the mouse, you can only lengthen/shorten one chord symbol region at a time.

2. Lengthen/Shorten the chord symbol regions in any of the following ways:
   - To lengthen them by the current rhythmic grid resolution, press **Shift-Alt/Opt-Right Arrow**.
   - To shorten them by the current rhythmic grid resolution, press **Shift-Alt/Opt-Left Arrow**.

     NOTE

     Key commands lengthen/shorten items by moving their end only.

   - Click and drag the circular handle at the start/end to the right/left.

RESULT

The selected chord symbol regions are lengthened/shortened.

NOTE

Only one chord symbol region can exist at each rhythmic position. If any part of a selected chord symbol region collides with any part of another chord symbol region when it is lengthened/shortened, the other chord symbol region is shortened to accommodate this.

You can undo this action and restore the previous length of the other chord symbol region. However, if you lengthened/shortened a chord symbol region using the mouse and it overwrote another chord symbol region completely, the other chord symbol region is permanently deleted.

## Hiding/Showing chord symbol region highlights

You can hide/show colored highlights for chord symbol regions at any time, for example, if you want to show the highlights when inputting music but hide them when engraving.

NOTE

This does not affect the solid line shown above the staff in chord symbol regions, which you cannot hide.

PROCEDURE

- Choose **View** > **Highlight Chord Symbol Regions**.

RESULT

Highlights in chord symbol regions are shown when a tick appears beside **Highlight Chord Symbol Regions** in the menu, and hidden when no tick appears.

# Positions of chord symbols

By default, chord symbols are centered horizontally on the middle of the front notehead in the first voice column, at the rhythmic position to which they are attached.

NOTE

The front notehead is the notehead on the correct side of the stem at that rhythmic position.

Their vertical position in full scores is determined by the staves above which they are set to appear and any chord symbol regions you have input. This also affects in which part layouts chord symbols appear.

### Alignment of chord symbols relative to notes and chords

You can change whether chord symbol text is left-aligned above the notehead, center-aligned above the notehead, or right-aligned above the notehead, although right-aligned typically produces unclear results.

You can change the horizontal alignment of individual chord symbols by activating **Alignment** in the **Chord Symbols** group of the Properties panel and selecting an option from the menu.

### Alignment of chord symbols across the system

Chord symbols are aligned at the same vertical position across the width of the system by default.

RELATED LINKS
Chord symbol regions on page 535
Hiding/Showing chord symbols on page 534
Hiding/Showing chord symbols in layouts on page 534

## Moving chord symbols rhythmically

You can move chord symbols to new rhythmic positions after they have been input.

PROCEDURE

1. In Write mode, select the chord symbols you want to move.

   NOTE

   When using the mouse, you can only move one chord symbol rhythmically at a time.

2. Move the chord symbols according to the current rhythmic grid resolution in any of the following ways:
   - Press **Alt/Opt-Right Arrow** to move them to the right.
   - Press **Alt/Opt-Left Arrow** to move them to the left.
   - Click and drag the chord symbol to the right/left.

RESULT

The selected chord symbols are moved to new rhythmic positions.

NOTE

Only one chord symbol can exist at each rhythmic position. If a chord symbol passes over another chord symbol as part of its move, the existing chord symbol is deleted.

You can undo this action, but any chord symbols deleted in the process are only restored if you moved the chord symbol using the keyboard.

## Respelling chord symbols

You can change the enharmonic spelling of chord symbols for transposing instruments, for example, to choose a simpler enharmonic equivalent spelling. This changes the enharmonic

spelling of chord symbols in all transposing layouts and for all instruments with the same transposition.

PROCEDURE

1. In Write mode, open a layout with the transposition for which you want to respell chord symbols.

   For example, to respell a chord symbol for all instruments in B♭, open the part layout for an instrument in B♭.
2. Select the chord symbol you want to respell.
3. Press **Return** to open the chord symbols popover for the selected chord symbol.

   The existing entry for the chord symbol is shown inside the popover.
4. Change the root name of the chord, but leave other details as they were, such as quality, interval, or alterations.

   For example, change just the root of D♭maj13 from **Db** to **C#**.

RESULT

The spelling of the chord symbol is changed in transposing layouts for all instruments with the same transposition. For example, changing the spelling of a chord symbol for a Clarinet in B♭ also changes the spelling of that chord symbol in the part layout for a Trumpet in B♭.

RELATED LINKS

Chord symbols popover on page 234
Transposing chord symbols on page 533
Concert vs. transposed pitch on page 134
Making layouts transposing/concert pitch on page 133

## Showing chord symbols as modes

You can show individual chord symbols as their modal equivalent if one exists for that chord symbol.

PROCEDURE

1. Select the chord symbols you want to show as a mode.
2. In the Properties panel, activate **Show as mode** in the **Chord Symbols** group.
3. Select the mode you want from the menu.

RESULT

The selected chord symbols are respelled according to the selected mode. This does not affect the notes included in the chord symbols.

## Resetting the enharmonic spelling of chord symbols

You can remove enharmonic spelling overrides for chord symbols you have respelled and return them to their default spelling. You can remove overrides for instruments with a single transposition only, such as instruments in B♭, or for all instrument transpositions.

PROCEDURE

1. In Write mode, select the chord symbol whose spelling you want to reset.
   - If you want to reset the enharmonic spelling of the chord symbol for a single instrument transposition only, select the chord symbol on a staff belonging to an instrument with

that transposition. For example, select it on the staff of any instrument in B♭ to reset the chord symbol for all instruments in B♭.

- If you want to reset the enharmonic spelling of the chord symbol for all instrument transpositions, select the chord symbol on any staff that belongs to a transposing instrument.

2. Press **Return** to open the chord symbols popover for the selected chord symbol.
   The existing entry for the chord symbol is shown inside the popover.
3. Reset the enharmonic spelling of the chord symbol in any of the following ways:
   - To reset the enharmonic spelling of the chord symbol for instruments only with the selected transposition, enter **Alt/Opt-S** into the chord symbols popover.
   - To reset the enharmonic spelling of the chord symbol for all instrument transpositions, enter **Shift-Alt/Opt-S** into the popover.

RESULT

The enharmonic spelling of the selected chord symbol in transposing layouts is reset, either just for instruments with the specified transposition or for all transposing instruments.

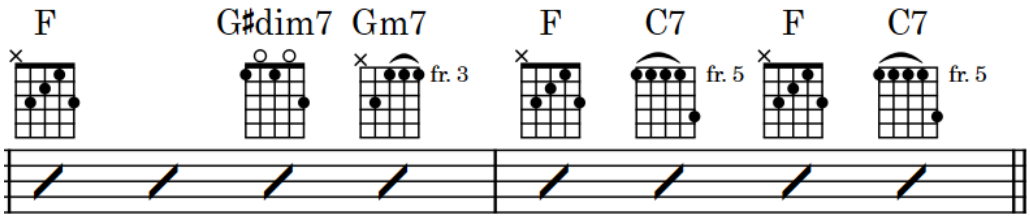
# Chord symbols imported from MusicXML

Chord symbols are imported from MusicXML files. However, chords that specify Neapolitan, Italian, French, German, Pedal, Tristan, and Other values for the kind of element are ignored during import, as there is no information to specify what notes these chord symbols are meant to describe.

# Chord diagrams

Chord diagrams represent the pattern of strings and frets on fretted instruments and use dots to indicate the stopped finger positions required to produce the corresponding chord. This demonstrates the specific shape of chords in a compact way and is useful if a particular voicing is required.

In Dorico Elements, chord diagrams are part of chord symbols, meaning you can show them below chord symbols wherever they are shown. You can show chord diagram shapes for any fretted instrument, including different tunings and string arrangements, such as guitar DADGAD tuning. This can be different to the instrument above which they appear, for example, if you want to show chord diagram shapes for standard guitar tuning above the bass staff.




A sequence of chord symbols with chord diagrams for banjo

The positions of stopped frets relative to each other are known as “shapes” in Dorico Elements. Any playable shape can be re-used for other chords whose pitches match the shape, including any new chord diagram shapes you have created. This includes shapes being available for other instruments, other tunings, and other positions along the fretboard, so long as any open strings included in the shape can be played with a barré at other fret positions.

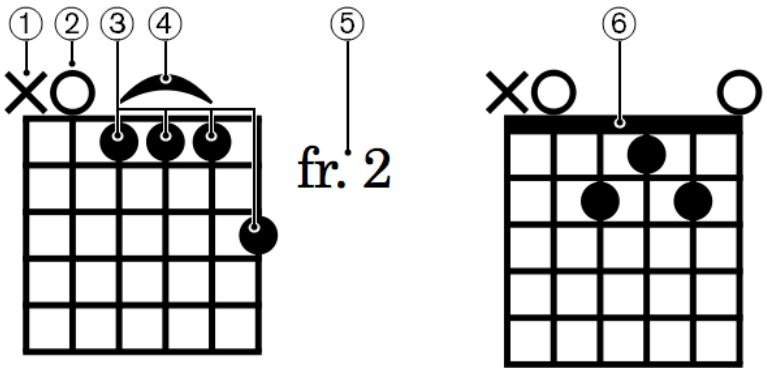
A single chord can appear with different chord diagram shapes for different instruments and tunings, as their open string pitches and the number of strings they have varies.

RELATED LINKS

Hiding/Showing chord diagrams on page 542

## Chord diagram components

Chord diagrams use a combination of symbols, dots, and lines to convey the information about strings, fret positions, and finger positions that performers require to play the corresponding chord.



1 **Omitted string**

Indicates a string that must not sound.

2 **Open string**

Indicates a string that must sound but must be left open, that is, not stopped.

3 **Dots**

Indicate the fret positions where strings should be stopped, usually with left-hand fingers.

4 **Barré**

Indicates that multiple strings must be stopped with the same finger, usually pressed flat against the fretboard.

5 **Starting fret number**

Indicates the number of the highest fret in the chord diagram when this is not the first fret.

6 **Nut**

Represents the top of the fretboard, or “nut”, and appears in chord diagrams whose highest fret is the first fret.

RELATED LINKS

Changing the chord diagram shape on page 543

# Hiding/Showing chord diagrams

You can hide/show chord diagrams for any type of fretted instrument alongside chord symbols. You can also change the fretted instrument or tuning for which chord diagrams are shown. However, you cannot show chord diagrams when chord symbols are hidden.

PREREQUISITE

- You have input the chord symbols for which you want to show chord diagrams.
- Chord symbols are shown above the staves where you want to show chord diagrams.

PROCEDURE

1. In Setup mode, select a player in the **Players** panel for whom you want to hide/show chord diagrams.
2. Right-click the player and choose one of the following options from the context menu:
   - To show chord diagrams, choose **Chord Diagrams** > **[Fretted instrument and tuning]**. For example, to show chord diagrams for a guitar in DADGAD tuning, choose **Chord Diagrams** > **DADGAD guitar tuning**.
   - To hide chord diagrams, choose **Chord Diagrams** > **No Chord Diagrams**.

RESULT

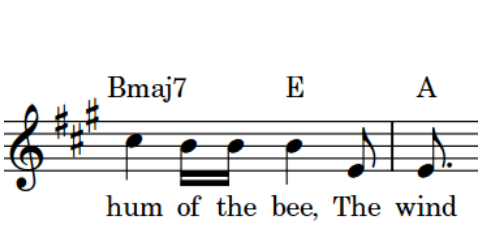
Chord diagrams are shown alongside all chord symbols for the selected player, as appropriate for the selected fretted instrument and tuning. Dorico Elements shows the simplest diagram available for each chord, that is, shapes with the most open strings and finger positions closest to the nut.

If no chord diagram is available for a chord symbol, an empty chord diagram is shown.

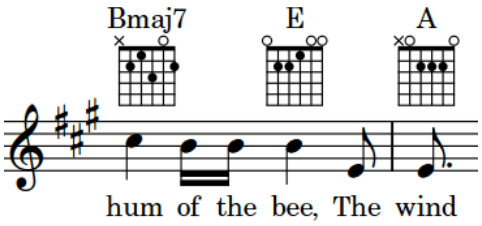
TIP

You can edit empty chord diagrams to save a new chord diagram shape.

EXAMPLE




Chord symbols shown but chord diagrams hidden




Chord diagrams shown (standard guitar tuning)

RELATED LINKS

Inputting chord symbols on page 238
Hiding/Showing chord symbols on page 534

# Changing the chord diagram shape

You can change the chord diagram shape shown at individual rhythmic positions, for example, if you require a shape with a different voicing. Many chords have multiple playable shapes.

You can also apply your changes to all other instances of the same chord for instruments with compatible tunings.

PROCEDURE

1. Select the chord diagram whose shape you want to change.

   NOTE

   You can only change the shape of a single chord diagram at a time.

2. Change the shape in any of the following ways:
   - To cycle through all the available shapes for the selected chord, press **Alt/Opt-Q**.
   - To open the **Choose Chord Diagram** dialog and see all the available shapes for the selected chord at once, press **Shift-Alt/Opt-Q**.
3. Optional: In the **Choose Chord Diagram** dialog, select the shape you want to use.

   TIP

   If the shape you require is not available, you can click **Edit**, which allows you to create a new shape.

4. Click **OK** to save your changes and close the dialog.
5. Optional: To apply the new shape to other instances of the same chord for instruments with compatible tunings, choose **Edit** > **Chord Diagrams** > **Copy Shape to Matching Chord Symbols**.

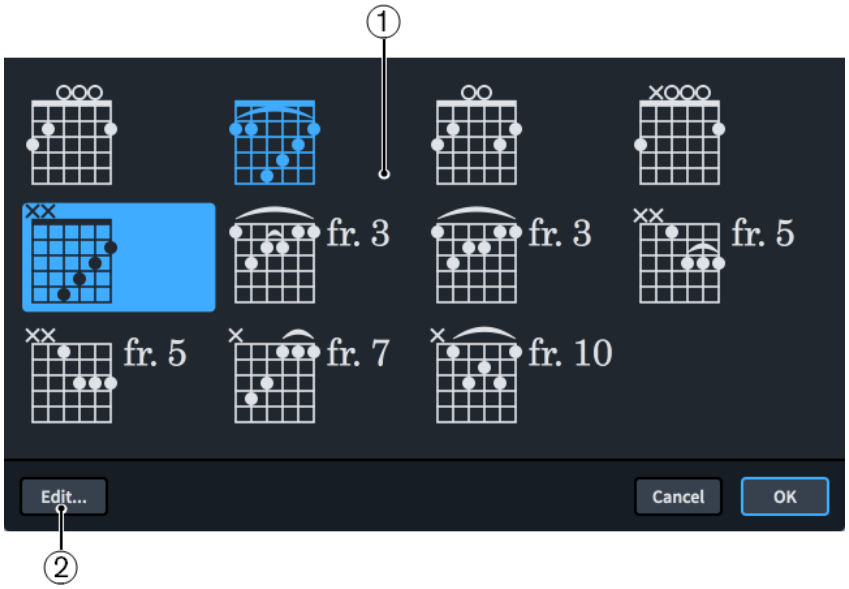
RESULT

The shape shown for the selected chord diagram is changed. This also updates all other chord diagrams using the same fretted instrument tuning at the same rhythmic position.

## Choose Chord Diagram dialog

The **Choose Chord Diagram** dialog allows you to view all available chord diagram shapes for the selected chord and select the one you want to use.

- You can open the **Choose Chord Diagram** dialog in Write mode by selecting a chord diagram and pressing **Shift-Alt/Opt-Q**.




**Choose Chord Diagram** dialog

The **Choose Chord Diagram** dialog comprises the following:

1 **Available chord diagrams**

Displays all the valid chord diagram shapes for the selected chord and allows you to select a different shape to show at the selected rhythmic position. Shapes you have created yourself appear in a different color.

2 **Edit**

Opens the **Edit Chord Diagram** dialog, which allows you to edit the shape of chord diagrams, including changing the number of frets shown, stopped fret positions, and the starting fret number.

# Creating new chord diagram shapes

You can create new chord diagram shapes by editing an existing one, for example, if you want an alternative voicing for a chord or to show a barré. Your changes to existing chord diagram shapes are saved as a new shape, they do not overwrite the existing one.

NOTE

In Dorico Elements, you cannot start new chord diagram shapes from scratch.

PROCEDURE

1. In Write mode, select the chord diagram whose shape you want to edit.
2. Press **Shift-Alt/Opt-Q** to open the **Choose Chord Diagram** dialog.
3. Click **Edit** to open the **Edit Chord Diagram** dialog.
4. Edit the shape and settings of the chord diagram as required.

For example, you can change open strings to omitted strings or change the stopped fret position on strings to change the corresponding string pitch.

5. Optional: If you want the shape to be available for chords with different start fret positions, activate **Chord may be moved along the neck**.
6. Click **Save**, then **Close**.

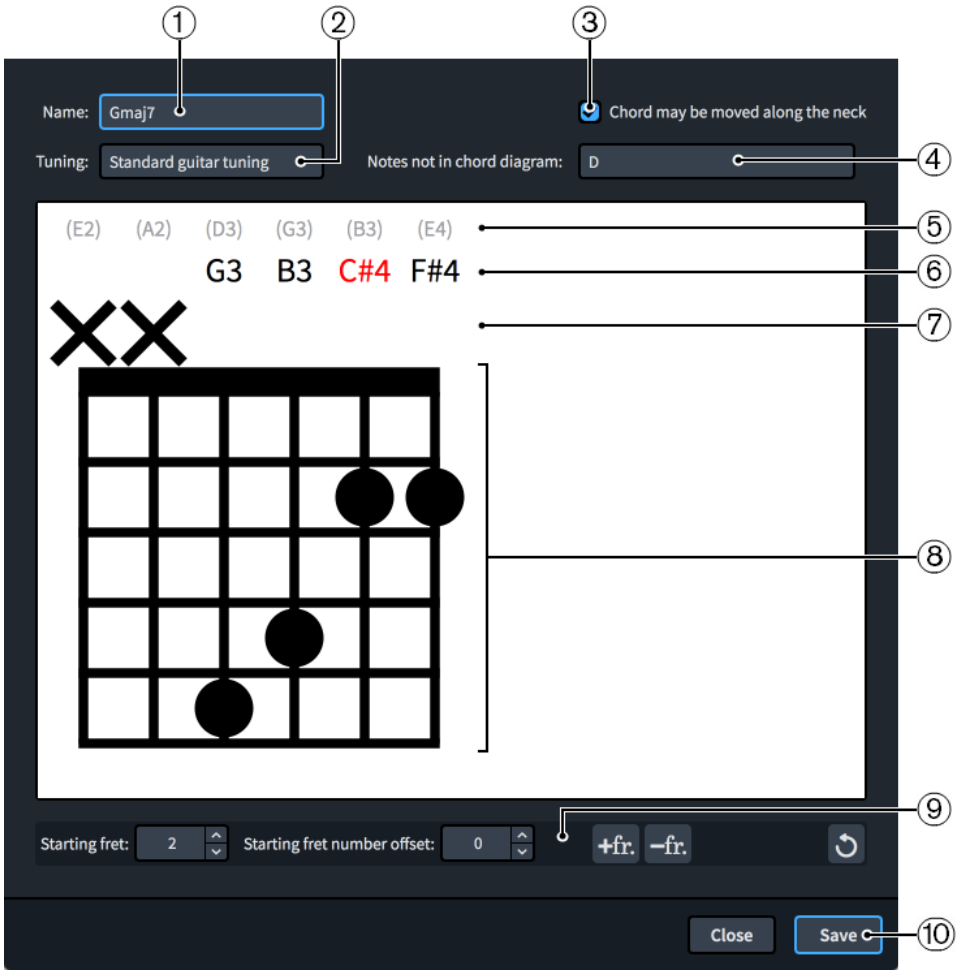
RESULT

The new shape is saved and is used for the selected chord diagram. The new shape also becomes available for any other chord for which it is valid.

## Edit Chord Diagram dialog

The **Edit Chord Diagram** dialog allows you to edit the shape of individual chord diagrams, including changing the number of frets shown, stopped fret positions, and the starting fret number.

- You can open the **Edit Chord Diagram** dialog in Write mode by opening the **Choose Chord Diagram** dialog, selecting the chord diagram whose shape you want to edit, and clicking **Edit**.




**Edit Chord Diagram** dialog

The **Edit Chord Diagram** dialog contains the following options and sections:

**1 Name**

Displays the name of the chord whose chord diagram you are editing in the dialog. You cannot change this name.

2 **Tuning**

Displays the fretted instrument and tuning for the current chord diagram.

3 **Chord may be moved along the neck**

Allows you to specify whether or not the shape of the chord diagram can be reused at other fret positions, for example, by playing open strings with a barré at higher fret positions.

4 **Notes not in chord diagram**

Displays any pitches that are part of the chord but not currently included in the chord diagram.

5 **Open string pitch**

Displays the open pitch of the corresponding string for reference.

6 **Current string pitch**

Displays the current pitch of the corresponding string if it is open or stopped. If the pitch of a string is not part of the chord, the string pitch appears red.

7 **String status**

Displays the current usage status of the corresponding string and allows you to switch the status of individual strings between open and omitted by clicking in this row.

- **O**: Open string
- **X**: Omitted string
- **No symbol**: Stopped string

8 **Chord diagram shape editor**

Displays the current arrangement of stopped frets using dots, and allows you to change the chord diagram shape and move the stopped fret positions by clicking at the required positions. Each string can only have a single stopped fret position.

If two or more strings are stopped at the same fret, you can hide/show a barré by clicking any of the dots at that fret position.

9 **Action bar**

Contains options that allow you to edit and change the number of frets.

- **Starting fret**: Changes the fret number of the highest fret in the chord diagram.
- **Starting fret number offset**: Changes the offset of the starting fret number, for example, if you want the starting fret label to appear beside the second fret down the chord diagram in order to include a barré.
- **Add fret**: Adds a fret to the bottom of the chord diagram.

- **Remove fret**: Removes a fret from the bottom of the chord diagram.

- **Reset Chord Diagram**: Removes your changes to the chord diagram and resets it to its default shape.

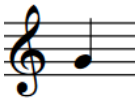
10 **Save**

Saves the chord diagram shape and updates the selected chord diagram in the music area. The shape also becomes available as an alternative shape for other compatible chords.

# Clefs

Clefs are the symbol at the start of every system that give the notes on the staff context; that is, the clef tells you which note of the scale applies to each line or space of the staff.

For example, the treble clef is also known as a “G clef”, because the spiral shape in the middle centers around G, normally the one above middle C.



The other common clefs are:

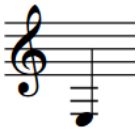
- The bass clef, or F clef, in which two dots are shown either side of the line corresponding to F, normally the F below middle C.

  Middle C uses one ledger line below staves with treble clefs, and one ledger line above staves with bass clefs.
- The C clef, in which the center of the bracket to the right of the clef’s thick vertical line is positioned on the line that corresponds to C, normally middle C.

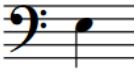
The C clef today is commonly used at two positions on the staff:

- On the middle line of the staff, commonly called the alto clef.
- On the line above the middle line of the staff, commonly called the tenor clef.

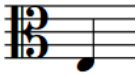
To minimize the number of ledger lines required, these clefs are used to match the register of the instrument for which they are used.



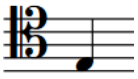
The E below middle C shown in a treble clef



The E below middle C shown in a bass clef



The E below middle C shown in a C (alto) clef



The E below middle C shown in a C (tenor) clef

In Dorico Elements, clefs and octave lines are both contained in the Clefs panel on the right of the window.

RELATED LINKS

Input methods for clefs and octave lines on page 241

## General placement conventions for clefs

Clefs are placed at the start of every system, with a small gap between the start of the staff and the left edge of the clef. Their vertical placement must be precise, as this signifies which pitches are intended by the subsequent notes on the staff.

Clef changes that occur during a piece are usually smaller than the clefs shown at the start of each system. If clef changes occur at the start of a new system or page, a cautionary clef is shown at the end of the previous system to ensure the performer notices the change of clef.

Wherever possible, clef changes should not be positioned in the middle of tie chains. Changing the clef changes the position of the tied note on the staff, which could easily cause a performer to misread the tie as a slur and play two different notes. You can input clef changes in the middle of tie chains in Dorico Elements, but we recommend that you position clef changes either before or after tie chains.

RELATED LINKS
Ties on page 831

# Moving clefs rhythmically

You can move clefs to new rhythmic positions after they have been input.

PROCEDURE

1. In Write mode, select the clefs you want to move.

   NOTE

   - You cannot select an initial clef at the start of the flow or clefs shown automatically at the start of each system.
   - When using the mouse, you can only move one clef rhythmically at a time.

2. Move the clefs according to the current rhythmic grid resolution in any of the following ways:
   - Press **Alt/Opt-Right Arrow** to move them to the right.
   - Press **Alt/Opt-Left Arrow** to move them to the left.
   - Click and drag the clef to the right/left.

RESULT

The selected clefs are moved to new rhythmic positions. They take effect from their new positions until the next clef, or the end of the flow, whichever comes first.

NOTE

- You can only move clefs along staves. If you want to move a clef across staves, you must delete the clef and input a new clef on the other staff.
- Only one clef can exist at each rhythmic position, except for clefs that only apply to single staves. If a clef passes over another clef as part of its move, the existing clef is deleted.

  You can undo this action, but any clefs deleted in the process are only restored if you moved the clef using the keyboard.

# Deleting clefs

You can delete clefs without affecting the pitches of notes. Notes are automatically respelled according to the previous clef on the staff.

NOTE

You cannot delete an initial clef at the start of the flow or clefs shown automatically at the start of each system. If you do not want any clef to appear on a staff, you can input an invisible clef.

PROCEDURE

1. In Write mode, select the clefs or signposts of clefs you want to delete.
2. Press **Backspace or Delete**.

RESULT

The selected clefs are deleted. Any music on the staff is respelled according to the previous clef, up until the next existing clef or the end of the flow.

RELATED LINKS

Input methods for clefs and octave lines on page 241

# Showing clefs after grace notes

According to convention, clefs are positioned before grace notes so this is the default in Dorico Elements. However, in some circumstances you might want to position clefs between grace notes and normal notes.

PROCEDURE

1. Select the clefs you want to show after grace notes.
2. Choose **Edit** > **Clef Position** > **After Grace Notes**. You can also choose this option from the context menu.

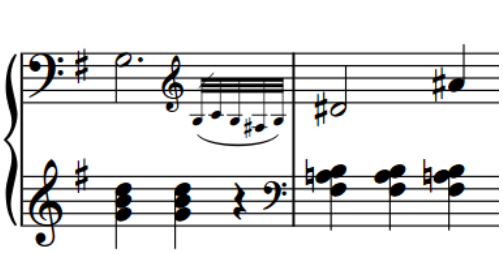
RESULT

The selected clefs are positioned between normal notes and grace notes.

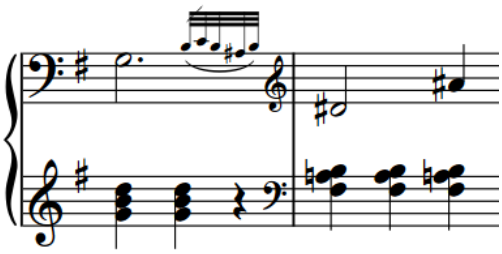
NOTE

You can reset the position of clefs relative to grace notes by selecting the clefs whose position you want to reset and choosing **Edit** > **Clef Position** > **Reset Clef Position**. You can also choose this option from the context menu.

EXAMPLE



Treble clef before grace notes



Treble clef after grace notes to align with bass clef

RELATED LINKS

General placement conventions for clefs on page 547

# Setting different clefs for concert/transposed pitch

You can set clef changes to show a different clef in concert pitch layouts compared to transposed pitch layouts. For example, if you want a clef change on a Bass Clarinet staff to appear as a treble clef in the part layout but as a bass clef in the full score layout.

NOTE

- These steps only apply to clefs you have input, as you cannot select initial clefs or the clefs shown automatically at the start of each system.
- Many instruments in Dorico Elements show different clefs in full score/custom score and part layouts by default. You can select the appropriate instrument type from the instrument picker when adding or changing instruments.

PROCEDURE

1. Select the clefs whose concert/transposed pitch versions you want to change.
2. Choose one of the following options:
   - To change the concert pitch version of the selected clefs, choose **Edit** > **Clef** > **Concert Pitch** > **[Clef]**.
   - To change the transposed pitch version of the selected clefs, choose **Edit** > **Clef** > **Transposed Pitch** > **[Clef]**.

     TIP

     You can also choose these options from the context menu.

RESULT

The clefs shown at the selected clef changes in layouts of the corresponding transposition are changed up to the next existing clef change or the end of the flow, whichever comes first.

AFTER COMPLETING THIS TASK

If you want to show the clefs in some layouts but hide them in others, you can hide/show clefs in layouts according to the layout transposition.

RELATED LINKS

Adding instruments to players on page 112
Changing instruments on page 113
Instrument picker on page 93

# Hiding/Showing clefs according to layout transpositions

You can show individual clefs only in layouts that are either concert or transposed pitch. For example, due to their transpositions, some instruments require clef changes in concert pitch scores to avoid excess ledger lines, but do not require those clef changes in their transposed pitch parts.

By default, all clefs appear in all layouts.

PROCEDURE

1. Select the clefs or signposts of clefs you want to hide/show according to the layout transposition.
2. In the Properties panel, activate **Show for transposition** in the **Clefs** group.
3. Choose one of the following options:

- **Concert Pitch**
- **Transposing Pitch**

RESULT

The selected clefs only appear in layouts with the corresponding transposition. In layouts where clefs are hidden, they are indicated by signposts.

Hidden clefs have no effect on note and staff spacing.

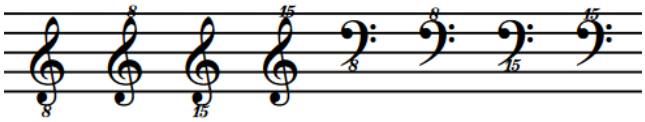
RELATED LINKS

Making layouts transposing/concert pitch on page 133
Signposts on page 314

# Transposing clefs

Transposing clefs indicate that notes are played in a different register to the one notated. A number above the clef indicates that notes are played higher than notated, while a number below the clef indicates that notes are played lower than notated.

Of these clefs, only the treble clef 8 below is still commonly used for tenor vocal parts.



RELATED LINKS

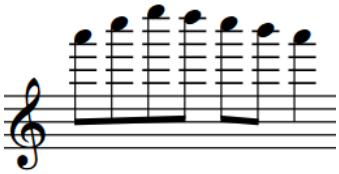
Transposing instruments on page 111
Concert vs. transposed pitch on page 134

# Octave lines

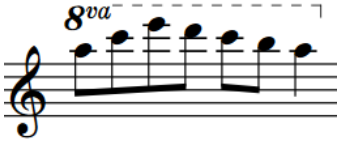
Octave lines indicate where notes are played higher/lower than they appear in the score or part.

Octave lines are dashed or dotted horizontal lines with an italic numeral at the start. The numeral indicates the number of pitches by which the phrase is changed, such as 8 for one octave and 15 for two octaves.

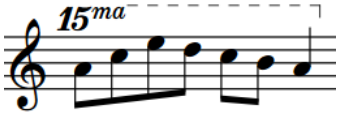
Octave lines that indicate notes are played higher than notated are placed above the staff, while octave lines that indicate notes are played lower than notated are placed below the staff.



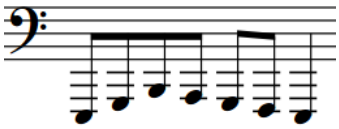
A treble clef phrase notated at pitch



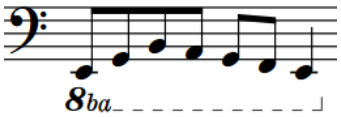

The treble clef phrase with an octave above line



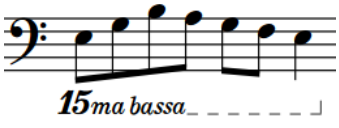

The treble clef phrase with a two octaves above line



A bass clef phrase notated at pitch



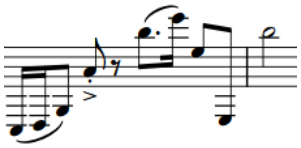

The bass clef phrase with an octave below line



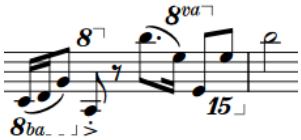

The bass clef phrase with a two octaves below line

In Dorico Elements, pitches are adjusted automatically when an octave line is present. You do not have to change the register of the notes within the line.

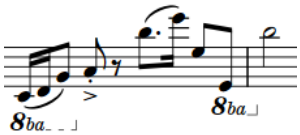
You can use octave lines across a few notes, a single phrase, or multiple phrases, but they must not confuse the contour of the music. If used excessively and for inappropriate sections, octave lines can mask the shape of the original melody. However, careful usage of octave lines can make music easier to read quickly as the performer has fewer ledger lines to count.



An angular phrase with no octave lines




The same phrase with many octave lines, which distort the overall shape of the phrase.




The same phrase with just two octave lines to reduce ledger lines. They do not change the overall shape of the phrase.

It is generally best to use a different clef for a whole phrase if appropriate for that instrument, or to input an octave line for the whole phrase in order to ensure the shape and register are clear to the performer.

Octave lines should be horizontal, meaning they can take up significant vertical space, as octave lines are usually placed outside all other notations. However, they can be placed within slurs and tuplet brackets if the slur or tuplet bracket is longer than the octave line.

Octave lines can continue across system and page breaks. It is customary to show the numeral again at the start of each system as a reminder. Cautionary octave line numerals are usually parenthesized and the suffix is optional.

RELATED LINKS
Input methods for clefs and octave lines on page 241
Lines on page 719

# Lengthening/Shortening octave lines

You can lengthen/shorten octave lines after they have been input.

PROCEDURE

1. In Write mode, select the octave lines you want to lengthen/shorten.

   NOTE

   When using the mouse, you can only lengthen/shorten one octave line at a time.

2. Lengthen/Shorten the selected octave lines in any of the following ways:
   - To lengthen them by the current rhythmic grid resolution, press **Shift-Alt/Opt-Right Arrow**.
   - To shorten them by the current rhythmic grid resolution, press **Shift-Alt/Opt-Left Arrow**.
   - To snap the end of a single octave line to the next notehead, press **Ctrl/Cmd-Shift-Alt/Opt-Right Arrow**.
   - To snap the end of a single octave line to the previous notehead, press **Ctrl/Cmd-Shift-Alt/Opt-Left Arrow**.

     NOTE

     - You can only lengthen/shorten octave lines by the current rhythmic grid resolution when multiple octave lines are selected.
     - When using the keyboard, you can only move the end of octave lines. You can move the start of octave lines by moving the whole line, or by clicking and dragging the start handle.

   - Click and drag the circular handle at the start/end of a single octave line to noteheads to the right/left.

RESULT

Single octave lines are lengthened/shortened according to the current rhythmic grid resolution or to the next/previous notehead, whichever is closer.

Multiple octave lines are lengthened/shortened according to the current rhythmic grid resolution.

# Positions of octave lines

By default, octave lines that indicate notes are played higher than written are placed above the staff, while octave lines that indicate notes are played lower than written are placed below the staff.

You can move octave lines to new rhythmic positions in Write mode. They are automatically positioned to avoid collisions.

## Moving octave lines rhythmically

You can move octave lines to new rhythmic positions after they have been input.

PROCEDURE

1. In Write mode, select the octave lines you want to move.

   NOTE

   When using the mouse, you can only move one octave line rhythmically at a time.

2. Move the octave lines to the next or previous notehead on the staff, while maintaining their total durations, in any of the following ways:
   - To move a single octave line to the next notehead on the staff, press **Alt/Opt-Right Arrow**.
   - To move a single octave line to the previous notehead on the staff, press **Alt/Opt-Left Arrow**.
   - To move them to the right according to the current rhythmic grid resolution, press **Ctrl/Cmd-Alt/Opt-Right Arrow**.
   - To move them to the left according to the current rhythmic grid resolution, press **Ctrl/Cmd-Alt/Opt-Left Arrow**.

     NOTE

     You can only move octave lines according to the current rhythmic grid resolution when multiple octave lines are selected.

   - Click and drag the octave line to the right/left.

RESULT

The octave lines are moved to new rhythmic positions. The octave lines now apply to the notes at their new positions.

NOTE

- If a single octave line passes over another octave line as part of its move, the existing line is unaffected as multiple octave lines can exist at the same rhythmic position. However, if you move multiple octave lines together, existing octave lines are shortened or deleted according to where you move the selected ones.
- If you move octave lines to a rhythmic position that does not have a notehead, they do not appear in the music area. You must continue moving them to the right/left until you reach the next notehead for them to appear.
- Octave lines can only be moved along staves. If you want to move an octave line across staves, you must delete the octave line and input a new octave line on the other staff.

RELATED LINKS
Input methods for clefs and octave lines on page 241

## Changing the alignment of octave line numerals relative to notes

You can change whether the left edge, center, or right edge of individual octave line numerals is aligned with the first note to which each octave line applies.

PROCEDURE

1. Select the octave lines whose numeral alignment relative to notes you want to change.
2. In the Properties panel, activate **L alignment** in the **Octave Lines** group.
3. Select one of the following options from the menu:
   - **Left**
   - **Center**
   - **Right**

RESULT

The alignment of the numerals of the selected octave lines is changed. For example, if you select **Right**, the right edge of the selected octave line numerals is aligned with the first noteheads to which the octave lines apply.

## Changing the position of octave line numerals relative to accidentals

You can change whether the numerals at the start of individual octave lines are positioned on noteheads or accidentals.

PROCEDURE

1. Select the octave lines whose numeral alignment relative to accidentals you want to change.
2. In the Properties panel, activate **L position** in the **Octave Lines** group.
3. Choose one of the following options:
   - **Notehead**
   - **Accidental**

RESULT

The alignment of the numerals of the selected octave lines is changed. For example, if you choose **Accidental**, the octave line numerals are aligned with the accidental on the first noteheads to which the octave lines apply.

# Deleting octave lines

You can delete octave lines without deleting notes and other items.

PROCEDURE

1. In Write mode, select the octave lines you want to delete.
2. Press **Backspace or Delete**.

RESULT

The selected octave lines are deleted. Any notes to which the deleted octave lines previously applied are shown at either concert pitch or transposed pitch, depending on your current setting for the layout.

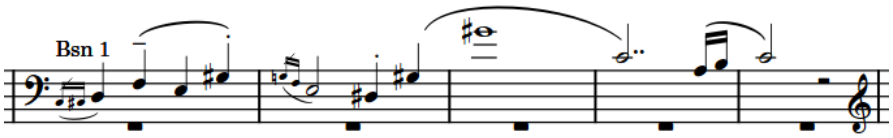
RELATED LINKS

Input methods for clefs and octave lines on page 241
Making layouts transposing/concert pitch on page 133

# Cues

Cues are passages of music shown in instrumental parts that are played by a different player, usually to help orientate players before entries or solos following a significant passage of rests.

Cues can also be used to assist with co-ordination or tuning between players, or to indicate material that the player might be asked to double.




A cue in a violin part showing music from a Bassoon 1 part

In Dorico Elements, you cannot input or edit cues. However, cues are shown if you import or open a project that contains them.

# Dynamics

Dynamics indicate the loudness of the music, and can be combined with other instructions to give the performer a detailed understanding of how to perform the music, while also leaving room for interpretation.

Dynamics can indicate an immediate change in volume or a gradual change over a specified duration. By default, they are placed below the staff for instruments and above the staff for voices.

You can add modifiers to dynamics that can give stylistic direction context alongside the volume level, such as ***f*** *espressivo*, which indicates that a passage is played loudly but also with expressive feeling.

While almost all expression text is written in italics, dynamics such as ***ff*** and ***pp*** use a bold italic font.

RELATED LINKS
Input methods for dynamics on page 229
Positions of dynamics on page 559
Dynamics lanes on page 383

## Types of dynamics

Dorico Elements categorizes dynamics into different groups according to their function.

**Immediate dynamics**

Immediate dynamics apply to the note to which they are attached until the next dynamic marking, and indicate an immediate change from any previous dynamic. Immediate dynamics include dynamic symbols, such as ***pp*** or ***f***, and qualifying text, such as *subito* or *molto*.

**Gradual dynamics and hairpins**

Gradual dynamics are often shown as hairpins but can also be shown using text. In Dorico Elements, you can show gradual dynamic text in the following ways:

- *cresc.* or *dim.*: abbreviated text with no continuation line
- *cresc...* or *dim...*: abbreviated text with a dotted continuation line
- *cre-scen-do* or *di-mi-nuen-do*: the full word spread out across the duration of the gradual dynamic

Gradual dynamics can also have qualifying text, such as *poco*, *molto*, *poco a poco*, and *niente*.

In Dorico Elements, a hairpin can be shown as *messa di voce*, which shows a pair of hairpins. In some cases, this is easier than having separate lines for each half of the pair.

**Force/Intensity of attack**

These dynamics, such as ***fz*** and ***sffz***, indicate that a note has a stronger attack than is usually expected for the dynamic, similar to an accent articulation.

**Combined dynamics**

Combined dynamics, such as ***fp*** or ***p–mf***, specify a sudden change of dynamic.

You can create custom combined dynamics in Dorico Elements, and control the intensity of each dynamic in the pair, in the **Combined Dynamics** section of the Dynamics panel. For example, you can make dynamics such as ***pppf***, ***fff–mp***, and ***ffff pppp***.

RELATED LINKS
Gradual dynamics on page 567

# Positions of dynamics

Dynamics are placed below the staff for instruments, where they can be read alongside the notes, and above the staff for voices. This way, they do not clash with lyrics placed below the staff, and are still close enough to the notes to be read simultaneously.

Immediate dynamics, such as ***pp*** or ***f***, are centered on the notehead to which they apply. The beginnings of gradual dynamics are centered on the notehead from which they begin, or immediately after an immediate dynamic at the same position. The ends of gradual dynamics are centered on the notehead at which they end, or immediately before an immediate dynamic at the same position.

The staff-relative placement of dynamics varies, depending on their function and the type of player. For example, dynamics are placed below instrumental staves and above vocal staves by default. This ensures dynamics are kept as close to the staff as possible for legibility but are not placed between noteheads and lyrics on vocal staves. For grand staff instruments, such as piano or harp, dynamics are usually placed between the two staves, but can be placed both above and below when each staff requires separate dynamics.

In general, dynamics are not placed within the staff, as hairpins in particular become very hard to read. They are also not usually placed within tuplet brackets. Dynamics are placed outside of notations such as slurs, which must be kept close to noteheads, but inside pedal lines, which can be placed further from noteheads and still be clearly understood.

You can move dynamics to different rhythmic positions in Write mode. They are automatically positioned to avoid collisions.

RELATED LINKS
Changing the staff-relative placement of items on page 310
Moving dynamics rhythmically on page 560

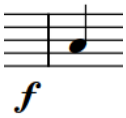
## Changing the horizontal beat-relative position of dynamics

You can position individual dynamics before or after the beat.

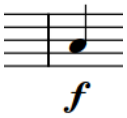
PROCEDURE

1. Select the dynamics whose position relative to the beat you want to change.
2. In the Properties panel, activate **Beat-relative position** in the **Dynamics** group.
3. Choose one of the following options:
   - **Before**
   - **After**

EXAMPLE



A dynamic positioned before the beat



A dynamic positioned after the beat

## Changing the alignment of immediate dynamics relative to noteheads

Immediate dynamics, such as ***ff*** and ***mp***, are usually horizontally aligned with the optical center of noteheads. However, you can change the horizontal alignment of immediate dynamics individually.

PROCEDURE

1. Select the dynamics whose alignment relative to noteheads you want to change.
2. In the Properties panel, activate **Text alignment** in the **Dynamics** group.
3. Choose one of the following options:
   - **Align optical center with notehead**

     
   - **Left-align with notehead**

     
   - **Align optical center with left of notehead**

RESULT

The alignment of the selected immediate dynamics is changed.

## Moving dynamics rhythmically

You can move dynamics to new rhythmic positions after they have been input, including within tie chains.

NOTE

If you want to move a single dynamic within a group, you must click and drag it with the mouse. If you use the key commands, the whole group is moved.

PROCEDURE

1. In Write mode, select the dynamics you want to move.

   NOTE

   When using the mouse, you can only move one dynamic rhythmically at a time.

2. Move the dynamics in any of the following ways:
   - To move a single dynamic to the next notehead on the staff, press **Alt/Opt-Right Arrow**.
   - To move a single dynamic to the previous notehead on the staff, press **Alt/Opt-Left Arrow**.
   - To move them to the right according to the current rhythmic grid resolution, press **Ctrl/Cmd-Alt/Opt-Right Arrow**.
   - To move them to the left according to the current rhythmic grid resolution, press **Ctrl/Cmd-Alt/Opt-Left Arrow**.

     NOTE

     You can only move dynamics according to the current rhythmic grid resolution when multiple dynamics are selected.

   - Click and drag the dynamic to noteheads to the right/left.

RESULT

The selected dynamics are moved to new rhythmic positions.

NOTE

If a single dynamic passes over another dynamic as part of its move, the existing one is unaffected as multiple dynamic can exist at the same rhythmic position. However, if you move multiple dynamics together, any existing dynamics they pass over are deleted.

You can undo this action, but any dynamics deleted in the process are only restored if you moved dynamics using the keyboard.

RELATED LINKS

Moving dynamic points on page 388

# General placement conventions for hairpins relative to barlines

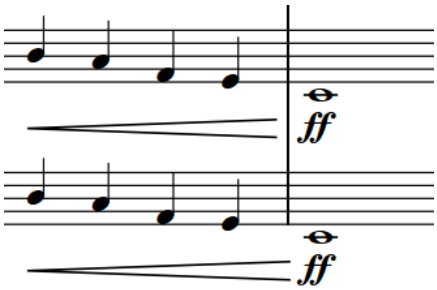
In Dorico Elements, the ends of hairpins align with the left edge of the note to their right. This can include hairpins extending across barlines.

Hairpins that end on the first note of a bar extend across the preceding barline in the following cases:

- If there is no immediate dynamic on the first note in the next bar.
- If there is a time signature or key signature change at the barline that increases the gap between the end of the current bar and the first note in the new bar.

Dorico Elements avoids hairpins overlapping barlines by a small amount, as this is less visually clear. However, this means that the same dynamic phrase on two different staves can appear differently if one of the staves does not have a barline join extending below it.

You can allow/disallow hairpins across barlines if the hairpin ends on the first note in the next bar. Disallowing hairpins across barlines ensures hairpins appear the same length on all staves.




The ends of the two hairpins are not aligned despite their duration being identical, as the barline does not extend to the bottom staff of the system.

## Allowing/Disallowing hairpins across barlines

You can allow/disallow hairpins across barlines when they end on the first note in the next bar, for example, so all hairpins appear the same length across multiple staves that do not all have barline joins.

PROCEDURE

1. Select the hairpins you want to allow/disallow across barlines.
2. In the Properties panel, activate **Barline interaction** in the **Dynamics** group.
3. Choose one of the following options:
   - **Stop before**
   - **Continue**

RESULT

The selected hairpins are allowed across barlines in the current layout when you choose **Continue**, and disallowed in the current layout when you choose **Stop before**.

NOTE

Changing the appearance of individual gradual dynamics only affects their appearance in the current layout, but you can copy property settings to other layouts.

RELATED LINKS

Copying property settings to other layouts on page 353

# Showing dynamics in parentheses

You can show individual dynamics in parentheses, for example, to show editorial dynamics that were not in the original manuscript.

PROCEDURE

1. Select the dynamics you want to appear parenthesized.
2. In the Properties panel, activate **Parenthesized** in the **Dynamics** group.

RESULT

Each of the selected dynamics is shown in parentheses individually.

Deactivating **Parenthesized** removes parentheses from the selected dynamics.

# Copying dynamics

You can copy dynamics to other rhythmic positions after they have been input. You can select dynamics on a single staff to copy to another single staff, or you can select dynamics across multiple staves to copy across the same number of staves.

PROCEDURE

1. In Write mode, select the dynamics you want to copy.

   TIP

   If you want to copy many dynamics or, for example, just gradual dynamics, you can use a filter.

2. Press **Ctrl/Cmd-C** to copy the dynamics.
3. Select the notehead at the rhythmic position to which you want to copy the dynamics.
4. Press **Ctrl/Cmd-V** to paste the dynamics.

RESULT

The selected dynamics are pasted to new rhythmic positions. If you copied dynamics to other staves at the same rhythmic position as the original dynamics, the dynamics on all staves are automatically linked.

If you selected multiple dynamics at different rhythmic positions, their new positions reflect their original rhythmic spacing.

TIP

- You can also copy dynamics without adding them to your clipboard by selecting them and **Alt/Opt**-clicking each notehead to which you want to copy the selected dynamics.
- If you want to copy dynamic phrases immediately after where they were originally input, you can select them and press **R**. If you select a single immediate dynamic, it is copied to the same position.

RELATED LINKS

Linked dynamics on page 574
Filters on page 307

# Deleting dynamics

You can delete dynamics from your project. If you delete some but not all dynamics from a group that is linked to dynamics on other staves, all equivalent linked dynamics are also deleted.

PROCEDURE

1. In Write mode, select the dynamics you want to delete.
2. Press **Backspace or Delete**.

RESULT

The selected dynamics are deleted. If you delete immediate dynamics immediately before/after hairpins, the length of hairpins can adjust automatically, depending on the context.

NOTE

Deleting dynamics that are linked to other staves can cause the selected dynamics to be deleted from all linked staves as well. If you do not select and delete all dynamics in the group, the

selected dynamics are also deleted from all linked staves. However, if you select and delete the whole group of dynamics from a single staff, those dynamics are not deleted from other staves.

RELATED LINKS
Groups of dynamics on page 573
Linked dynamics on page 574

# Voice-specific dynamics

Voice-specific dynamics only apply to a single voice on a staff, which allows you to specify different dynamics for each voice in multiple-voice contexts.

Inputting voice-specific dynamics allows you to show different dynamics for multiple voices on a staff, or to highlight an inner melody voice in a piano texture. They change the dynamics of each voice in playback.

NOTE

- You can only input voice-specific dynamics when the caret is active, such as during note input. Voice-specific dynamics apply to the voice indicated by the quarter note symbol beside the caret.
- Voice-specific dynamics only affect playback automatically for sounds that use velocity to control dynamics. When using playback devices that control dynamics in other ways, such as with CC, you must enable independent voice playback to hear different dynamics in different voices for the same instrument.

RELATED LINKS
Input methods for dynamics on page 229
Enabling independent voice playback on page 413
Dynamics lanes on page 383

# Niente hairpins

*Niente* markings at the start/end of gradual dynamics indicate that the dynamic either increases from, or decreases to, silence.

This effect works very well on strings and singers with vowels, but it cannot always be played literally. For example, singers with words beginning with consonants cannot begin from silence, nor can reed and brass instruments, as they have to achieve a certain air pressure before a note sounds.

*Niente* markings can be shown in two ways: as a circle at the end of a hairpin, and as text directly before or after a hairpin. You can input both types of *niente* markings in Dorico Elements using the dynamics popover and by clicking **niente** in the **Gradual Dynamics** section of the Dynamics panel.

TIP

You can turn existing hairpins into *niente* hairpins by selecting them and clicking **niente** in the **Gradual Dynamics** section of the Dynamics panel, or by activating **Niente** in the **Dynamics** group of the Properties panel.

EXAMPLE

A niente shown as **Circle on hairpin**


A niente shown as **Text**

RELATED LINKS
Lengthening/Shortening gradual dynamics and groups of dynamics on page 567
Input methods for dynamics on page 229

## Changing the appearance of individual niente hairpins

You can show *niente* hairpins in two ways in Dorico Elements, and you can change how they appear individually.

PROCEDURE

1. Select the hairpins whose *niente* style you want to change.
2. In the Properties panel, activate **Niente style** in the **Dynamics** group.
3. Choose one of the following options:
   - **Circle on hairpin**

     
   - **Text**

RESULT
The *niente* style of the selected hairpins is changed.

EXAMPLE

A niente shown as **Circle on hairpin**


A niente shown as **Text**

# Dynamic modifiers

Modifiers add further detail to dynamics than simply their volume level, and can help guide how a player performs a note or phrase. Modifiers include *poco a poco*, *molto* and *subito*. They are also known as “expressive text”.

In Dorico Elements, modifiers must accompany a dynamic level, such as ***p*** or ***f***.

NOTE

You cannot input dynamic modifiers on their own. However, you can hide the immediate dynamic that follows or precedes them.

You can input dynamic modifiers by entering them into the dynamics popover alongside an immediate dynamic or by clicking available options in the **Immediate Dynamics** section of the Dynamics panel. You can also add them to existing dynamics by entering the text you want into one of the following properties in the **Dynamics** group of the Properties panel:

- **Prefix**: Adds modifiers before existing dynamics.
- **Suffix**: Adds modifiers after existing dynamics.

RELATED LINKS
Hiding immediate dynamics on page 566

## Adding modifiers to existing dynamics

You can add modifiers both before and after dynamics after they have been input, for example, if you want to add “sim.” instead of repeating dynamics across multiple phrases.

PROCEDURE

1. Select the dynamics to which you want to add modifiers.
2. In the Properties panel, activate the following properties, individually or together, in the **Dynamics** group:
   - **Prefix**
   - **Suffix**
3. Enter the text you want to add into the corresponding value field.
4. Press **Return**.

RESULT

The text you entered is added to the selected dynamics as a modifier. Text entered into the **Prefix** field appears before dynamics, while text entered into the **Suffix** field appears after dynamics. Modifiers appear below hairpins placed below the staff and above hairpins placed above the staff, and are aligned with the start of the hairpin.

Deactivating the properties removes the corresponding modifiers from the selected dynamics.

NOTE

Deactivating properties permanently deletes any custom text entered.

AFTER COMPLETING THIS TASK

If you added modifiers to hairpins, you can show them centered inside the hairpins.

RELATED LINKS
Niente hairpins on page 564
Input methods for dynamics on page 229
Adding poco a poco text to gradual dynamics on page 570
Showing modifiers centered inside hairpins on page 570

## Hiding immediate dynamics

You can hide immediate dynamics such as *f* and *pp*, for example, if you only want to show the dynamic modifier, such as “sim.”, without its accompanying immediate dynamic.

PROCEDURE

1. Select the immediate dynamics you want to hide.

2. In the Properties panel, activate **Hide intensity marking** in the **Dynamics** group.

RESULT

The selected immediate dynamics are hidden. If no other dynamic exists at their rhythmic position, they are indicated by signposts. However, signposts are not printed by default.

Deactivating **Hide intensity marking** shows the selected immediate dynamics again.

# Gradual dynamics

Gradual dynamics indicate a change in volume that happens incrementally over the specified duration. They usually appear either as hairpins or as text instructions, such as *cresc.* or *dim.*.

A pair of hairpins without an immediate dynamic in the middle is known as a *messa di voce*.

In Dorico Elements, gradual dynamics appear as hairpins by default. You can change the appearance of individual gradual dynamics. For example, if you want to show a particularly long crescendo using *cresc.* text rather than a hairpin.

NOTE

Changing the appearance of individual gradual dynamics only affects their appearance in the current layout, but you can copy property settings to other layouts.

RELATED LINKS

Types of dynamics on page 558

## Lengthening/Shortening gradual dynamics and groups of dynamics

You can change the length of gradual dynamics and groups of dynamics after they have been input.

NOTE

You can only lengthen/shorten one gradual dynamic or group of dynamics at a time.

PROCEDURE

1. In Write mode, select one of the following that you want to lengthen/shorten:
   - A single gradual dynamic
   - A single gradual dynamic in a group of dynamics
2. Lengthen/Shorten the gradual dynamic or groups of dynamics in any of the following ways:
   - To lengthen them by the current rhythmic grid resolution or to the next notehead, whichever is closer, press **Shift-Alt/Opt-Right Arrow**.
   - To shorten them by the current rhythmic grid resolution or to the previous notehead, whichever is closer, press **Shift-Alt/Opt-Left Arrow**.
   - To lengthen them to the next notehead, press **Ctrl/Cmd-Shift-Alt/Opt-Right Arrow**.
   - To shorten them to the previous notehead, press **Ctrl/Cmd-Shift-Alt/Opt-Left Arrow**.

     NOTE

     When using the keyboard, you can only move the end of dynamics. You can move the start of dynamics by moving the whole dynamic, or by clicking and dragging the start handle.

- Click and drag the circular handle at the start/end to the right/left.

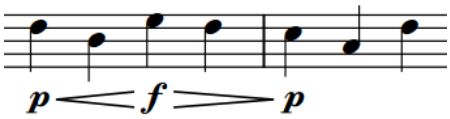
RESULT

Individual gradual dynamics are lengthened/shortened either according to the current rhythmic grid resolution or to next/previous noteheads.

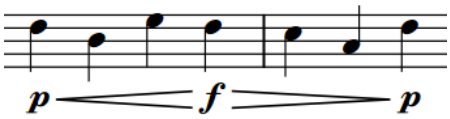
Dynamic groups are lengthened/shortened proportionally by lengthening/shortening the gradual dynamics and moving any other type of dynamic in the group. This retains the relative durations of the gradual dynamics in the group.

In the example, the ***p*** at the end moves two quarter notes to the right, but the ***f*** in the middle only moves one quarter note to the right. This keeps the lengths of the gradual dynamics equal.

EXAMPLE




Original dynamic phrase




Lengthened dynamic phrase

RELATED LINKS

Groups of dynamics on page 573
Ungrouping dynamics and removing dynamics from groups on page 574

## Changing the appearance of gradual dynamics

You can change the appearance of individual gradual dynamics, for example, to change a crescendo hairpin to a *messa di voce* pair of hairpins with two directions or to show a particularly long crescendo using “cresc.” text rather than a hairpin.

PROCEDURE

1. Select the gradual dynamics whose appearance you want to change.
2. In the Properties panel, activate **Gradual style** in the **Dynamics** group.
3. Select one of the following options from the menu:
   - **Hairpin**
   - **cresc./dim.**
   - **cresc...**
   - **cre - scen - do**
4. Optional: Customize the appearance of the selected gradual dynamics in one of the following ways, depending on their **Gradual style**:
   - If you selected **Hairpin**, activate **Hairpin line style** and choose one of the available options.
   - If you selected **cresc./dim.**, **cresc...**, or **cre - scen - do**, activate **Diminuendo style** and select one of the available options from the menu.
   - If you selected **cresc...**, activate **Continuation line style** and choose one of the available options.
5. Optional: For hairpin gradual dynamics, choose one of the following options for **Type**
   - **Cresc. or dim.**

- **Messa di voce**

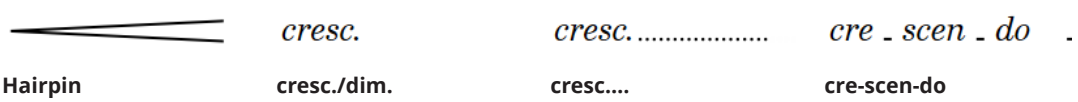
RESULT

The appearance of the selected gradual dynamics is changed in the current layout.

NOTE

Changing the appearance of individual gradual dynamics only affects their appearance in the current layout, but you can copy property settings to other layouts.

EXAMPLE




**Hairpin** **cresc./dim.** **cresc....** **cre-scen-do**

RELATED LINKS

Copying property settings to other layouts on page 353

## Hiding/Showing flared ends on hairpins

Flared ends are usually shown at the end of crescendo hairpins and indicate a sudden burst in volume at the end of the crescendo. You can hide/show flared ends on any hairpin.

NOTE

You can only show flared ends on hairpins with solid lines.

PROCEDURE

1. Select the hairpins on which you want to hide/show flared ends.
2. In the Properties panel, activate/deactivate **Flared end** in the **Dynamics** group.

RESULT

A flared end is shown on the selected dynamics when **Flared end** is activated, and hidden when it is deactivated.

EXAMPLE

Crescendo hairpin with flared end hidden

Crescendo hairpin with flared end shown

# Adding poco a poco text to gradual dynamics

You can add *poco a poco* text to individual gradual dynamics after they have been input.

PROCEDURE

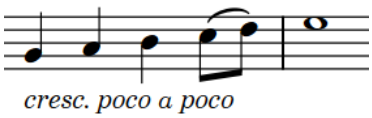
1. Select the gradual dynamics to which you want to add *poco a poco*.
2. In the Properties panel, activate **Poco a poco (little by little)** in the **Dynamics** group.

RESULT

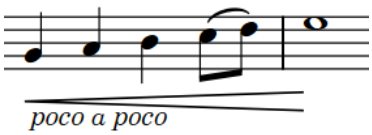
*Poco a poco* is shown immediately after gradual dynamic text, below hairpins placed below the staff, and above hairpins placed above the staff.

Deactivating **Poco a poco (little by little)** removes *poco a poco* text from the selected gradual dynamics.

EXAMPLE




Text gradual dynamic with poco a poco




Hairpin gradual dynamic with poco a poco

AFTER COMPLETING THIS TASK

You can show *poco a poco* text centered inside hairpins.

## Showing modifiers centered inside hairpins

You can show modifiers you have added to hairpins, such as *poco a poco* or *molto*, centered both horizontally and vertically inside hairpins. By default, modifiers appear at the start of and either above or below hairpins.

PROCEDURE

1. Select the hairpins whose modifiers you want to show centered inside hairpins.
2. In the Properties panel, activate **Modifier position** in the **Dynamics** group.
3. Choose one of the following options:
   - **Above or Below**
   - **Inside**

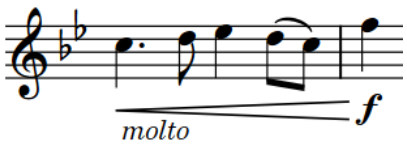
RESULT

Modifiers on the selected hairpins appear centered inside the hairpins. They automatically erase their background so the text does not collide with the hairpin lines.

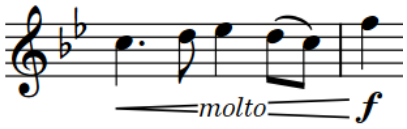
NOTE

This only affects the position of modifiers in the current layout, but you can copy property settings to other layouts.

EXAMPLE




Modifier (molto) below a hairpin




Modifier (molto) centered inside hairpin

RELATED LINKS
Adding modifiers to existing dynamics on page 566
Copying property settings to other layouts on page 353

# Gradual dynamic spacing

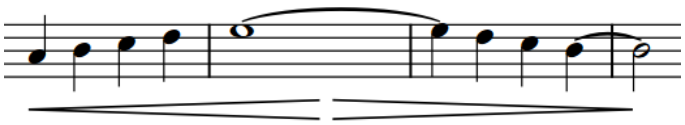
Dorico Elements ensures that hairpins can always be clearly distinguished by giving hairpins a minimum default length. However, this can affect note spacing.

The default minimum hairpin length is three spaces. When hairpins are shorter than this, they can sometimes be confused with the accent articulation mark. Therefore, if you add a hairpin to a note which would make the hairpin less than three spaces long, the spacing of the note is changed to ensure the hairpin meets the minimum length.

## Gradual dynamics that start/end partway through notes

If the start/end of a gradual dynamic is not attached to a note, there are restrictions on how you can move the start/end position.

For example, if you enter two hairpins separated by a space into the dynamics popover, pair of hairpins that looks like a *messa di voce* is created but containing two separate hairpins, rather than the combined option. Neither of the open ends of the hairpins is attached to a specific notehead, and you cannot move the center of the pair of hairpins rhythmically. You can lengthen/shorten the two hairpins as a group but you cannot lengthen/shorten each hairpin individually.



However, if you enter two hairpins without a space between them into the dynamics popover, you can move the center of the pair of hairpins and each hairpin rhythmically, but only to noteheads. You can lengthen/shorten each hairpin separately according to the current rhythmic grid resolution.

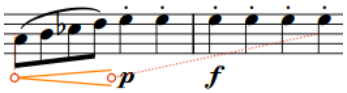
RELATED LINKS
Lengthening/Shortening gradual dynamics and groups of dynamics on page 567
Note spacing on page 361

## Gradual dynamics truncated by immediate dynamics

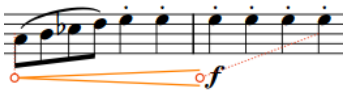
A hairpin is automatically truncated if an immediate dynamic is positioned within its range, either before or after the hairpin is input.

The hairpin remains tied to its originally designated rhythmic positions, even if graphically it appears shorter. This means that if the immediate dynamic that truncated it is ever deleted, the hairpin extends up to its end or the next immediate dynamic within its range.

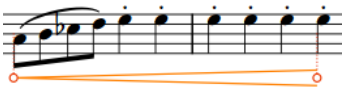
The examples demonstrate a crescendo hairpin that is truncated by two dynamics, but the hairpin extends to its total length as they are deleted. The dotted attachment line shows the link between the hairpin and the rhythmic position to which its end is attached.




A long hairpin truncated by a **p**




After deleting the **p**, the hairpin is now truncated by the **f**



Deleting both immediate dynamics allows the hairpin to extend to its full length

## Sustaining and non-sustaining instruments

The volume settings for sustaining instruments and non-sustaining instruments vary in terms of their control of gradual dynamics.

**Sustaining instruments**

Sustaining instruments include string, wind, and brass instruments, because they can hold a note while being in control of its volume throughout.

Dorico Elements applies gradual dynamics to these instruments in playback. You can control settings for each software instrument by choosing **Play** > **Expression Maps** and selecting software instruments from the list on the left.

**Non-sustaining instruments**

Non-sustaining instruments, such as piano, harp, marimba, and most percussion instruments, have no further control of the dynamic of notes after they have been struck. For this reason, non-sustaining software instruments often use note velocity for dynamics, because this is set at the start of the note.

TIP

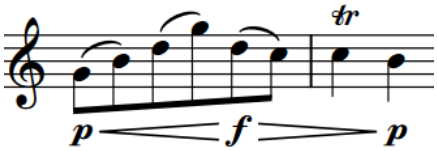
You can control settings for each software instrument in the **Expression Maps** dialog.

RELATED LINKS

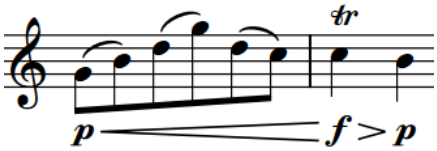
Expression Maps dialog on page 440

# Groups of dynamics

Groups of dynamics are automatically aligned in a row and can be moved and edited as a group. When you move immediate dynamics within a group, the length of the hairpins on either side automatically adjust to compensate.




A group of dynamics

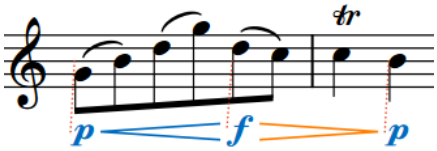



The same group of dynamics adjusts to compensate when the middle dynamic moves rhythmically.

A single dynamic, either immediate or gradual, is considered a group on its own.

Two or more dynamics are automatically grouped together if they immediately follow each other horizontally on the staff, were input together or in sequence, and have gradual dynamics between the immediate dynamics.

All of the dynamics in a group are highlighted when any of the dynamics in the group are selected.




NOTE

- Groups of dynamics apply project-wide, meaning you cannot have dynamics grouped one way in some layouts but differently in other layouts.
- As well as horizontal groups of dynamics, you can also link groups of dynamics across staves if you want the same dynamics to appear on multiple staves. This can be useful when multiple instruments play the same dynamics simultaneously and you want to make the same change in all staves, for example, moving the peak of a crescendo to a later beat, or changing a *f* to a *fff*.

RELATED LINKS

Linked dynamics on page 574

## Grouping dynamics together

You can manually group dynamics together that were not automatically grouped when they were input. Grouped dynamics are automatically aligned in a row and can be moved and edited as a group.

PROCEDURE

1. In Write mode, select the dynamics you want to group together.
2. Choose **Edit** > **Dynamics** > **Group Dynamics**. You can also choose this option from the context menu.

RESULT

The selected dynamics are grouped together. If the first dynamic in the group is linked to other staves, all dynamics in the group are added to those staves. This applies to all layouts in which the dynamics appear.

RELATED LINKS

Linked dynamics on page 574

## Ungrouping dynamics and removing dynamics from groups

You can ungroup dynamics so that all dynamics in the group become ungrouped. You can also remove only selected dynamics from groups while leaving other dynamics in the group.

This applies to all layouts in which the dynamics appear.

PROCEDURE

1. In Write mode, select the dynamics you want to ungroup or remove from groups.
2. Do one of the following:
   - To ungroup all dynamics in the selected groups, choose **Edit** > **Dynamics** > **Ungroup Dynamics**.
   - To remove only the selected dynamics from their groups, choose **Edit** > **Dynamics** > **Remove from Group**.

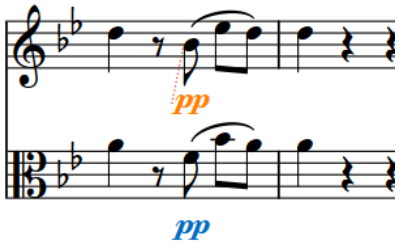
TIP

You can also choose these options from the context menu.

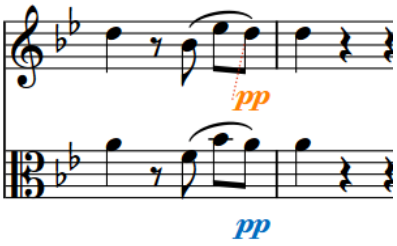
# Linked dynamics

Identical dynamics at the same rhythmic position on multiple staves can be linked together. This happens automatically when you copy and paste dynamics between staves.

If you select one dynamic in a linked group, all other dynamics in the linked group appear highlighted. If one linked dynamic is moved to a new rhythmic position, all linked dynamics move.




Two linked dynamics with only the top dynamic selected

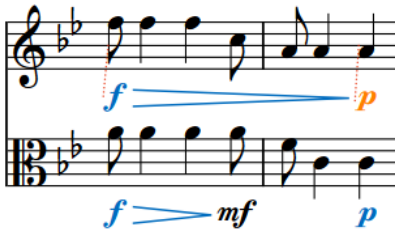



Moving just the top dynamic of the linked group automatically moves the other to match its new position.

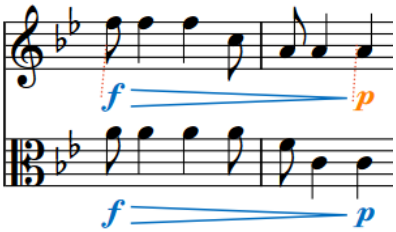
Similarly, if you change one linked dynamic, for example, from *p* to *mf*, all dynamics linked to the changed dynamic are also changed.

If you group other dynamics to one of the linked dynamics, such as a hairpin, the hairpin is added at the same position in all linked staves.

If one staff has another immediate dynamic before the end of a hairpin, the hairpin is truncated automatically. If you delete such a dynamic, the hairpin extends automatically up to the next immediate dynamic or to its full length, whichever comes first.




Two staves with linked dynamics, but the lower staff has another immediate dynamic that truncates the hairpin.




Deleting the **mf** at the end of the first bar in the second staff causes the hairpin to extend to match the range of the top staff.

NOTE

- If you delete only some dynamics from a group that is linked to other staves, those dynamics are also deleted from the linked staves. If you delete a whole dynamic group from one staff, this does not affect linked dynamics on other staves.
- As well as vertically linked dynamics, you can also group dynamics horizontally. This automatically aligns the dynamics in a row and allows them to be moved and edited as a group.
- Linking or unlinking dynamics applies project-wide, meaning you cannot have dynamics linked one way in some layouts but differently in other layouts.

RELATED LINKS

Groups of dynamics on page 573
Disabling automatic linking of dynamics and slurs when pasting on page 309

## Linking dynamics together

When you copy and paste identical dynamics to the same rhythmic position on other staves, those dynamics are linked together automatically. You can also manually link dynamics and groups of dynamics together that are not automatically linked to allow simultaneous editing.

NOTE

Groups of dynamics must be the same in order to link them together. For example, you can link two ***p*** dynamics together if neither is part of a group, but you cannot link them together if one is grouped with a hairpin.

PROCEDURE

1. In Write mode, select the dynamics you want to link together.
2. Choose **Edit** > **Dynamics** > **Link**. You can also choose this option from the context menu.

RESULT

The selected dynamics are linked together. If you later change one of the linked dynamics, all linked dynamics are changed to match. This applies to all layouts in which the dynamics appear.

RELATED LINKS

Copying dynamics on page 563

## Unlinking dynamics

You can unlink dynamics, including dynamics that were linked automatically.

PROCEDURE

1. In Write mode, select a dynamic in each linked group that you want to unlink.
2. Choose **Edit** > **Dynamics** > **Unlink**. You can also choose this option from the context menu.

RESULT

All dynamics in the linked groups are unlinked. This applies to all layouts in which the dynamics appear.

RELATED LINKS

Disabling automatic linking of dynamics and slurs when pasting on page 309

# VST Expression Maps for volume types

If you are using a third-party sound library, you may need to change or edit the expression map to make instruments respond to gradual dynamics. Otherwise, the sound library uses velocity by default.

The setup of the expression map for dynamics depends on how the instrument is configured. Consult the documentation for the sound library for further information.

Dorico Elements provides the following default expression maps:

- **CC11 Dynamics** for dynamics produced by changing MIDI channel expression
- **Modulation Wheel Dynamics** for dynamics produced by changing MIDI controller 1

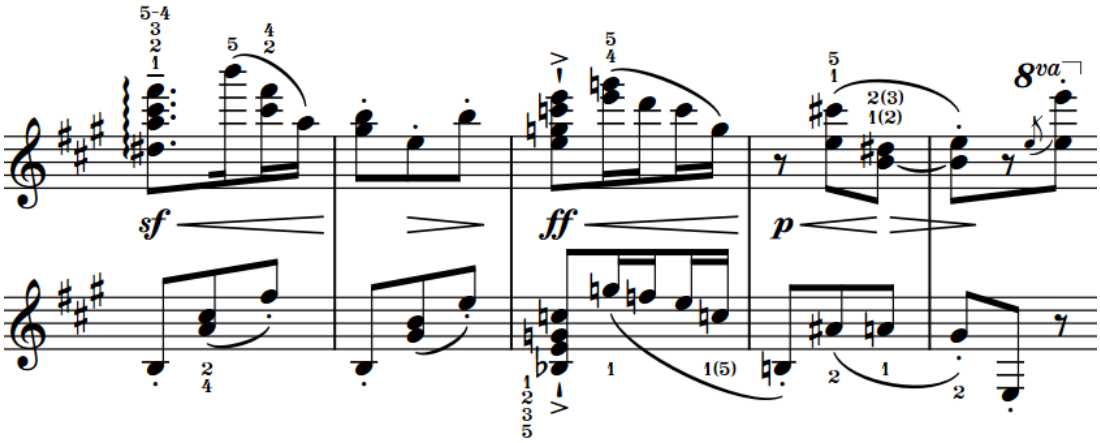
TIP

You can edit expression maps in the **Expression Maps** dialog.

# Fingering

Fingerings can be added to music to recommend which fingers players should use for notes. This can be useful for music aimed at players learning the instrument and for difficult musical passages where certain fingering patterns make the notes much easier to play.

Fingerings are often used in keyboard music, as players can use all ten fingers to play notes, and in guitar music, where fingerings are often used alongside fret positions. However, fingerings can also be useful for other instruments, for example, to indicate that string players should change the finger used to stop the string while holding the note, or to instruct wind players to use uncommon fingerings for particular notes in order to create a special sonic effect.




Piano music containing multiple fingerings, including a substitution fingering and alternative fingerings

Dorico Elements also provides fingerings for brass instruments. For example, you can specify which valves players should depress for instruments such as trumpet and horn, and you can specify the horn branch you want players to use for double horns.

Fingerings in Dorico Elements use a bold roman font by default, following accepted conventions for the appearance of fingerings.

RELATED LINKS
Inputting fingerings on page 203
Fingerings popover on page 204
Hiding/Showing fingering on page 581
String indicators on page 590

## General placement conventions for fingering

Fingerings are placed as close as possible to the notes to which they apply, so the performer can read them easily and clearly.

In music for grand staff instruments, such as the piano and harp, it is accepted to place fingerings for the right hand above the top staff, and fingerings for the left hand below the bottom staff. However, in dense contrapuntal music for these instruments, fingerings can be placed between the staves to follow the direction of the voices to which they apply.

Different conventions apply to fingerings for fretted instruments, as they require fingerings for both the right and left hands.

### Right-hand fingering placement

By default, all right-hand fingerings are placed outside the staff and on the notehead side of notes, which can be above or below the staff depending on the stem direction. When shown beside notes inside the staff, Dorico Elements automatically joins adjacent notes with the same right-hand fingering with a bracket.

### Left-hand fingering placement

Left-hand fingerings are usually positioned inside the staff and to the left of the notes to which they apply. However, they also must not collide with other items, such as accidentals and rhythm dots. Dorico Elements automatically calculates the most appropriate positions for left-hand fingerings and erases their backgrounds by default, which improves their readability when placed on staff lines.

RELATED LINKS
Fingerings for fretted instruments on page 582
Changing the position of left-hand fingerings on page 584
Hiding/Showing brackets for right-hand fingerings on page 583

## Changing fingerings to substitution fingerings

Substitution fingerings indicate where players should change the finger used for the note. You can change existing fingerings to substitution fingerings.

PROCEDURE

1. Select the fingerings you want to change to substitution fingerings.
2. In the Properties panel, activate **Substitution** in the **Fingering and Positions** group.
3. Enter the fingering you want for the substitution into the value field.
4. Press **Return**.

RESULT

The selected fingerings are now shown as substitution fingerings. The deferred position of the substitution is the same as the original fingering by default, but you can change the rhythmic position of substitution fingerings.

## Changing the rhythmic position of substitution fingerings

Substitution fingerings are shown as immediate by default, meaning that the substitution takes place on the same note, but you can change the rhythmic position at which individual substitutions take place.

PROCEDURE

1. Select the substitution fingering whose deferred rhythmic position you want to change.
2. Change the rhythmic position of the substitution fingering in any of the following ways:
   - Click and drag the circular handle to the right/left.
   - Activate **Substitution offset** in the **Fingering and Positions** group of the Properties panel.

     Change the rhythmic position of substitutions as fractions of a quarter note (crotchet) by entering a value into the left value field, or by clicking the arrows beside the value field. Increasing the value moves substitutions to later positions, decreasing the value moves them to earlier positions.

NOTE

The right value field is for the grace note position at which substitutions occur, if applicable.

RESULT

The rhythmic position of the substitution fingering is changed.

Dorico Elements automatically arranges deferred substitutions so they are ordered appropriately alongside any fingerings that coincide with the substitution.

NOTE

You can only change the position of single substitution fingerings when dragging their handles with the mouse. However, you can change the positions of multiple substitution fingerings with **Substitution offset** in the **Fingering and Positions** group of the Properties panel.

Deferred substitutions are always shown with horizontal lines.

RELATED LINKS

Fingerings popover on page 204

# Changing existing fingerings

You can change fingerings after you have input them, for example, if you decide a different fingering would be better.

PROCEDURE

1. Select the fingerings you want to change.
2. In the Properties panel, enter the new fingering you want into the **Finger or position** value field in the **Fingering and Positions** group.
3. Press **Return**.

RESULT

The selected fingerings are changed.

TIP

You can also change existing fingerings in Write mode by opening the fingerings popover. Any existing fingerings on the selected note are shown in the popover.

RELATED LINKS

Inputting fingerings on page 203
Fingerings popover on page 204

# Changing the staff-relative placement of fingerings

Dorico Elements automatically follows conventions for fingering placement, but you can show individual fingerings belonging to non-fretted instruments either above or below the staff.

According to convention, keyboard instrument fingering is positioned above the right-hand staff, and below the left-hand staff. String and brass instrument fingering is always positioned above the staff.

NOTE

These steps only apply to non-fretted instruments.

PROCEDURE

1. Select the fingerings whose staff-relative placement you want to change.
2. In the Properties panel, activate **Staff-relative position** in the **Fingering and Positions** group.
3. Choose one of the following options:
   - **Above**
   - **Below**

RESULT

The selected fingerings appear above/below the staff.

RELATED LINKS

Fingerings for fretted instruments on page 582

## Showing fingerings inside the staff

You can show individual fingerings belonging to non-fretted instruments beside noteheads inside the staff.

NOTE

- These steps only apply to non-fretted instruments. Left-hand fingerings for fretted instruments are shown inside the staff by default.
- These steps do not apply to substitution fingerings.

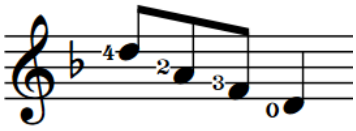
PROCEDURE

1. Select the notes whose fingerings you want to show inside the staff.
2. In the Properties panel, activate **Inside staff** in the **Fingering and Positions** group.

RESULT

Fingerings belonging to the selected notes are shown inside the staff, directly beside the noteheads. By default, if they belong to a note on a staff line, they erase part of the staff line to ensure legibility.

EXAMPLE



# Hiding/Showing fingering

You can hide/show fingering in each layout in your project independently of other layouts. For example, you can show fingering in part layouts but hide fingering in full score layouts as conductors rarely require fingering information.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to hide/show fingering.

   By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Players** in the page list.
4. In the **Fingering** section, activate/deactivate **Show fingering**.
5. Click **Apply**, then **Close**.

RESULT

All fingerings in the selected layouts are shown when the checkbox is activated, and hidden when the checkbox is deactivated.

# Deleting fingerings

You can remove fingerings from notes after you have input them. However, because fingerings are considered an intrinsic part of notes rather than a separate item, you cannot select and delete them as you would for other items.

PROCEDURE

1. Select the notes from which you want to remove fingerings.
2. Choose **Edit** > **Fingering** > **Reset Fingering**.

RESULT

All fingerings are removed from the selected notes.

TIP

You can assign your own key command for this action.

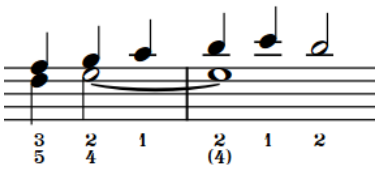
RELATED LINKS

Large selections on page 303
Assigning key commands on page 62

# Cautionary fingerings

Cautionary fingerings remind players that fingerings specified at previous rhythmic positions continue to apply to notes that are still sounding. Dorico Elements automatically shows cautionary fingerings when you add other fingerings at rhythmic positions where notes with existing fingerings are still sounding.

By default, cautionary fingerings are shown enclosed in parentheses.

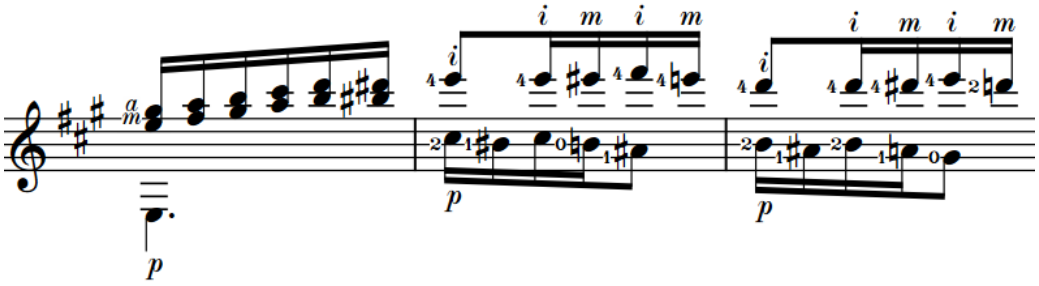


Cautionary fingering shown in parentheses (default)

# Fingerings for fretted instruments

Fretted instruments, such as the classical guitar, require additional fingering instructions for both hands due to the complex nature of the music.

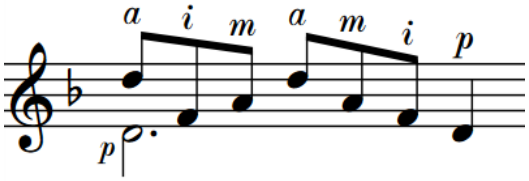
Fingerings for fretted instruments use the same fonts as normal fingerings.



A passage for guitar with right-hand and left-hand fingerings

### Right-hand fingering

Right-hand fingerings tell the performer which finger to use to pluck the string, which is usually the right hand. By default, all right-hand fingerings are placed outside the staff, on the notehead side of notes, and follow the stem directions of voices in multiple-voice contexts. When the same finger plays multiple notes in a chord, you can show a single fingering with a bracket for the notes plucked by that finger.



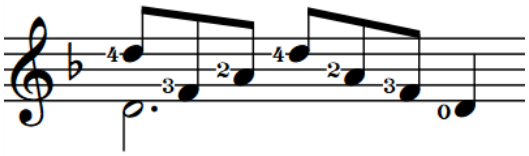
Dorico Elements shows “p” for right-hand thumb fingerings and “e” for right-hand fingerings for the pinky finger.

NOTE

In Dorico Elements, we use “pinky” to refer to the smallest finger, but it can also be called “little” or “fifth digit”.

### Left-hand fingering

Left-hand fingerings tell the performer which finger to use to stop the string, which is usually the left hand. In Dorico Elements, left-hand fingerings are placed inside the staff and to the left of the notes to which they apply.



When shown inside the staff next to notes, left-hand fingering appears smaller than fingering shown outside the staff.

RELATED LINKS
Inputting fingerings on page 203
Fingerings popover on page 204
Adding fingerings to arpeggio signs on page 585
Fingering slides on page 585
String indicators on page 590

## Hiding/Showing brackets for right-hand fingerings

When multiple notes in the same chord are plucked by the same right-hand finger, you can show the same fingering multiple times, once for each note, or show a single fingering for all notes with a bracket spanning the notes plucked by that finger. When showing a separate fingering for each note, you can also choose to place each fingering either above or below the staff.

NOTE

These steps only apply to right-hand fingerings belonging to fretted instruments.

PREREQUISITE

You have input the fingerings for which you want to hide/show brackets or whose vertical position you want to change.

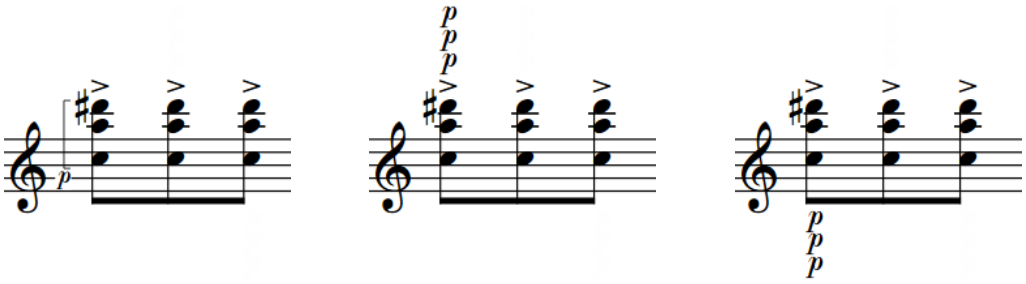
PROCEDURE

1. Select all the notes for which you want to hide/show brackets for right-hand fingerings.
2. In the Properties panel, activate **Vertical position** in the **Plucked Fingering** group.
3. Select one of the following options from the menu:
   - To hide brackets and show a separate fingering for each selected note, select **Above staff** or **Below staff**.
   - To show brackets and a single fingering for all notes in each bracket, select **Next to note**.

RESULT

Brackets on the selected right-hand fingerings are hidden/shown. If you selected **Above staff** or **Below staff**, their staff-relative placement is changed accordingly.

EXAMPLE



Right-hand fingerings shown next to notes with a bracket

Right-hand fingerings shown above the staff

Right-hand fingerings shown below the staff

RELATED LINKS

Inputting fingerings on page 203

## Changing the position of left-hand fingerings

You can change the position of individual left-hand fingerings. By default, they are positioned inside the staff and to the left of the notes to which they apply.

NOTE

These steps only apply to left-hand fingerings belonging to fretted instruments.

PREREQUISITE

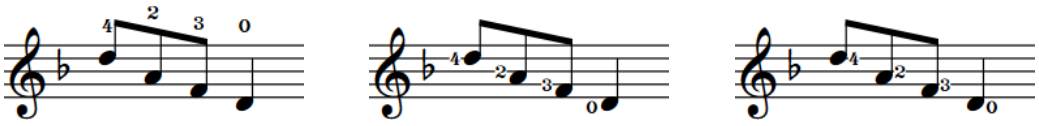
You have input the fingerings whose position you want to change.

PROCEDURE

1. Select the left-hand fingerings whose position you want to change.
2. In the Properties panel, activate **Stopping finger position** in the **Fingering and Positions** group.
3. Select one of the following options from the menu:
   - **Outside staff**
   - **Left of note**
   - **Right of note**

EXAMPLE

The position of the selected left-hand fingerings is changed. When shown outside the staff, they are placed above the staff by default.



**Outside staff**

**Left of note**

**Right of note**

RELATED LINKS
General placement conventions for fingering on page 577
Inputting fingerings on page 203

## Adding fingerings to arpeggio signs

You can add fingerings to arpeggio signs to indicate which right-hand finger should be used to strum a chord. By default, fingerings are placed at the bottom of arpeggio signs.

NOTE

These steps only apply to arpeggio signs belonging to fretted instruments.

PREREQUISITE

You have input the arpeggio signs to which you want to add fingerings.

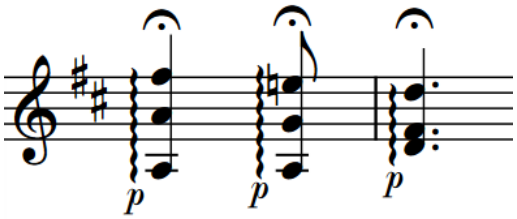
PROCEDURE

1. Select the arpeggio signs belonging to fretted instruments to which you to add fingerings.
2. In the Properties panel, activate **Finger** in the **Plucked Fingering** group.
3. Enter the fingering you want into the value field.
   For example, for the thumb, enter **p**.

RESULT

The specified fingering is added to the selected arpeggio signs. It is positioned at the bottom of the arpeggio signs by default.

EXAMPLE



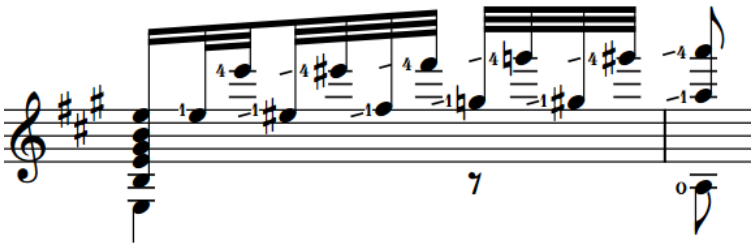

Arpeggio signs played with the thumb

RELATED LINKS
Input methods for ornaments, arpeggio signs, glissando lines, guitar bends, and jazz articulations on page 251

# Fingering slides

Fingering slides indicate that the performer should slide their finger up/down the neck of the instrument. They are notated as an angled line between fingerings.

The note at the start of a fingering slide is known as a source note. The note at the end of a fingering slide is known as the destination note.



A passage with fingering slides

When the source and destination notes are sufficiently close horizontally, fingering slides are shown between the fingerings, joining them directly in their existing positions without moving them. When the source and destination notes are far apart horizontally, fingering slides appear with a fixed length to the left of the destination note. You can change the length of individual fingering slides.

Fingering slides automatically avoid obstructions, such as noteheads, accidentals, and other fingerings.

NOTE

- Dorico Elements automatically adjusts the length/angle of fingering slides when you move the fingerings at the start/end.
- In Dorico Elements, you can only show fingering slides on staves belonging to fretted instruments. You can show string fingering shift indicators on staves belonging to other string instruments.

RELATED LINKS

Hiding/Showing fingering slides on page 586
Hiding/Showing string fingering shift indicators on page 588

## Hiding/Showing fingering slides

You can hide/show slides between notes played by the same left-hand finger on the same string on fretted instruments.

NOTE

These steps only apply to fingerings belonging to fretted instruments.

PREREQUISITE

- You have input the same left-hand fingering for the notes at the start and end of the slides.
- You have specified the same string for the notes at the start and end of the slides.

PROCEDURE

1. Select the destination notes before which you want to hide/show fingering slides.
2. In the Properties panel, activate/deactivate **Slide in** in the **Fingering and Positions** group.

RESULT

Fingering slides are shown before the selected notes when **Slide in** is activated, and hidden when it is deactivated. If the gap between the source and destination notes is small enough, fingering slides appear as an angled line joining the fingerings. If the gap is large, fingering slides appear as a fixed length angled line to the left of the destination notes.

RELATED LINKS
Inputting fingerings on page 203
Changing existing fingerings on page 579
Specifying the string for individual notes on page 638

# Fingerings for valved brass instruments

For instruments like trumpet and horn, fingering is used to show which valves must be depressed to produce a specific note.

You can enter fingerings for valved brass instruments into the fingerings popover as numbers without any separation. For example, enter **12** for a C♯ on a trumpet to indicate that the first two valves must be depressed.

By default, Dorico Elements automatically stacks fingerings added to notes on brass instrument staves vertically. They are shown with no separator by default.

RELATED LINKS
Fingerings popover on page 204
Inputting fingerings on page 203

## Showing horn branch indicators

You can indicate the branch on which notes are played for double horns and triple horns by adding branch indicators as prefixes to horn fingerings. Some publications simply indicate “T” for thumb, while others more explicitly indicate which branch is to be used by specifying its pitch.

NOTE

You can only add branch indicators to notes belonging to horns in F.

PROCEDURE

1. Select the horn fingerings to which you want to add branch indicators.
2. In the Properties panel, activate **Horn branch** in the **Fingering and Positions** group.
3. Select one of the following horn branches from the menu:
   - **F**
   - **B flat**
   - **F alto**
   - **E flat alto**
   - **Thumb trigger**

RESULT

Branch indicators are added to the selected fingerings.

RELATED LINKS
Inputting fingerings on page 203

# Hiding/Showing string fingering shift indicators

An angled line can be used to indicate the direction of movement when string players must shift their finger position on the fingerboard to play a higher/lower note with the same finger as the previous note.

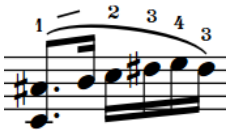
PROCEDURE

1. Select the notes on string instrument staves from which you want to indicate a fingering shift.
2. In the Properties panel, activate/deactivate **Indicate shift to next note** in the **Fingering and Positions** group.

RESULT

Shift indicators are shown when the property is activated, even if neither of the notes at each end have explicit fingerings, and hidden when the property is deactivated. They are positioned between the selected notes and the notes that immediately follow them.

EXAMPLE




RELATED LINKS

Specifying the string for individual notes on page 638
String indicators on page 590

# Changing the direction of string fingering shift indicators

You can change the direction of individual string fingering shift indicators if they do not point in the direction required.

PROCEDURE

1. Select the shift indicators whose direction you want to change.
2. In the Properties panel, activate **Shift direction** in the **Fingering and Positions** group.
3. Choose one of the following options:
   - **Up**
   - **Down**

RESULT

The selected shift indicators are angled up/down.

NOTE

You can also affect the direction of string shift indicators by specifying the strings on which notes are played.

RELATED LINKS

Specifying the string for individual notes on page 638

# Fingerings imported from MusicXML files

Dorico Elements imports fingerings that are specified using the fingering element in MusicXML files.

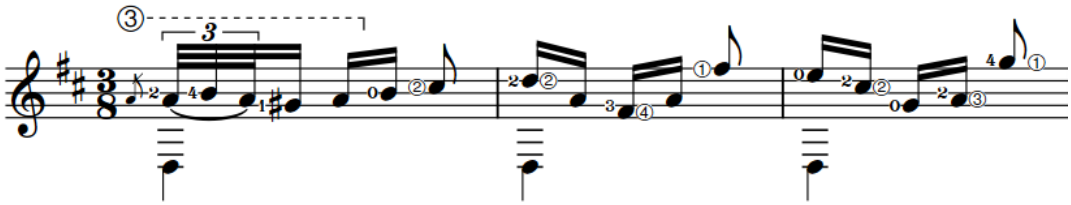
MusicXML files exported from Finale typically represent fingerings in the correct way. However, because Sibelius does not use the fingering element, Dorico Elements cannot import fingerings from MusicXML files exported by Sibelius.

# String indicators

String indicators are commonly used in guitar music to tell performers the string on which they should play a note, particularly for pitches that are possible on multiple strings.

String indicators show the string number inside a circle enclosure, optionally with a dashed line to indicate they apply to a range of notes. Open pitches commonly appear as a zero without an enclosure.

In Dorico Elements, string indicators for stopped pitches appear in a plain font while string indicators for open strings use the fingering font.



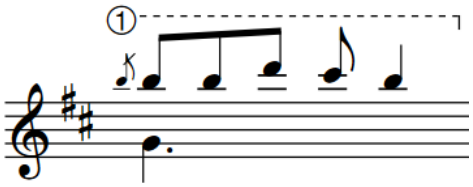
A phrase with string indicators and left-hand fingerings

There are two types of string indicators in Dorico Elements, which you input in different ways.

**String indicators outside the staff**

String indicators outside the staff always appear inside circle enclosures. They automatically show dashed duration lines when they have duration to indicate that multiple notes are played on that string.

In Dorico Elements, string indicators outside the staff are considered playing techniques. You can select and delete them independently of the notes to which they apply.



String indicator outside the staff with duration line

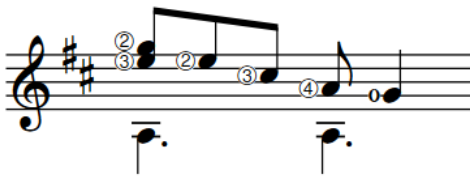
**String indicators inside the staff**

String indicators inside the staff appear inside circle enclosures, except when they show open strings, which appear as a bold number zero without an enclosure. They automatically erase their backgrounds so they do not collide with staff lines. They appear to the left of noteheads by default but automatically appear to the right if left-hand fingerings are present.

The string number shown in string indicators inside the staff is calculated automatically, but you can also specify the string manually.

String indicators inside the staff for stopped pitches are scaled-down versions of string indicators outside the staff.

In Dorico Elements, string indicators inside the staff are considered properties of the corresponding notes. You cannot select them independently of their corresponding notes.



String indicators inside the staff, with the last one for an open string

RELATED LINKS
Fingerings for fretted instruments on page 582
Input methods for playing techniques, pedal lines, string indicators, and harp pedal diagrams on page 263
Playing techniques on page 709
Playing technique duration on page 714
Lengthening/Shortening string indicators on page 591
Specifying the string for individual notes on page 638
Deleting string indicators on page 592

# Lengthening/Shortening string indicators

You can lengthen/shorten the duration of string indicators outside the staff after they have been input. Lengthening a string indicator outside the staff that was added to a single note gives it duration and shows a duration line, which is dashed by default.

PROCEDURE

1. In Write mode, select the string indicators outside the staff you want to lengthen/shorten.

   NOTE

   When using the mouse, you can only lengthen/shorten one string indicator at a time. When using the keyboard, you can lengthen/shorten multiple string indicators, but they must all have duration already.

2. Lengthen/Shorten the string indicators in any of the following ways:
   - To lengthen them by the current rhythmic grid resolution, press **Shift-Alt/Opt-Right Arrow**.
   - To shorten them by the current rhythmic grid resolution, press **Shift-Alt/Opt-Left Arrow**.
   - To snap the end of a single string indicator to the next notehead, press **Ctrl/Cmd-Shift-Alt/Opt-Right Arrow**.
   - To snap the end of a single string indicator to the previous notehead, press **Ctrl/Cmd-Shift-Alt/Opt-Left Arrow**.

     NOTE

     - You can only lengthen/shorten string indicators according to the current rhythmic grid resolution when multiple string indicators are selected.
     - When using the keyboard, you can only move the end of string indicators with duration. You can move the start of string indicators with duration by moving them rhythmically, or by clicking and dragging the start handle.

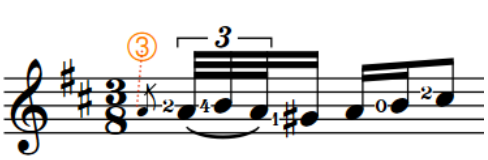
   - Click and drag the circular handle at the start/end to the right/left.

RESULT

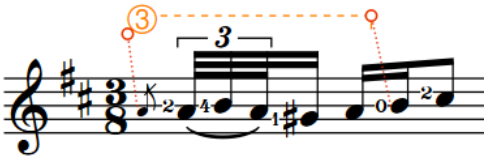
Single string indicators are lengthened/shortened according to the current rhythmic grid resolution or to the next/previous notehead, whichever is closer. If they previously had no duration, they now have duration and show a duration line.

Multiple string indicators are lengthened/shortened according to the current rhythmic grid resolution.

EXAMPLE



String indicator (selected) with no duration



String indicator (selected) with duration and duration line

RELATED LINKS

Playing technique duration on page 714
Playing technique continuation lines on page 713
Hiding/Showing playing technique duration lines on page 715
Input methods for playing techniques, pedal lines, string indicators, and harp pedal diagrams on page 263

# Deleting string indicators

You can remove string indicators inside the staff from notes after you have input them. However, because string indicators inside the staff are properties of notes rather than separate items, you cannot select and delete them as you would for other items.

NOTE

These steps only apply to string indicators inside the staff. You can delete string indicators outside the staff in the same ways as for other items.

PROCEDURE

1. Select the notes from which you want to remove string indicators inside the staff.
2. In the Properties panel, deactivate **Show** in the **String Indicators** group.

RESULT

String indicators inside the staff are removed from the selected notes.

RELATED LINKS

Large selections on page 303
Deleting notes and items on page 316
Inputting string indicators inside the staff on page 275

# Positions of string indicators

String indicators outside the staff are placed above it by default. In multiple-voice contexts, string indicators for the up-stem voices are placed above the staff and string indicators for the down-stem voices are placed below the staff.

String indicators inside the staff automatically erase their backgrounds so they do not collide with staff lines. They appear to the left of noteheads by default but automatically appear to the right if left-hand fingerings are present. You can change the notehead-relative position of string indicators individually.

You can move string indicators outside the staff to different rhythmic positions in Write mode. They are automatically positioned to avoid collisions. You can also change the staff-relative placement of string indicators outside the staff individually, in the same ways as for playing techniques.

RELATED LINKS
Changing the staff-relative placement of items on page 310

## Moving string indicators rhythmically

You can move string indicators outside the staff to new rhythmic positions after they have been input.

PROCEDURE

1. In Write mode, select the string indicators outside the staff you want to move.

   NOTE

   When using the mouse, you can only move one string indicator rhythmically at a time.

2. Move the string indicators in any of the following ways:
   - To move a single string indicator to the next notehead on the staff, press **Alt/Opt-Right Arrow**.
   - To move a single string indicator to the previous notehead on the staff, press **Alt/Opt-Left Arrow**.
   - To move them to the right according to the current rhythmic grid resolution, press **Ctrl/Cmd-Alt/Opt-Right Arrow**.
   - To move them to the left according to the current rhythmic grid resolution, press **Ctrl/Cmd-Alt/Opt-Left Arrow**.

     NOTE

     You can only move string indicators according to the current rhythmic grid resolution when multiple string indicators are selected.

   - Click and drag the string indicator to the right/left to the notehead you want.

RESULT
The selected string indicators are moved to new rhythmic positions.

NOTE

If a single string indicator above the staff passes over another string indicator above the staff as part of its move, the existing one is unaffected as multiple string indicators can exist at the same rhythmic position. However, if you move multiple string indicators together, any existing string indicators they pass over are shortened or deleted accordingly.

You can undo this action, but any string indicators shortened/deleted in the process are only restored if you moved string indicators using the keyboard.

RELATED LINKS
Lengthening/Shortening string indicators on page 591

## Changing the notehead-relative position of string indicators

By default, string indicators inside the staff appear to the left of noteheads when there are no left-hand fingerings and to the right of noteheads when there are left-hand fingerings. You can change the side of noteheads on which string indicators inside the staff appear individually.

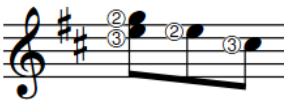
PROCEDURE

1. Select the string indicators inside the staff whose notehead-relative position you want to change.
2. In the Properties panel, activate **Notehead-relative pos.** in the **String Indicators** group.
3. Choose one of the following options:
   - **Left**
   - **Right**

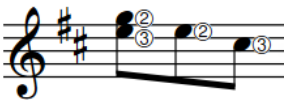
RESULT

The notehead-relative position of the selected string indicators is changed.

EXAMPLE



String indicators to the left of noteheads



String indicators to the right of noteheads

# Front matter

Front matter in Dorico Elements is a broad term that covers all information included before the first bar of music in scores.

Front matter includes musical information often added on pages before the first pages of scores, such as:

- Performance instructions
- Contents
- Instrumentation list

Front matter also includes information above the music on the first page of scores and parts, such as:

- Dedications
- Titles
- Subtitles
- Composers

RELATED LINKS
Master pages on page 329
Frames on page 328

## Project information used in default master pages

An efficient way of ensuring all text information in the different layouts in your project is consistent is to use tokens that link to information for the current project entered in the **Project Info** dialog.

Tokens are codes that refer to text elsewhere, meaning they are updated automatically if the source text is changed.

The default master pages in Dorico Elements include tokens, so that any information you add about the project in the **Project Info** dialog is automatically shown. For example, the **Default Full Score** master page set includes tokens for the following information:

- Composer
- Lyricist
- Title

NOTE

These tokens refer to the project by default. If you only enter information for flows in the **Project Info** dialog, that information does not automatically appear.

RELATED LINKS
Project Info dialog on page 98
Flow names and flow titles on page 140
Text tokens on page 355

# Grace notes

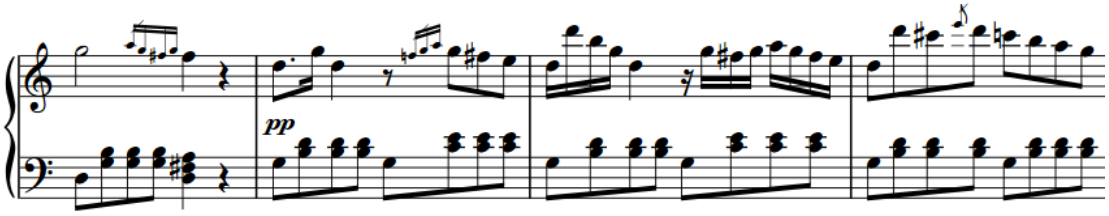
Grace notes are notes without a fixed duration, which are intended to be played quickly. They are scaled-down versions of normal notes, and are commonly shown with a slash through their stem.

Grace notes with slashed stems are known as acciaccaturas and are often played very fast. Grace notes without slashed stems are known as appoggiaturas and are often played slower than acciaccaturas.

In Baroque music, appoggiaturas are often understood to last for a specific duration, based on the prevailing meter and the rhythmic value of the notehead to which they are attached.

Grace notes do not take up space rhythmically, as they are intended to be fitted into the space before the notehead to which they are attached, which is the notehead immediately to their right.

There can be multiple grace notes before a notehead. If there are two or more grace notes attached to the same notehead, and they have a rhythmic value that shows a flag on the stem, such as eighth notes (quavers) and 16th notes (semiquavers), they are automatically beamed together.




Multiple grace notes before notes

In Dorico Elements, grace notes are scaled to 3/5 the size of a normal notehead by default and are affected by your note spacing settings. There is a separate option specifically for grace note spacing.

You can add notations, such as slurs and articulations, to grace notes in the same ways as to normal notes, and you can transpose grace notes after they have been input.

RELATED LINKS

Inputting grace notes on page 184
Grace note slashes on page 598
Slur placement relative to grace notes on page 782
Note spacing on page 361
Changing the pitch of individual notes on page 191
Inputting articulations on page 201
Inputting slurs on page 202

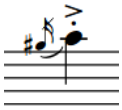
# General placement conventions for grace notes

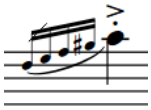
Grace notes function like normal notes in many ways, but there are some specific conventions about their stem direction, position relative to noteheads, and the placement of stem slashes.

Grace notes appear stem up by default, except when there are multiple voices with grace notes in a single staff, in which case grace notes in the lower voices appear stem down. This affects the placement of slurs relative to grace notes.

Grace notes are always positioned before a notehead, even if they are intended to be played on the beat rather than before the beat. They are normally placed after a barline, so they can be positioned directly before the notehead to which they are attached. However, groups of three or more grace notes can be placed before the barline so that the note of the first beat in the bar is not pushed too far from the barline.

Grace note stem slashes appear at the beginning of a grace note beam if multiple grace notes can be joined by a single beam at the same rhythmic position. If there is a single grace note, the slash appears across the stem, and its flag if applicable, and extends either side of the stem.





Adding accidentals causes their spacing to readjust so that the accidentals are clearly legible, similar to normal notes.

Articulations can be added to grace notes wherever they are most clearly legible, which is most likely outside the staff. Dorico Elements automatically places articulations on the stem-side of grace notes, and outside the staff if the stem or beam is within the staff.

### Slurs relative to grace notes

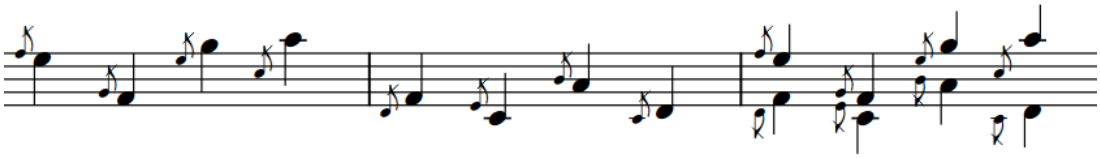
By default, slurs starting on grace notes and ending on tie chains end on the first note of the tie chain. You can change the position of individual slurs relative to tie chains, including those starting from grace notes.

RELATED LINKS
Changing the position of grace notes relative to barlines on page 598
Slur placement relative to grace notes on page 782
Slur position relative to tie chains on page 781
Changing the position of slurs relative to tie chains on page 782
Note spacing on page 361

# Grace note placement in multiple-voice contexts

According to accepted notation convention, grace notes appear stem up by default when there is only one voice on a staff, even if the notehead to which they are attached is stem down.

However, when there are multiple voices on the staff, all notes in the upper voices appear stem up and all notes in the lower voices appear stem down, including all grace notes. This adjustment happens automatically in Dorico Elements, but you can also override the stem direction of grace notes in multiple voices and change their directions individually if necessary.



RELATED LINKS
Changing the stem direction of notes on page 816
Slur placement relative to grace notes on page 782

## Changing the position of grace notes relative to barlines

By default, grace notes are positioned after barlines and directly before the notehead to which they apply, including for the first note in a bar. You can position individual grace notes before barlines, for example, so the first normal note in the bar is not pushed too far from the barline, or to indicate that grace notes are played before the beat.

PROCEDURE

1. Select the grace notes whose position relative to barlines you want to change.
2. In the Properties panel, activate/deactivate **Grace note before barline** in the **Grace Notes** group.

RESULT

The selected grace notes are positioned before barlines when the property is activated, and after barlines when the property is deactivated.

# Grace note size

Grace notes are smaller versions of normal notes, and are scaled down by a ratio that is set by default to 3/5 of a normal note.

You can change the size of grace notes individually in the same way as for normal notes.

RELATED LINKS
Changing the size of notes on page 637

# Grace note slashes

Slashes shown diagonally across grace note stems are often used to distinguish different types of grace notes. Grace notes with slashed stems are known as acciaccaturas and are often played very fast. Grace notes without slashed stems are known as appoggiaturas and are often played slower than acciaccaturas.

In Dorico Elements, grace notes appear with slashed stems by default. You can change whether grace notes are slashed or unslashed during note input as well as by changing the type of existing grace notes.

## Changing the type of grace notes

You can change the type of individual grace notes after they have been input. Grace notes have slashed stems by default, but you can change them to have unslashed stems.

PROCEDURE

1. Select the grace notes whose type you want to change.
2. In the Properties panel, choose one of the following options for **Grace note type** in the **Grace Notes** group:
   - **Slashed stem**

     
   - **Unslashed stem**

RESULT

The selected grace notes are shown with slashed/unslashed stems.

TIP

You can also change the grace note type during note input.

RELATED LINKS

Inputting grace notes on page 184

# Grace note stems

Grace notes are scaled-down notes, so the length of grace note stems is determined by the default settings for the stem length of all notes.

Following accepted conventions, grace notes in Dorico Elements are stem up by default in any clef, regardless of the stem direction of the note to which they apply. The stem directions of grace notes are changed automatically when there are multiple voices on a staff, but you can change the stem direction of individual grace notes manually. You can also lengthen/shorten grace note stems in the same ways as for normal stems.

RELATED LINKS

Stems on page 814
Grace note slashes on page 598
Changing the stem direction of notes on page 816

# Grace note beams

Dorico Elements automatically beams multiple adjacent grace notes together if they are an eighth note (quaver) or shorter in duration.

Like all beams, grace note beams ideally follow the accepted standards for beam placement relative to staff lines, in order to avoid wedges. However, because grace notes are smaller than normal notes, this can lead to extreme slants in grace note beams.

You can adjust the slants of individual grace note beams in the same ways as for normal beams.

RELATED LINKS
Beaming on page 510
Beam groups on page 510

# Holds and pauses

Different notations are used to show where the established rhythmic flow of the music is interrupted, either with a moment of repose or a short silence, before continuing. The most subtle effect is produced by a tenuto mark, with more significant effects denoted with holds and pauses.

The duration of the break in the music intended by the hold or pause does not need to be specified. This leaves significant room for interpretation, even though the different styles of holds and pauses normally indicate larger or smaller breaks.

NOTE

Holds and pauses do not currently have an effect in playback, but this is planned for future versions.

RELATED LINKS

Input methods for holds and pauses on page 246

## Types of holds and pauses

There are three types of holds and pauses in Dorico Elements, and they can all be input, moved, and deleted in the same ways.

**Fermatas**

Fermatas indicate that a note is held for longer than its notated length, which applies to the whole ensemble.

They are also known as “pauses” and informally sometimes called “birds’ eyes”.

**Breath marks**

Breath marks show suitable places for players to breathe, or suggest how the music is phrased to create a similar effect.

**Caesuras**

Caesuras indicate that a note is sustained for its full value and is followed by a break in sound before continuing.

## Types of fermatas

There are different types of fermatas available in Dorico Elements. Each fermata indicates a suggested pause duration whilst leaving room for interpretation.

| Fermata | Description |
| --- | --- |
| Very short fermata  | Indicates that a note is held only a fraction longer than the rhythm indicates. |

| Fermata | Description |
| --- | --- |
| Short fermata  | Indicates that a note is held a little bit longer than the rhythm indicates. |
| Short fermata (Henze)  | Indicates that a note is held a little bit longer than the rhythm indicates, as used by Hans Werner Henze. |
| Fermata  | Indicates that a note is held for longer than the rhythm indicates. |
| Long fermata  | Indicates that a note is held quite a lot longer than the rhythm indicates. |
| Long fermata (Henze)  | Indicates that a note is held quite a lot longer than the rhythm indicates, as used by Hans Werner Henze. |
| Very long fermata  | Indicates that a note is held for much longer than the rhythm indicates. |
| Curlew (Britten)  | Indicates that a note or rest is held until the next synchronization point in asynchronous music, as used by Benjamin Britten. |

Fermatas can be divided into two styles. Because their meanings overlap, it can be confusing for players if both styles are used in a single project.

| Style | Very short fermata | Short fermata | Fermata | Long fermata | Very long fermata |
| --- | --- | --- | --- | --- | --- |
| Normal |  |  |  |  |  |
| Henze | N/A |  |  |  | N/A |

RELATED LINKS
Holds and pauses popover on page 246
Changing existing items on page 309

## Types of breath marks

There are different types of breath marks available in Dorico Elements. Breath marks indicate a suitable place for a player to take a breath, or create a musical effect like a breath.

**Comma-like**

**Tick-like**

**Upbow-like**

**Salzedo**

## Types of caesuras

There are different types of caesuras available in Dorico Elements. All caesuras indicate a break in sound, but different types are often needed for different styles of musical scores.

**Caesura**

Two diagonal slashes

**Thick caesura**

Two thick diagonal slashes

**Short caesura**

Two straight, vertical slashes

**Curved caesura**

Two curved diagonal slashes

If you intend to communicate a specific length of hold or gap with each type of caesura, we recommend that you consider adding a legend, as different players may interpret these symbols differently.

RELATED LINKS
Changing existing items on page 309

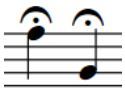
# Positions of holds and pauses

Holds and pauses are placed above the staff by default in single-voice contexts, and are shown on all staves at the closest rhythmic position available, for example, if a single staff has a fermata on the last beat in the bar, it is shown above the bar rests on the other empty staves. For staves with multiple voices, fermatas are also shown inverted below the staff.

You can move holds and pauses to different rhythmic positions in Write mode. They are automatically positioned to avoid collisions.

### Fermatas

Fermatas are positioned horizontally so that they are centered on noteheads, regardless of the stem direction of notes.



Fermatas affect the overall tempo of the piece, so all players must be able to see where they occur. Therefore, fermatas are shown on all staves at the same rhythmic position, or the rhythmic position of the note, chord, or rest that corresponds with the end of the fermata, including over a bar rest if a staff has no notes in that bar.

### Breath marks

Breath marks are placed above the top line of the staff, at the end of the note to which they apply; that is, they appear just before the following note.

Breath marks apply only to the staff to which they were added, as they do not affect the overall tempo, but instead only indicate to a single player or group of players a suitable place to break their line in order to breathe.

### Caesuras

Caesuras are positioned at the top of the staff, with the top staff line passing through the middle of the caesura and the bottom of the caesura resting on the second staff line. They are commonly placed at the end of a bar, before the barline.

Caesuras are automatically added to all staves at the same rhythmic position, immediately to the left of the notehead or barline to which they were input. They are not linked to noteheads, and adjust note spacing to create a clear gap.

## Multiple holds and pauses at the same rhythmic position

Because fermatas apply to all staves, only one type of fermata can exist at the same rhythmic position. For example, you cannot have a short fermata on one staff and a long fermata at the same rhythmic position on another staff.

A Britten curlew can be used at the same rhythmic position as another kind of fermata, but it cannot exist simultaneously with any breath mark. This is the only exception in Dorico Elements.

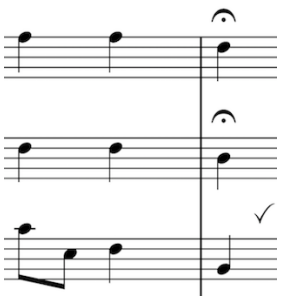
Caesuras can co-exist with any type of breath mark, but you cannot have a caesura and a fermata at the same rhythmic position.

## Changes to fermatas on single staves

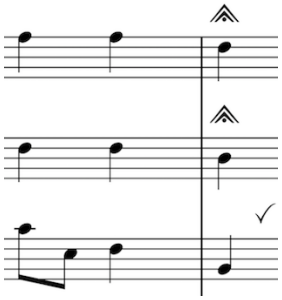
Changing the type of fermata or caesura on one staff automatically changes the type on all staves at that rhythmic position, as a pause at one particular rhythmic position can only be of one duration.

However, if you override a particular fermata on one staff, for example, by changing it to a Britten curlew or a breath mark, changing the existing fermata on another staff does not change the marking on the overridden staff. Deleting the marking on the overridden staff reverts that marking to match the fermata on the other staves.

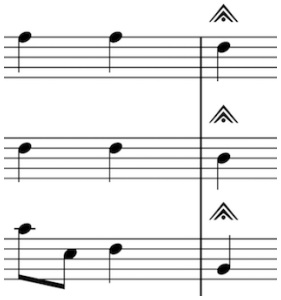
For example, changing a fermata to a breath mark changes the marking for only that staff. That note is not affected when the type of fermata on the other staves at that rhythmic position is changed.



The bottom staff is overridden to show a breath mark instead of a fermata.



The fermata is changed to a very short fermata, but the bottom staff is exempt as it was overridden to show a breath mark.



Deleting the breath mark from the bottom staff returns it to showing the fermata currently chosen for that rhythmic position.

## Moving holds and pauses rhythmically

You can move holds and pauses to new rhythmic positions after they have been input.

PROCEDURE

1. In Write mode, select the holds and pauses you want to move.

   NOTE

   When using the mouse, you can only move one hold or pause rhythmically at a time.

2. Move the holds and pauses according to the current rhythmic grid resolution in any of the following ways:
   - Press **Alt/Opt-Right Arrow** to move them to the right.
   - Press **Alt/Opt-Left Arrow** to move them to the left.
   - Click and drag the hold or pause to the right/left.

RESULT

The selected holds and pauses are moved to new rhythmic positions on each staff where they appear, even if their position does not appear to move. For example, if one staff has a bar rest, the rhythmic position of the hold or pause moves, but the hold or pause still appears above the rest.

NOTE

Only one type of hold or pause can exist at each rhythmic position. If a hold or pause passes over another hold or pause as part of its move, the existing hold or pause is deleted.

You can undo this action, but any holds and pauses deleted in the process are only restored if you moved the hold or pause using the keyboard.

## Changing the number of fermatas per staff

You can change the maximum number of fermatas that appear in each staff at individual positions when there are multiple voices on a staff.

PROCEDURE

1. Select a fermata or multiple fermatas.
2. In the Properties panel, activate **Max. fermatas per staff** in the **Holds and Pauses** group.

3. Select one of the following options from the menu:
   - **One per voice**
   - **One per each side of staff**
   - **One per staff**

RESULT

The number of fermatas shown at the selected positions is changed.

## Positioning fermatas on barlines

You can position individual fermatas over a barline instead of over a note to indicate a gap before the start of the following bar.

NOTE

Fermatas cannot be positioned on barlines if **Max. fermatas per staff** is also activated.

PROCEDURE

1. Select the fermatas you want to position over barlines.
2. In the Properties panel, activate **Attach to barline** in the **Holds and Pauses** group.

RESULT

The selected fermatas are positioned above the barline at the end of the bars they were in originally, appearing only above staves that are not joined by the barline. Depending on the instrumentation, this may mean they only appear at the top of the system.

Deactivating **Attach to barline** returns the selected fermatas to their default positions.

RELATED LINKS

Changing the number of fermatas per staff on page 605

# Key signatures

Key signatures are the markings that show the current key of music by indicating which notes in the scale for that key are sharpened or flattened. They are shown at the start of each system on every applicable staff.

Traditionally, accidentals are organized following the pattern of the circle of fifths, which is different for sharp keys and flat keys.

Using key signatures saves space, as by indicating which notes are generally going to be sharp or flat in the music in one group at the start of each system, these notes do not need an accidental beside them every time they occur.

By default, key signatures apply to the whole score. However, there are certain situations where some parts require their own key signature, independently of the rest of the ensemble. You can input key signatures that apply to all staves or only apply to single staves in Dorico Elements. Once you have input a key signature, all notes you subsequently input follow the key signature, for example, if you input an **F** after inputting a G major key signature, an F♯ is input automatically.

In Dorico Elements, key signatures exist within the overarching tonality system for your project. The only tonality system in Dorico Elements is 12-EDO.

RELATED LINKS
Tonality systems on page 613
Input methods for key signatures on page 206
Note input on page 159

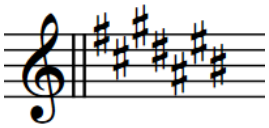
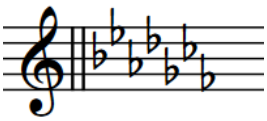
## Key signature arrangements

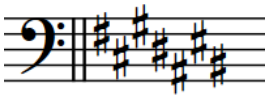
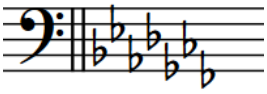
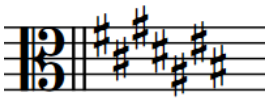
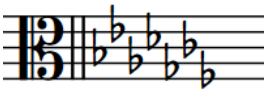
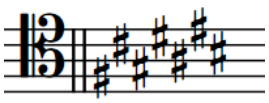
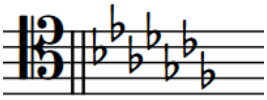
Dorico Elements automatically follows conventions for the placement and appearance of key signatures, such as showing accidentals in the accepted circle of fifths order and positioning key signatures between clefs and time signatures.

The order in which accidentals are shown in key signatures is different for sharp keys and flat keys.

- For sharps: F♯, C♯, G♯, D♯, A♯, E♯, B♯
- For flats: B♭, E♭, A♭, D♭, G♭, C♭, F♭

Accidentals are arranged automatically in these orders in Dorico Elements for all standard Western key signatures. There is an accepted pattern for the placement of accidentals in a key signature, so that they fit inside the staff according to the current clef. The pattern of accidentals is the same in all clefs, apart from the tenor clef, which requires sharp key signatures to follow a different, ascending pattern to ensure the accidentals fit on the staff.

| Clef | Arrangement of sharps | Arrangement of flats |
|---|---|---|
| Treble |  |  |

| Clef | Arrangement of sharps | Arrangement of flats |
|---|---|---|
| Bass |  |  |
| Alto |  |  |
| Tenor |  |  |

RELATED LINKS
Positions of key signatures on page 610

# Types of key signatures

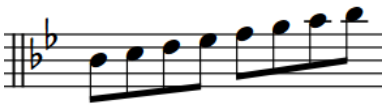
There are four types of key signatures in Dorico Elements, which can all be input, moved, and deleted in the same ways.

The four types are:

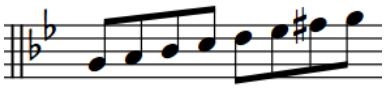
- Major
- Minor
- Open key, or atonal
- No key signature (for specific instruments, such as horn or percussion)

## Major/Minor key signatures

The key signature for a major key appears the same as the key signature for its relative minor, and vice versa. For example, B♭ major has two flats in its key signature. This is the same number of flats as for G minor, which is the relative minor key to B♭ major. The difference is that music in G minor usually has sharpened Fs, as the seventh degree of the scale is raised in minor keys. Therefore, if you input an F♯/G♭ after a G minor key signature, Dorico Elements prefers to spell it as F♯ in most cases, in order to follow the convention of harmonic minor keys.



A B flat major scale following a B flat major key signature



A G minor scale following a G minor key signature

## Open key signature

Although open, or atonal, key signatures appear the same as C major or A minor key signatures because none shows any accidentals, open key signatures behave differently.

In an open key signature, the spelling of accidentals is based on the current direction of the music. If the music is rising, sharps are preferred, whereas if the music is falling, flats are preferred. There is no hierarchy of pitches in an open key signature, so the same pitch might be spelled differently each time it appears depending on its context, even within a few bars.

In a C major or A minor key signature, accidentals are spelled based on the context of the major or minor tonality implied. For example, in C major, sharps in general are preferred, whether the music is going up or going down. Similarly, in A minor, G♯ in particular is preferred, whether the music is going up or going down, as G♯ is the leading note in A minor.

### No key signature

Some instruments are accustomed to seeing no key signatures in their parts, no matter the overall key of the piece. These instruments include timpani, percussion, horn, trumpet, and sometimes the harp. If you have added the **No key sig** version of these instruments, then no key signature is shown in their parts, even if they are a transposing instrument, such as horn or trumpet.

Any pitch can be input into these instruments, and they show accidentals if needed.

RELATED LINKS
Adding instruments to players on page 112

## Deleting key signatures

You can delete key signatures without affecting the pitches of notes. Where appropriate, pitches are shown with accidentals after you have deleted a key signature.

NOTE

- You cannot hide key signatures as they provide crucial information about the pitch of notes. If you do not want to see a key signature, you can input an open key signature or delete all key signatures from the flow or project.
- Instruments that do not usually have key signatures, such as timpani or horn, have a **No key sig** version in Dorico Elements which never show key signatures. You can select the appropriate instrument type from the instrument picker when adding or changing instruments.

PROCEDURE

1. In Write mode, select the key signatures or signposts of key signatures you want to delete.
2. Press **Backspace or Delete**.

RESULT

The selected key signatures are deleted from the score. The pitches of notes in the bars following the deleted key signatures are not changed, but the notes are shown with accidentals if the deleted key signature indicated an accidental for them, up until the next existing key signature or the end of the flow.

NOTE

If you delete the only key signature in the flow, your music appears without a key signature, with accidentals shown as necessary. This is treated as if there were an open key signature rather than a key signature of A minor or C major.

RELATED LINKS
Input methods for key signatures on page 206
Adding instruments to players on page 112
Changing instruments on page 113
Signposts on page 314

# Multiple simultaneous key signatures

You can have multiple key signatures simultaneously by inputting each one onto a single staff.

NOTE

You do not have to input multiple simultaneous key signatures if you have transposing instruments in your score. Dorico Elements handles instrument transpositions automatically.

You can check the transposition of transposing instruments by choosing **Edit** > **Transposed Pitch** to see the music in your layout at written pitch rather than concert pitch.

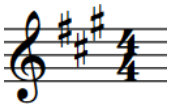
Alternatively, you can open the individual part layout of a transposing instrument and compare it to the full score.

RELATED LINKS
Input methods for key signatures on page 206

# Positions of key signatures

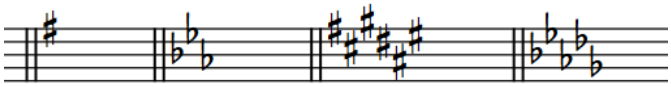
Key signatures are positioned between clefs and time signatures by default, and are shown on every staff that requires a key signature. They are not shown on staves for unpitched instruments.

Key signatures are shown at the start of a piece and at the start of subsequent movements, even if the music carries straight on and in the same key. Unlike time signatures, key signatures appear at the start of every system, even if the key signature has not changed. They apply until the end of the flow or until the next key signature change, whichever comes first.



The correct position for key signatures is between clefs and time signatures.

If a key signature change occurs during a piece or movement, it should be placed immediately after a barline. It is customary to have a double barline where a key signature change takes place, which is the default setting in Dorico Elements.



Examples of key signatures positioned after double barlines

You can move key signatures to new rhythmic positions in Write mode. They are automatically positioned correctly.

RELATED LINKS
Key signature arrangements on page 607
Moving key signatures rhythmically on page 611

## Moving key signatures rhythmically

You can move key signatures to new rhythmic positions after they have been input.

PROCEDURE

1. In Write mode, select the key signatures you want to move.

   NOTE

   When using the mouse, you can only move one key signature rhythmically at a time.

2. Move the selected key signatures according to the current rhythmic grid resolution in any of the following ways:
   - Press **Alt/Opt-Right Arrow** to move them to the right.
   - Press **Alt/Opt-Left Arrow** to move them to the left.
   - Click and drag the key signature to the right/left.

RESULT

The key signatures are moved to new rhythmic positions. They take effect from their new positions until the next key signature, or the end of the flow, whichever comes first.

NOTE

- Key signatures can only be moved along the staff. If you want to move a key signature across staves, you must delete the key signature and input a new key signature on the other staff.
- Only one key signature can exist at each rhythmic position, except for key signatures that only apply to single staves. If a key signature passes over another key signature as part of its move, the existing key signature is deleted and replaced by the key signature being moved.

  You can undo this action, but any key signatures deleted in the process are only restored if you moved the key signature using the keyboard.

RELATED LINKS

Input methods for key signatures on page 206

# Transposing key signatures alongside selections

You can transpose key signatures at the same time as transposing notes, which transposes both key signatures and notes by the same degree.

NOTE

Dorico Elements automatically shows the appropriate key signatures for transposing instruments in transposing layouts.

PROCEDURE

1. In Write mode, make a selection that includes both a key signature change and notes.
2. Choose **Write** > **Transpose** to open the **Transpose** dialog.
3. Adjust the parameters required for your transposition, such as interval and quality.

   TIP

   - We recommend using the **Calculate interval** section to determine your required settings, for example, if you want to transpose from G♭ major to G major.

- Different intervals have different possible qualities. For example, you can specify a major third but not a major octave. Therefore, if you want to set your transposition parameters manually, we recommend selecting the interval before the quality.

4. Activate **Transpose key signatures**.
   It is activated automatically if your selection includes a key signature.
5. Click **OK** to save your changes and close the dialog.

RESULT

All notes and key signatures within the selection are transposed by the degree you set in the dialog.

NOTE

If a key signature included in the transposed selection applies to all staves, then it is transposed on all staves in the layout, even if your selection did not include all staves.

Individual key signatures, that is, key signatures added only to single staves using the **Alt** key, are transposed if included in a selection, but this does not affect any other staff in the layout.

RELATED LINKS

Transpose dialog on page 194
Concert vs. transposed pitch on page 134
Making layouts transposing/concert pitch on page 133
Selecting/Deselecting notes and items individually on page 301
Large selections on page 303

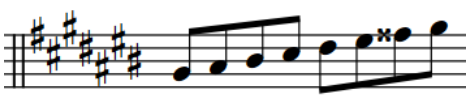
# Enharmonic equivalent key signatures

Enharmonic equivalent key signatures are keys with different names that include the same pitches, such as C♯ major and D♭ major. Dorico Elements follows the convention for transposing to keys with the same type of accidental as the previous key, except where the enharmonic equivalent key signature has fewer accidentals.

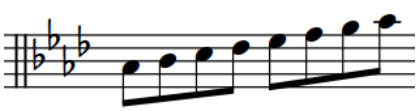
When transposing selections of notes, Dorico Elements prefers keys with the same type of accidental as the previous key signature. When choosing key signatures for transposing instruments, Dorico Elements prefers key signatures with the same type of accidental as the current concert pitch key.

However, there are some instances where you might prefer to transpose to a key with a different type of accidental as it has fewer accidentals than the enharmonic equivalent key. For example, C♯ major has seven sharps, whereas the enharmonic equivalent key of D♭ major only has five flats. This means the player has to remember the accidentals for fewer notes.

Transposing to an enharmonic equivalent key with fewer accidentals can have the added benefit of improving readability by avoiding double sharps or double flats. For example, transposing music from F♯ to G♯ requires the leading note to be spelled as an F𝄪, but transposing to A♭ instead means the leading note is G♮.



G♯ major requires a double sharp leading note



A♭ major, the enharmonic equivalent to G♯, does not require a double sharp leading note

By default, Dorico Elements selects an enharmonic equivalent key signature if it has fewer accidentals.

### How key signatures affect transposing instruments

If there is a key signature in the full score, it is transposed for a transposing instrument by the same degree as the transposing interval for the instrument. For example, in a project in E major, a B♭ clarinet part has a key of F♯ major, as a B♭ clarinet sounds a whole tone below its notated pitch.

### Instruments that do not show a key signature

Some instruments are accustomed to seeing no key signatures in their parts, no matter the overall key of the piece. These instruments include timpani, percussion, horn, trumpet, and sometimes the harp. If you have input the **No key sig** version of these instruments, then no key signature is shown in their parts, even if they are a transposing instrument, such as horn or trumpet.

You can still transpose music in the staves of these instruments, but they show accidentals as necessary, instead of showing a key signature.

RELATED LINKS
Transpose dialog on page 194
Transposing selections on page 193
Adding instruments to players on page 112

## Cautionary key signatures

When a key signature change occurs at a system break, either in the score or in a part, the new key signature is shown at the end of the first system as well as at the start of the new system.

This is sometimes considered a “cautionary key signature”, as players become used to seeing the key signature at the start of the system and therefore may miss a change of key signature if it is not conspicuously shown at the end of systems.

In Dorico Elements, as key signature changes occur immediately after barlines, the key signature at the end of a system is the key signature itself, rather than a cautionary key signature.

If the music is separate enough that you do not want to see a key signature at the end of a system and you cannot change where the system break occurs, you can separate the music by creating a new flow at the point of the system break.

RELATED LINKS
Flows on page 128
Splitting flows on page 320
Inserting system breaks on page 346

## Tonality systems

The term “tonality system” is used in Dorico Elements to encompass three crucial elements that together make up the concept of tonality.

The three elements that make up tonality systems are:

- A number of equal divisions of the octave, or EDO. For example, standard Western scales with semitone steps have 12-EDO.
- A set of accidentals. This allows you to notate how much a note is raised or lowered.

- A key signature. In Dorico Elements, you can use any traditional Western key signature.

RELATED LINKS
Custom tonality systems on page 614

## Equal Division of the Octave (EDO)

EDO stands for Equal Division of the Octave: the number of equal pieces, or intervals, into which an octave is divided.

Traditional Western harmony is based on equal temperament, another method used to describe tonality systems, or 12-EDO, as the traditional scale from C-C is made up of twelve steps spread across the seven notes in the scale.

For example, between the notes A and B there are two steps, but between B and C there is one step. This is because in 12-EDO, each step represents a semitone, and there are two semitones between A and B according to standard equal temperament, but only one semitone between B and C.

Other tonality systems can have different equal divisions of the octave, for example, in 24-EDO each octave division is a quarter tone. However, the only tonality system in Dorico Elements is 12-EDO.

RELATED LINKS
Custom tonality systems on page 614

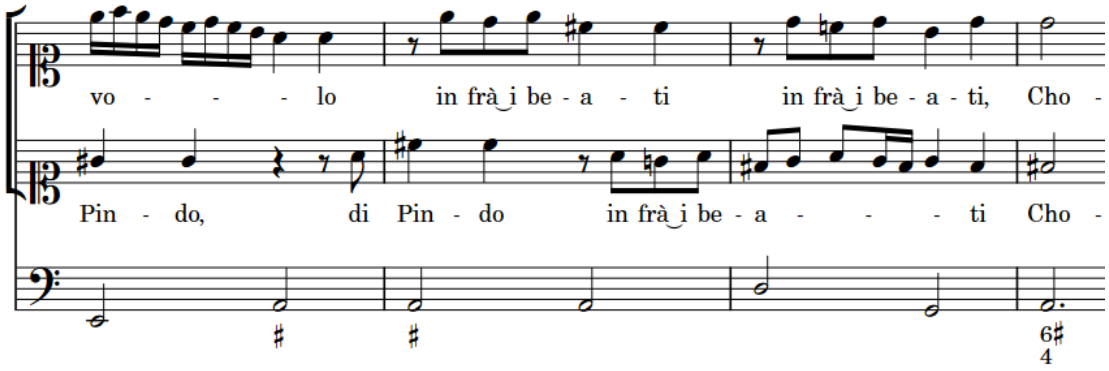
## Custom tonality systems

Custom tonality systems allow you to specify a unique number of divisions of the octave for your project. This can be useful for music not based on traditional Western harmony. Custom tonality systems are only available in Dorico Elements if you open a project that already contains them, and you cannot change where they apply.

# Lyrics

In Dorico Elements, the term lyrics is used for all text that is sung by singers.

To differentiate sung text from any other forms of text that often appear in musical scores, other forms of text are referred to as performance instructions, tempos, dynamics, and so on.




Lyrics for a soprano duet with basso continuo accompaniment

In Dorico Elements, lyrics were designed so that it is simple to make changes to existing lyrics without having to re-input new lyrics each time. For example, you can change the syllable type of lyrics so that they are either followed or not followed by a hyphen.

Lyrics are organized into lines to ensure consistent horizontal alignment and to make showing verse numbers simple and accurate. There are different types of lyric lines for lyrics with different purposes, and the appearance of lyrics changes depending on their line type. For example, lyrics in a chorus line are shown in an italic font.

When inputting lyrics, you can use key commands to switch between lyric lines, to change on which side of the staff lyrics are input, and to switch the lyric style between normal lyrics, chorus lyrics, and translation lyrics. You can also change the type of lyrics after they have been input.

You can input multiple lines of lyrics, chorus lyrics, and translations, both above or below staves. You can filter existing lyrics according to their type and lyric line.

RELATED LINKS
Types of lyrics on page 617
Lyric line numbers on page 626
Filters for lyrics on page 616
Inputting lyrics on page 279
Changing the syllable type of existing lyrics on page 619

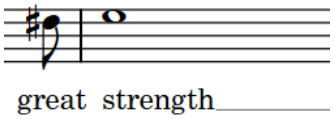
## General placement conventions for lyrics

Lyrics are generally placed below the staff to which they apply, and are positioned so that they align horizontally with their corresponding notehead.

A plain font is generally used for normal lyrics, and an italic font is generally used for chorus lyrics and translation lyrics in order to differentiate them.

The horizontal spacing of lyrics must be wide enough so that words or syllables do not overlap with the words or syllables on either side. For this reason, note spacing must sometimes be adjusted to accommodate lyrics.

To reduce how severely the note spacing is changed to accommodate lyrics, which can distort the appearance of rhythms, Dorico Elements allows the alignment of some lyrics to be adjusted relative to their corresponding notes. For example, if a long, single-syllable word on a long note follows another long, single-syllable word on a short note, the second word is moved a little to the right to give both words enough space.




A short note followed by a long note, where the horizontal position of the lyrics is automatically adjusted for legibility

RELATED LINKS
Positions of lyrics on page 624

# Filters for lyrics

In Dorico Elements, lyrics filters allow you to select all lyrics of a specified type across your project or across a specific selection.

The following filters are available in the menu when you choose **Edit** > **Filter** > **Lyrics**:

**All Lyrics**

Selects all types of lyrics in the current selection, with any lyric line number and placement above/below the staff.

**Line 1**

Selects only Line 1 lyrics and translation lyrics for Line 1 in the current selection, including Line 1 below the staff and Line 1 above the staff.

**Line 2**

Selects only Line 2 lyrics and translation lyrics for Line 2 in the current selection, including Line 2 below the staff and Line 2 above the staff.

**Line 3**

Selects only Line 3 lyrics and translation lyrics for Line 3 in the current selection, including Line 3 below the staff and Line 3 above the staff.

**Line 4**

Selects only Line 4 lyrics and translation lyrics for Line 4 in the current selection, including Line 4 below the staff and Line 4 above the staff.

**Line 5**

Selects only Line 5 lyrics and translation lyrics for Line 5 in the current selection, including Line 5 below the staff and Line 5 above the staff.

**Above Staff**

Selects all lyrics above the staff in the current selection. You can use this filter in addition to the other filters. For example, you can filter first by line number, and then filter again by staff-relative placement.

**Below Staff**

Selects all lyrics below the staff in the current selection. You can use this filter in addition to the other filters. For example, you can filter first by line number, and then filter again by staff-relative placement.

**Chorus**

Selects all chorus lyrics in the current selection.

**Translations**

Selects all translation lyrics in the current selection.

## Selecting lyrics using filters

You can use lyric filters to select all lyrics of a specified type across your project or across a specific selection.

PREREQUISITE

You filter setting is set to **Select Only**. You can check this by choosing **Edit** > **Filter** > **Select Only**.

PROCEDURE

1. In the music area, make a selection that includes all the lyrics you want to select.
   For example, press **Ctrl/Cmd-A** to select the whole flow.
2. Choose **Edit** > **Filter** > **Lyrics** > **[Lyrics type]**.

RESULT

All lyrics of the selected type in your selection are selected. For example, if you choose **Edit** > **Filter** > **Lyrics** > **Chorus**, all chorus lyrics in your selection are selected.

RELATED LINKS

Filters for lyrics on page 616
Large selections on page 303

# Types of lyrics

Lyrics are divided into different lyric types in Dorico Elements.

**Lyric lines**

Lyric lines contain normal lyrics and can be shown with verse numbers. They can be both below and above the staff.

**Chorus lines**

Chorus lines contain lyrics in an italic font and are placed between lyric lines. For example, if there are two lyric lines, the chorus line appears between Line 1 and Line 2.

Chorus lines do not have verse numbers.

**Lyric line translations**

Lyric line translations show the text in lyric lines or chorus lines in different languages. They are placed directly below the lyric line or chorus line of which they are a translation. They are shown in an italic font.

Each lyric line can have its own lyric line translation, including chorus lines.

Lyric line translations do not have verse numbers, as they are part of the line of which they are a translation.

You can input all types of lyrics using the lyrics popover. The icon shown on the left-hand side of the popover indicates the type of lyric currently being input.

RELATED LINKS
Lyric line numbers on page 626
Changing the line number and type of lyric lines on page 627
Lyrics popover on page 280

## Changing the type of individual lyrics

You can change the type of individual lyrics after they have been input. For example, you can change lyrics into chorus lyrics or translation lyrics.

PROCEDURE

1. Select the individual lyrics whose type you want to change.
2. In the Properties panel, activate/deactivate the following properties, individually or together, in the **Lyrics** group:
   - **Chorus**
   - **Is translation**

RESULT

- Activating **Chorus** changes the selected individual lyrics to chorus lyrics.
- Activating **Is translation** changes the selected lyrics to translation lyrics of the same lyric line number. For example, selecting lyrics in Line 2 and activating **Is translation** turns them into translation lyrics for Line 2.
- Activating both properties changes the selected lyrics to translation lyrics of the chorus.
- Deactivating both properties changes the selected lyrics to normal lyrics. Their line number is indicated by the number in **Line number** in the **Lyrics** group of the Properties panel.

NOTE

If other chorus lines exist at the same position on the side of the staff where you want to change your current selection to chorus lines, the two lines collide. To avoid this, change the type of the whole lyric line, which automatically avoids collisions.

RELATED LINKS
Showing lyrics in italics on page 624

# Types of syllables in lyrics

There are different types of syllables in lyrics, depending on their position in words. The key you press to advance the popover indicates the syllable type for each lyric.

Dorico Elements defines lyrics as different syllables depending on how you advance the popover when inputting lyrics.

**Whole word**

Lyrics are considered a whole word if the lyric comes after a gap and is followed by a gap or a period.

No hyphens are shown either side of whole word lyrics. Extender lines can be shown after lyrics.

**Start**

Lyrics are considered the start syllable in a multi-syllabic word if the lyric comes after a gap, but is followed by a hyphen.

Hyphens are shown after start lyrics, which can be continuation hyphens depending on the distance before the next lyric in the same lyric line.

**Middle**

Lyrics are considered the middle syllable in a multi-syllabic word if the lyric comes after a hyphen, and is followed by a hyphen.

Hyphens are shown after middle lyrics, which can be continuation hyphens depending on the distance before the next lyric in the same lyric line.

**End**

Lyrics are considered the end syllable in a multi-syllabic word if the lyric comes after a hyphen but is followed by a gap or a period.

Extender lines can be shown after end lyrics.

RELATED LINKS
Inputting lyrics on page 279

## Changing the syllable type of existing lyrics

You can change the syllable type of lyrics after they have been input.

For example, if you advanced the lyrics popover to the next note by pressing **Space** but you later want it to be followed by a hyphen, you can change its syllable type.

NOTE

Changing the syllable type changes whether a hyphen is shown after the selected lyrics, not before them. Therefore, if you want to show a hyphen before lyrics, you must change the syllable type of the lyrics immediately preceding them.

PROCEDURE

1. Select the lyrics whose syllable type you want to change.
2. In the Properties panel, select one of the following options from the **Syllable type** menu in the **Lyrics** group:
   - **Whole word**
   - **Start**
   - **Middle**
   - **End**

RESULT

Lyrics with a syllable type of **Whole word** or **End** are followed by a space.

Lyrics with a syllable type of **Start** or **Middle** are followed by a hyphen.

RELATED LINKS
Inputting lyrics on page 279

# Deleting lyric lines

You can delete whole lines of lyrics.

PROCEDURE

1. In Write mode, select the staves from which you want to delete a whole lyric line.

2. Select just the lyric line you want to delete by choosing **Edit** > **Filter** > **Lyrics** > **[Lyrics type]**.
3. Press **Backspace or Delete**.

RESULT

All lyrics in the selected lyric line are deleted.

RELATED LINKS

Filters for lyrics on page 616
Selecting lyrics using filters on page 617
Large selections on page 303

## Deleting lyrics individually

You can delete individually selected lyrics without deleting other lyrics in the same lyric line.

PROCEDURE

1. In Write mode, select the lyrics you want to delete.
2. Press **Backspace or Delete**.

RESULT

The selected lyrics are deleted.

# Copying/Pasting lyrics

You can copy and paste lyrics from both existing lyric lines in Dorico Elements and from external text editors, for example, if you want to copy a lyric line to a player who has different rhythms to the source but uses the same lyrics.

When copying text from outside Dorico Elements, you must format the text so it is suitably separated into syllables, for example, by adding hyphens in multi-syllabic words. This ensures Dorico Elements can correctly identify the characters required for each word/syllable and therefore format the resulting lyrics appropriately. There are automatic hyphenation tools that you can use, but results from these are not always reliable. Dorico Elements checks text you have copied to your clipboard to make sure it contains only single spaces and single hyphens for correct syllable input.

NOTE

You cannot currently copy/paste lyrics containing Chinese, Japanese, or Korean characters. This is planned for future versions.

PROCEDURE

1. In Write mode, select the lyrics/text you want to copy.

   TIP

   If you want to select many lyrics, you can use filters for lyric lines or you can select a single lyric and press **Ctrl/Cmd-Shift-A** multiple times to select the rest of the lyrics in the lyric line.

2. Press **Ctrl/Cmd-C** to copy the selected lyrics/text.
3. In Write mode, select the first note in the voice to which you want to copy lyrics.
4. Press **Shift-L** to open the lyrics popover.
   By default, the lyrics popover opens with lyric line input selected.

5. Optional: Change the lyric type into which you will paste lyrics in one of the following ways:
   - To change the lyric line number, press **Down Arrow**.
   - To change to a lyric line above the staff, press **Shift** - **Up Arrow**.
   - To change to a chorus line, press **Up Arrow**.
   - To change to a translation lyric line, press **Alt/Opt** - **Down Arrow**.
6. Press **Ctrl/Cmd-V** to paste the first word/syllable of the copied lyrics/text.
   The lyrics popover automatically advances to the next note in the selected voice according to the source text. For example, for syllables followed by hyphens in the source, the popover advances as if you had pressed **-** (hyphen), which automatically shows hyphens after those syllables.
7. Optional: For words/syllables that you want to apply to two or more notes, you must advance the popover manually in one of the following ways:
   - After complete words or the final syllable in multi-syllabic words, press **Space**.
   - After syllables that are not the final syllable in multi-syllabic words, press **-** (hyphen).
   - After syllables that you do not want to be followed by an extension line or hyphen, press **Right Arrow**.
8. Continue pressing **Ctrl/Cmd-V** for each word/syllable you want to paste.

RESULT

The selected lyrics/text is pasted into the selected lyric line belonging to the voice in which you selected a note.

NOTE

Words/syllables are removed from your clipboard as you paste them. If you want to paste the same lyrics/text again into another lyric line or staff, you must copy the source again.

RELATED LINKS

Edit Lyrics dialog on page 622
Large selections on page 303
Selecting lyrics using filters on page 617
Selecting more items of the same type on page 302
Lyrics popover on page 280

# Lyric text editing

Proofreading lyrics can be challenging, because lyrics are spaced more widely than regular text and individual words are often split up over large horizontal distances. In Dorico Elements, you can change the text of individual words/syllables within the lyrics popover and also by viewing entire lyric lines in a single dialog.

## Editing existing lyrics

You can change the text of lyrics after they have been input, for example, to correct misspellings.

NOTE

This resets any properties you had set on the affected lyrics.

PROCEDURE

1. In Write mode, select the lyric you want to change.

   NOTE

   You can only change one lyric at a time.

2. Press **Return** or **Shift-L** to open the lyrics popover.
3. Change the existing text in the lyrics popover.
4. Optional: If you want to change other existing lyrics, advance the popover in one of the following ways:
   - To advance the popover to the next note if you entered a complete word, or the final syllable in a multi-syllabic word, press **Space**.

     Existing lyrics are automatically selected in the popover when you press **Space**.
   - To advance the popover to the next note if you entered one syllable of a multi-syllabic word, press **-**.
   - To move the cursor one character to the right, press **Right Arrow**.
   - To move the cursor one character to the left, press **Left Arrow**.

     The cursor automatically moves to the next/previous lyric/note if you keep pressing the arrow keys.
5. Press **Return** or **Esc** to close the popover when you have finished changing lyrics.

   The popover closes automatically when you reach the last note on the staff.

RELATED LINKS

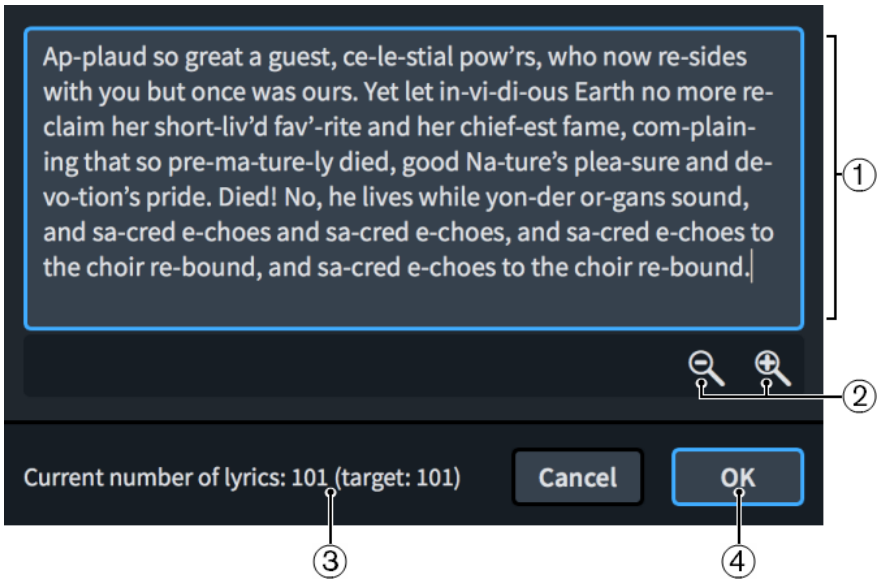
Lyric line numbers on page 626
Inputting lyrics on page 279

## Edit Lyrics dialog

The **Edit Lyrics** dialog allows you to view and edit entire lyric lines in one place and with the text displayed with consistent spacing. This is more convenient than changing each word/syllable individually alongside the music, where lyrics can be split up over large horizontal distances.

- You can open the **Edit Lyrics** dialog by making a selection that includes at least a single lyric and choosing **Edit** > **Lyrics** > **Edit Line of Lyrics**.

The dialog shows all lyrics in the same lyric line as the selected lyric and allows you to edit the lyrics, such as fixing misspellings, adding commas, or changing where in a word the hyphen is placed. If you selected multiple lyrics to open the dialog, Dorico Elements populates the dialog with the lyric line of the earliest lyric on the highest staff you selected.




**Edit Lyrics** dialog

The **Edit Lyrics** dialog comprises the following:

1 **Text editor**

Allows you to edit all the lyrics in the selected lyric line in the current flow, with hyphens and spaces as appropriate. For example, you can add a comma after the final syllable in a line for a poem setting or replace a hyphen with a space.

NOTE

You cannot add, delete, or change the duration/rhythmic position of lyrics, such as the number of notes to which each lyric applies.

2 **Zoom controls**

Allow you to increase/decrease the size of text in the dialog.

3 **Current number of lyrics**

Displays the number of lyrics currently shown in the text editor and the target number of lyrics in the lyric line. The target number is the number of lyrics that already exists in the selected lyric line in the flow.

The current number of lyrics updates automatically as you work in the dialog. Dorico Elements requires the current number and target number of lyrics to match before you can confirm the dialog.

4 **OK button**

Allows you to confirm your changes and close the dialog. You can only confirm the dialog when the current number and target number of lyrics match.

NOTE

Any properties you had previously set on any lyrics in the line, such as making them italic, are reset when you confirm the dialog.

# Showing lyrics in italics

You can show individual lyrics in an italic font without changing their font style, lyric type, or staff-relative placement.

PROCEDURE

1. Select the lyrics you want to show in an italic font.
2. In the Properties panel, activate **Italic** in the **Lyrics** group.

RESULT

The selected lyrics are shown in an italic font.

TIP

If you want to show lyrics in an italic font because they are intended to be either chorus lyrics or translation lyrics, you can change their lyric type instead.

RELATED LINKS

Changing the line number and type of lyric lines on page 627
Changing the type of individual lyrics on page 618

# Positions of lyrics

Dorico Elements automatically positions lyrics and makes adjustments to accommodate variations in the length of lyrics, including adjusting the horizontal alignment of lyrics in melismatic music.

NOTE

The horizontal position of lyrics is automatically adjusted in Dorico Elements to minimize changes to the note spacing. Syllables are moved by small amounts either left or right to accommodate longer syllables without distorting the appearance of note rhythms.

You can prevent Dorico Elements from considering lyrics in note spacing calculations using the **Make space for lyrics** option on the **Note Spacing** page in **Setup** > **Layout Options**; however, we recommend using this option with caution.

## Positions of syllables

The number of notes sung on syllables or words determines how the lyrics are positioned:

- Single syllables, which are whole words or parts of longer words that are sung on only one note, are centered on their corresponding note.
- Melismata, which are syllables or words that are sung on more than one note, are left-aligned with the left side of the first note to which they apply.

## Placement of lyric lines

Lyrics are placed relative to other lyric lines according to their line number. For example, lyrics in Line 1 are placed at the top, including when there are multiple lyric lines above the staff.

If a line of lyrics is missing across the width of a whole system, no additional gap is left between the remaining lines of lyrics.

EXAMPLE

You have three lines of lyrics, but one system does not have a second line of lyrics. On this system, the third line of lyrics is moved upwards, closer to the first line of lyrics.

If a subsequent system does not have a first line, but does have the second and third lines, then the second and third lines of lyrics are moved upwards. The second line of lyrics takes the place of the first line.

RELATED LINKS

Changing the staff-relative placement of lyric lines on page 628
Note Spacing page in Layout Options on page 362

## Moving lyrics rhythmically

You can move lyrics to new rhythmic positions after they have been input.

PROCEDURE

1. In Write mode, select the lyrics you want to move.
2. Move the lyrics according to the current rhythmic grid resolution in any of the following ways:
   - Press **Alt/Opt-Right Arrow** to move them to the right.
   - Press **Alt/Opt-Left Arrow** to move them to the left.

   NOTE

   You cannot move lyrics rhythmically with the mouse, you can only move them using the keyboard.

RESULT

The selected lyrics are moved to new rhythmic positions.

## Changing the alignment of lyrics relative to notes

By default, the center of lyrics is aligned horizontally with noteheads, but you can change the horizontal alignment of individual lyrics.

There is no default setting for the alignment of lyrics relative to notes, as Dorico Elements automatically adjusts the horizontal position of lyrics to minimize note spacing changes.

NOTE

Changing the alignment of lyrics manually overrides Dorico Elements's automatic spacing for the selected lyrics, meaning that note spacing at the affected rhythmic positions might change.

PROCEDURE

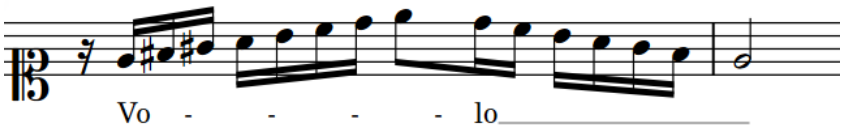
1. Select the lyrics whose alignment you want to change.
2. In the Properties panel, activate **Lyric text alignment** in the **Lyrics** group.
3. Select one of the following alignment options from the menu:
   - **Left**
   - **Center**
   - **Right**

RESULT

The alignment of the selected lyrics is changed.

# Lyric hyphens and lyric extender lines

Lyric hyphens indicate that individual lyrics are syllables within multi-syllabic words, for example, “Hal-le-lu-jah”. Lyric extender lines indicate that individual lyrics, either whole words or the last syllables in multi-syllabic words, extend across multiple notes.



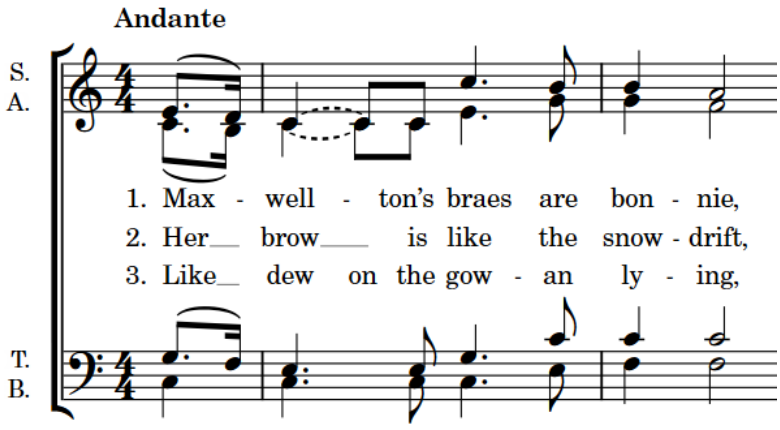

A phrase containing hyphens and an extender line

Dorico Elements automatically inputs and positions lyric hyphens when you advance the lyrics popover by pressing **-** between syllables, and lyric extender lines when you advance the lyrics popover by pressing **Space** multiple times after an entry.

# Lyric line numbers

Lyric line numbers are used to organize lyrics when a single musical passage can have different lyrics sung to it, such as music that contains multiple verses. In Dorico Elements, you can specify the line number of lyrics as you input them and by changing the line number of existing lyrics.

For example, if you input lyrics in Line 3 but later want to change those lyrics to Line 4 because you want to input different lyrics as Line 3, you can change your current Line 3 into Line 4, and then input a new line of lyrics as Line 3. The spacing is automatically adjusted to show lyric lines in the correct order.




The start of a choral piece with three lyric lines for its three verses

In Dorico Elements, you can have multiple lines of lyrics both above and below the same staff. Turning lyric lines into chorus lyric lines or lyric line translations changes both their placement and appearance as chorus lyrics generally use an italic font.

RELATED LINKS

Verse numbers on page 629
Filters for lyrics on page 616
Showing lyrics in italics on page 624

# Changing the line number and type of lyric lines

You can change the lyric line number of whole lyric lines after they have been input. You can also change whole lyric lines to chorus lines and lyric line translations.

For example, you can change the existing Line 1 into a lyric translation of Line 4, or change Line 2 into a chorus line.

TIP

To identify which line you are working on, select a syllable in the line of lyrics and check the number in the **Line number** value field in the **Lyrics** group of the Properties panel.

PROCEDURE

1. In Write mode, select a lyric in the line whose lyric line type you want to change. The lyric line can be above or below the staff.

   TIP

   You can also make a selection and use the lyric filters to select different lyric lines according to their line numbers.

2. Change the line type of the selected lyric line in one of the following ways:
   - Choose **Edit** > **Lyrics** > **Line** > **[Line number]**.
   - Choose **Edit** > **Lyrics** > **Line** > **Chorus**.
   - Choose **Edit** > **Lyrics** > **Translations** > **[Line number Translation]**.
   - Choose **Edit** > **Lyrics** > **Translations** > **Chorus Translation**.

   TIP

   You can also choose these options from the context menu.

RESULT

The line number or type of the whole lyric line of the selected lyric is changed.

NOTE

The position of the selected lyric line relative to other lyric lines at the same position might be changed. For example, if there were two lyric lines and you changed Line 1 to Line 3, it now appears below Line 2.

If a lyric line with the same number already exists at the same position on the same side of the staff, the two lines switch. For example, if there is already a Line 1 at the rhythmic position where you want to change Line 2 to Line 1, then the existing Line 1 becomes Line 2 to accommodate your most recent preference. The same applies to chorus lines and lyric line translations.

RELATED LINKS

Lyric line numbers on page 626
Types of lyrics on page 617
Filters for lyrics on page 616

## Changing the line number of individual lyrics

You can change the lyric line number of individually selected lyrics after they have been input.

PROCEDURE

1. Select the individual lyrics whose line number you want to change.
2. In the Properties panel, change the value for **Lyric number** in the **Lyrics** group.

RESULT

The line number of the selected lyrics is changed to match the value in the value field.

NOTE

The position of the selected lyrics relative to other lyric lines might be changed. For example, if there were two lyric lines and you changed lyrics in Line 1 to Line 3, they now appear below Line 2.

## Changing the staff-relative placement of lyric lines

You can change the staff-relative placement of whole lyric lines after they have been input.

PROCEDURE

1. In Write mode, select a lyric in each line whose staff-relative placement you want to change.

   TIP

   You can also make a selection and use the lyric filters to select different lyric lines according to their line numbers and staff-relative placement.

2. Select the staff-relative placement you want in one of the following ways:
   - Choose **Edit** > **Lyrics** > **Placement** > **Above**.
   - Choose **Edit** > **Lyrics** > **Placement** > **Below**.

   TIP

   You can also choose these options from the context menu.

RESULT

The staff-relative placement of the whole lyric lines in which you selected lyrics is changed.

NOTE

If other lyric lines with the same lyric line number exist at the same position on the side of the staff to which you want to change your current selection, the two lines switch sides. For example, if there is already a Line 2 above the staff at the position where you want to change the placement of Line 2 below the staff, then the existing Line 2 above the staff is placed below the staff to accommodate your most recent preference.

RELATED LINKS

Lyric line numbers on page 626
Filters for lyrics on page 616
Changing the line number and type of lyric lines on page 627

## Changing the staff-relative placement of individual lyrics

You can change the staff-relative placement of individual lyrics within lyric lines.

PROCEDURE

1. Select the lyrics whose staff-relative placement you want to change.
2. In the Properties panel, choose one of the following options for **Line placement** in the **Lyrics** group:
   - **Above**
   - **Below**

RESULT

The staff-relative placement of the selected individual lyrics is changed.

NOTE

If other lyric lines with the same lyric line number already exist at the same position on the same side of the staff, the two lines collide. To avoid this, change the lyric line number of one of the lyric lines, or change their staff-relative placement by choosing **Edit** > **Lyrics** > **Placement** and selecting an option from the menu, which avoids collisions.

# Verse numbers

Verse numbers indicate the order in which lyrics are sung when multiple lines of lyrics share the same musical passage. They are commonly used in hymns and song sheets.

Depending on the type of music you are writing, verse numbers might not be appropriate. Therefore, hiding/showing verse numbers in Dorico Elements is optional. By default, verse numbers are not shown. You can hide/show verse numbers on individually selected lyrics.

NOTE

Lyric line translations are part of the lyric line of which they are a translation so do not have their own verse number.

## Hiding/Showing verse numbers on individual lyrics

You can hide/show verse numbers on individual lyrics, for example, if you want to show the verse number at the start of every system.

PROCEDURE

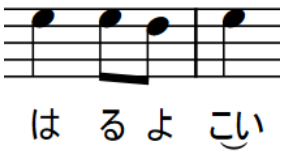
1. Select the lyrics before which you want to hide/show verse numbers.
2. In the Properties panel, activate/deactivate **Show verse number** in the **Lyrics** group.
3. Activate/Deactivate the corresponding checkbox.

RESULT

Verse numbers are shown before the selected lyrics when the checkbox is activated, and hidden when the checkbox is deactivated.

# East Asian elision slurs

East Asian elision slurs are used to show that two or more characters in East Asian languages are part of the same lyric.




A phrase containing an East Asian elision slur

You can hide/show East Asian elision slurs on individual lyrics.

## Hiding/Showing East Asian elision slurs

You can hide/show East Asian elision slurs for individual lyrics.

PROCEDURE

1. Select the lyrics on which you want to show East Asian elision slurs.
2. In the Properties panel, activate/deactivate **Show East Asian elision slur** in the **Lyrics** group.
3. Activate/Deactivate the corresponding checkbox.

RESULT

East Asian elision slurs are shown on the selected lyrics when the checkbox is activated, and hidden when the checkbox is deactivated.

# Notes

Notes are shapes that are positioned on staves to indicate musical pitches. Notes are most commonly shown with oval-shaped, round noteheads that are either filled or void depending on their duration, but there are many different designs of noteheads that you can use.

Depending on their duration, notes can have stems that help indicate their duration.

In Dorico Elements, a sequence of adjacent notes joined with ties is considered a single note of the total duration of the tie chain, rather than separate notes. Note grouping is automatically adjusted according to the prevailing beat grouping, which is normally set by the time signature.

RELATED LINKS
Inputting notes on page 164
Note spacing on page 361
Stems on page 814
Changing the notehead design of individual noteheads on page 636
Add intervals popover on page 189
Adding notes above/below existing notes on page 189
Bracketed noteheads on page 640
Ties on page 831
Note and rest grouping on page 524
Beam grouping according to meters on page 510

## Notehead sets

A notehead set is a collection of related noteheads that together allow you to represent all the different noteheads required for the different durations used in music notation.

A typical notehead set contains at least four noteheads:

- A black notehead for quarter notes (crotchets) and shorter
- A white notehead for half notes (minims)
- A wider white notehead for whole notes (semibreves)
- A wider white notehead with one or two vertical strokes on either side, or a square white notehead, for double whole notes (breves)

Pitch-dependent notehead sets contain noteheads that vary according to the pitch of notes rather than their duration.

- In *pitched* notehead sets, there are different noteheads for different pitches.

  For example, the Pitch Names notehead set shows the letter name and any applicable accidental of each note within its notehead.
- In *scale degree* notehead sets, there is a different notehead for each scale degree, relative to the current key signature.

  For example, the Aikin 7-shape notehead set uses a different notehead shape for each pitch.

NOTE

- A single notehead can appear in multiple notehead sets. If you edit a notehead within one notehead set, your changes affect the appearance of that notehead in all notehead sets that contain it.

- Notehead sets can only contain noteheads of the same type. For example, you cannot use a normal notehead in a pitched notehead set.
- You cannot change the type of an existing notehead set or an existing notehead.

RELATED LINKS
Pitch-dependent notehead set designs on page 635

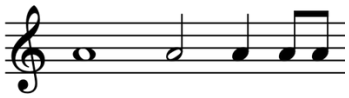
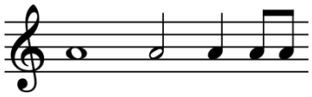
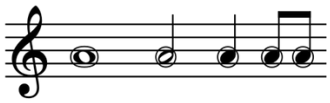
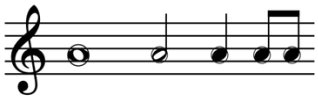
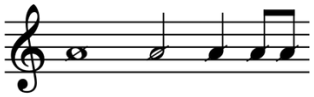
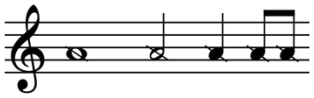
## Notehead set designs

There are a number of different notehead set designs that you can use for individual noteheads in Dorico Elements.

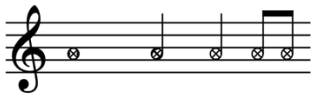
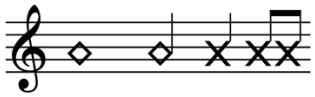
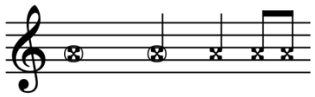
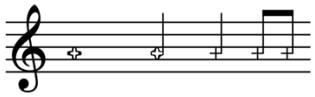
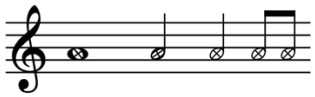
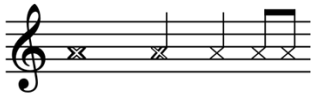
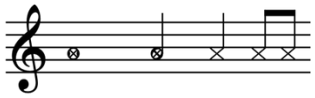
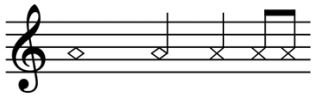
- You can find the available notehead designs by choosing **Edit** > **Notehead** > **[Notehead type]** > **[Notehead design]**.

NOTE

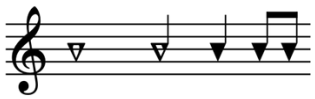
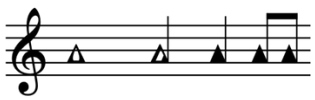
Dorico Elements does not offer stemless noteheads.

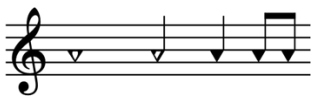
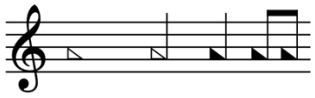
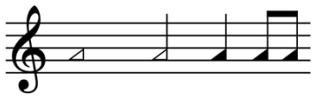
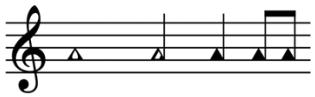
| Notehead set design | Notehead set name |
|---|---|
|  | Larger Noteheads |
|  | Default Noteheads |
|  | Large Circled Noteheads |
|  | Circled Noteheads |
|  | Slashed Noteheads (Bottom Left to Top Right) |
|  | Slashed Noteheads (Top Left to Bottom Right) |

### Cross noteheads

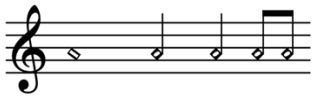
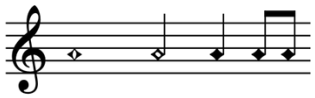
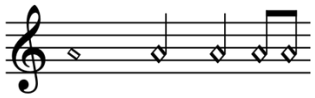
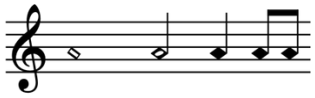
| Notehead set design | Notehead set name |
| --- | --- |
|  | Circle X Noteheads |
|  | Large X and Diamond Noteheads |
|  | Ornate X Noteheads |
|  | Plus Noteheads |
|  | With X Noteheads |
|  | X Noteheads |
|  | X and Circle X Noteheads |
|  | X and Diamond Noteheads |

### Triangular noteheads

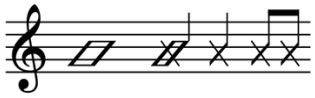
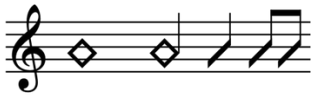
| Notehead set design | Notehead set name |
| --- | --- |
|  | Large Arrow Down Noteheads |
|  | Large Arrow Up Noteheads |

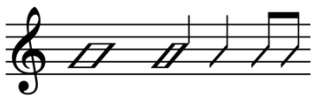
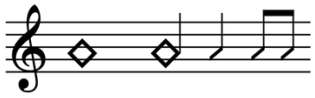
| Notehead set design | Notehead set name |
| --- | --- |
|  | Triangle Down Noteheads |
|  | Triangle Left Noteheads |
|  | Triangle Right Noteheads |
|  | Triangle Up Noteheads |

**Diamond noteheads**

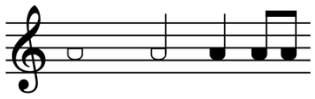
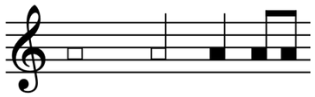
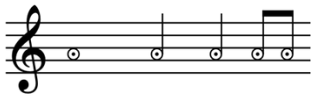
| Notehead set design | Notehead set name |
| --- | --- |
|  | Diamond Noteheads |
|  | Old-Style Diamond Noteheads |
|  | White Diamond Noteheads |
|  | Wide Diamond Noteheads |

**Slash noteheads**

| Notehead set design | Notehead set name |
| --- | --- |
|  | Muted Slash Noteheads |
|  | Oversized Slash Noteheads |

| Notehead set design | Notehead set name |
| --- | --- |
|  | Slash Noteheads |
|  | Small Slash Noteheads |

**Round and square noteheads**

| Notehead set design | Notehead set name |
| --- | --- |
|  | Moon Noteheads |
|  | Rectangular Noteheads |
|  | Round White with Dot Noteheads |

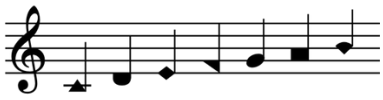
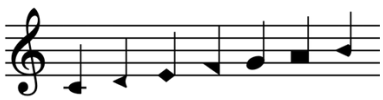
RELATED LINKS
Changing the notehead design of individual noteheads on page 636

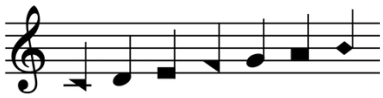
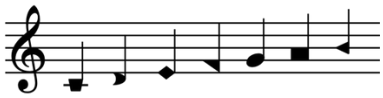
## Pitch-dependent notehead set designs

Pitch-dependent notehead sets use different notehead designs or different notehead colors depending on the pitch of notes. There are a number of different pitch-dependent notehead sets available in Dorico Elements.

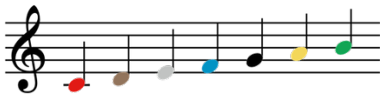
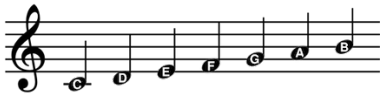
- You can find the available notehead designs by choosing **Edit** > **Notehead** > **[Notehead type]** > **[Notehead design]**.

**Scale degree noteheads**

| Notehead set design | Notehead set name |
| --- | --- |
|  | Aikin 7-shape Noteheads |
|  | Funk 7-shape Noteheads |

| Notehead set design | Notehead set name |
| --- | --- |
|  | Walker 4-shape Noteheads |
|  | Walker 7-shape Noteheads |

**Pitched noteheads**

| Notehead set design | Notehead set name |
| --- | --- |
|  | Figurenotes© Noteheads |
|  | Pitch Name Noteheads |

RELATED LINKS
Notehead sets on page 631
Changing the notehead design of individual noteheads on page 636

# Changing the notehead design of individual noteheads

You can change the notehead design of individual noteheads, including trill auxiliary notes. For example, cross noteheads might be used to indicate where players should produce pitchless sounds, such as air sounds on wind instruments.

NOTE

These steps do not apply to notes in slash voices.

PROCEDURE

1. Select the noteheads whose design you want to change.
2. Choose **Edit** > **Notehead** > **[Notehead type]** > **[Notehead design]**. You can also choose these options from the context menu.

   For example, to change the notehead design of the selected notes to X noteheads, choose **Edit** > **Notehead** > **Crosses** > **X Noteheads**.

RESULT

The notehead design of the selected notes is changed.

RELATED LINKS
Rhythm slashes on page 763
Slash voices on page 890

# Changing the size of notes

You can change the size of notes individually using the default scale sizes for notes in cues or grace notes, or you can use a custom scale size.

TIP

If you want to change the size of notes because you want them to be grace notes or cues, you can input them as either grace notes or cues instead.

PROCEDURE

1. Select the notes whose size you want to change.
2. In the Properties panel, activate any of the following properties in the **Common** group:
   - If you want to use a default scale size, activate **Scale**.
   - If you want to use a custom scale size, activate **Custom scale**.
   - If you want to use a custom scale size based on a default scale size, activate both **Scale** and **Custom scale**.
3. Optional: If you activated **Scale**, select one of the following options from the menu:
   - **Normal**
   - **Grace**
   - **Cue**
   - **Cue grace**
4. Optional: If you activated **Custom scale**, change the value in the value field.

RESULT

- If you activated **Scale**, the selected notes are changed to the selected default scale size.
- If you activated **Custom Scale**, the selected notes are changed to the custom percentage scale size you set.
- If you activated both **Scale** and **Custom Scale**, the selected notes are changed to the custom percentage scale size of the selected default scale size. For example, if you selected **Grace** for **Scale** then set **Custom Scale** to **50**, the size of the selected notes is half the size of grace notes.

RELATED LINKS

Inputting grace notes on page 184
Notehead set designs on page 632

# Moving notes rhythmically

You can move notes, including grace notes, to different rhythmic positions along staves after they have been input.

NOTE

Although these steps can apply to tuplet notes, their behaviour depends on whether or not you have selected their tuplet brackets or tuplet numbers/ratios. We recommend following the dedicated steps for moving tuplets.

PROCEDURE

1. In Write mode, select the notes you want to move.

2. Move the selected notes according to the current rhythmic grid resolution in any of the following ways:
   - Press **Alt/Opt-Right Arrow** to move them to the right.
   - Press **Alt/Opt-Left Arrow** to move them to the left.

RESULT

The selected notes are moved to new rhythmic positions. If you selected multiple notes, they are moved together as a block.

Notes are automatically positioned according to their rhythmic duration and position relative to other notes.

NOTE

If **Chords** is not activated and any of your selected notes collide with other notes in the same staff and at the same rhythmic position that are in the same voice as your selected notes, the existing notes are deleted and replaced with your selected notes.

You can undo moving notes immediately, which restores any notes deleted in the process.

RELATED LINKS

Moving tuplets rhythmically on page 862
Rhythmic grid on page 158
Inputting chords on page 185
Notes toolbox on page 149
Note spacing on page 361
Creating cross-staff beams on page 517
Moving notes to other staves on page 318

# Specifying the string for individual notes

You can specify on which string individually selected notes are played for notes belonging to string instruments, such as violin, cello, or guitar. Many notes can be played on multiple strings, depending on where along its length the string is stopped.

Specifying the string can be useful for notes that also have glissando lines or fingering shifts, as the string and finger position required to play the note affects the direction of these changes. However, the string number is not shown in the music. You can instead input fingerings, which can help string players understand the string on which they should play.

NOTE

You can only specify strings on notes belonging to string instruments.

PROCEDURE

1. Select the notes whose assigned string you want to change.

   NOTE

   If selecting multiple notes at once, select notes only in staves of the same instrument type. For example, select multiple Cs in Violin 1 and Violin 2 staves.

2. In the Properties panel, activate **String** in the **Notes and Rests** group.
3. Select your preferred string from the menu.

The string number for the instrument is shown, followed by the fundamental pitch and the octave number of that string in parentheses. For example, the lowest cello string is expressed as **4 (C2)**.

NOTE

The options available in the menu depend on the selected pitches and the instrument type.

RESULT

The string on which the selected notes are played is changed.

NOTE

If you subsequently change the pitches of notes, **String** is automatically deactivated for all notes that can no longer be played on their specified string.

RELATED LINKS

Glissando lines on page 672
Changing the direction of string fingering shift indicators on page 588
String indicators on page 590
Inputting string indicators inside the staff on page 275

# Hiding/Showing colors for notes out range

You can show colors for notes that are considered out of range, such as notes too high/low for the instrument to play or the voice type to sing, or pitches that do not fit with the current harp pedal settings. When colors for notes out of range are hidden, all notes appear black by default.

Colors for notes out of range are considered annotations and are not printed by default.

PROCEDURE

- Choose **View** > **Note And Rest Colors** > **Notes Out Of Range**.

RESULT

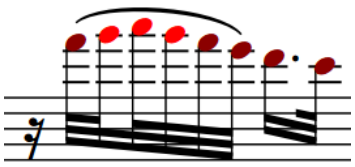
Notes out of range appear red when a tick appears beside **Notes Out Of Range** in the menu, and black when no tick appears.

Notes that are considered challenging are shown in a darker red, while notes that are impossible or virtually impossible are shown in a bright red.

NOTE

Notes out of the fret range of the corresponding string on tablature are always shown as question marks, even if you do not show colors for notes out of range.

EXAMPLE



Colors for notes out of range shown. Three notes in the middle of the phrase are bright red, while the rest are the darker red.

AFTER COMPLETING THIS TASK

If showing colors for notes out of range reveals some notes do not fit with the current harp pedal settings, you can input a new pedal diagram for that passage or calculate a suitable harp pedal diagram.

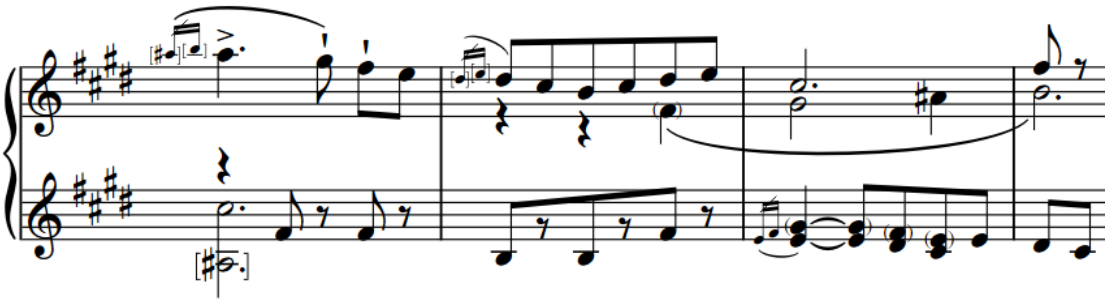
RELATED LINKS

Inputting harp pedal diagrams on page 272
Calculating harp pedal diagrams based on existing music on page 272
Annotations on page 476

# Bracketed noteheads

Bracketed noteheads are often used to indicate that notes are optional, editorial, not played in all playthroughs in music with repeats, or pressed down but not fully struck on the piano. In Dorico Elements, you can show brackets on any notehead.

Notehead brackets extend slightly above and below noteheads so it is clear which notes are included in each bracket.



A phrase containing round and square notehead brackets

You can also show brackets on noteheads on notation staves and tablature independently of each other.

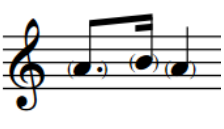
The following types of notehead brackets are available in Dorico Elements:

**Round notehead brackets**

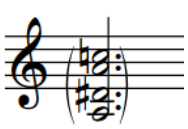
Round notehead brackets have a similar appearance to slurs, but vertical.

NOTE

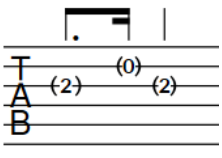
On tablature, round brackets are automatically shown around the second note/chord and all subsequent notes/chords in tie chains. If you show brackets around all noteheads in tie chains on tablature, these automatic notehead brackets are included.



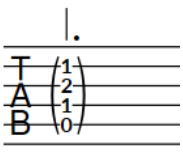
Round brackets on single noteheads on a notation staff



Round bracket on a chord on a notation staff



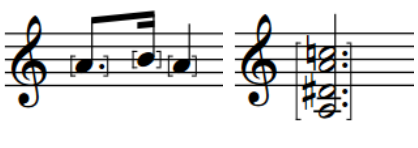

Round brackets on single noteheads on tablature




Round bracket on a chord on tablature

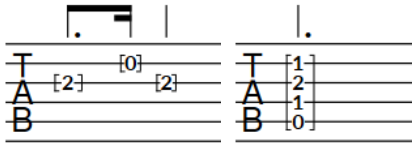
**Square notehead brackets**

Square notehead brackets comprise a straight vertical line with horizontal hooks at the top and bottom. Dorico Elements automatically adjusts the length of square brackets to ensure they do not end on staff lines and their hooks remain visible.



Square brackets on single noteheads on a notation staff

Square bracket on a chord on a notation staff



Square brackets on single noteheads on tablature

Square bracket on a chord on tablature

RELATED LINKS

Showing brackets around one/all noteheads in tie chains on page 642
Showing notes as dead notes on page 812
Inputting notes on page 164
Ties on page 831

# Showing brackets on noteheads

You can show round or square brackets on individual noteheads, on single notes within chords, and on whole chords. For example, if you want to indicate that specific notes are optional or an editorial change, or to show notes belonging to unpitched percussion instruments as ghost notes.

NOTE

If you want to show brackets on noteheads to represent dead notes, you can instead show notes as dead notes.

PROCEDURE

1. Select the noteheads on which you want to show brackets.

   NOTE

   - If you want to show brackets on whole chords, you must select all notes in those chords.
   - If you want to show brackets on both notation staves and tablature, you must select notes on both.

2. In the Properties panel, activate **Bracket style** in the **Bracketed Noteheads** group.
3. Choose one of the following options:
   - **Round**
   - **Square**

RESULT

The corresponding type of notehead brackets is shown on the selected notes. If you only selected notes on tablature, brackets are not shown on the corresponding notes on the notation staff, and vice versa.

If you selected notes in tie chains, only the first noteheads in the tie chains are bracketed.

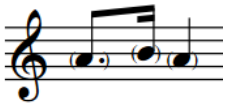
If you selected all notes in chords, Dorico Elements shows a single bracket for each chord unless they contain very large gaps, in which case Dorico Elements automatically splits brackets. If you selected individual notes within chords, they are each shown with separate brackets.

TIP

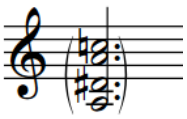
- Deactivating **Bracket style** hides brackets on the selected notes.
- You can also hide/show brackets on noteheads by choosing **Edit** > **Notehead** > **Toggle Round Brackets** or **Edit** > **Notehead** > **Toggle Square Brackets**. You can also choose these options from the context menu.

  You can assign key commands for these options on the **Key Commands** page in **Preferences**.

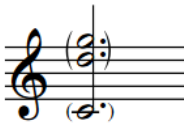
EXAMPLE



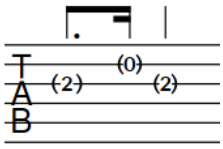
Round brackets on single noteheads on a notation staff



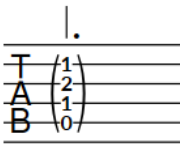
Round bracket on a chord on a notation staff



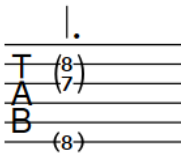
Split round bracket on a chord on a notation staff




Round brackets on single noteheads on tablature




Round bracket on a chord on tablature




Split round bracket on a chord on tablature

RELATED LINKS
Showing notes as dead notes on page 812
Inputting notes on page 164

## Showing brackets around one/all noteheads in tie chains

You can change whether brackets appear only on the first notehead in tie chains or span the entire duration of the tie chain, that is, with the left bracket on the first notehead and the right bracket on the last notehead in the tie chain. By default, brackets appear only on the first notehead in tie chains.

PREREQUISITE

You have shown brackets on the required notes.

PROCEDURE

1. Select the notes whose notehead bracket positions relative to tie chains you want to change.
2. In the Properties panel, activate/deactivate **Bracket until end of tie chain** in the **Bracketed Noteheads** group.

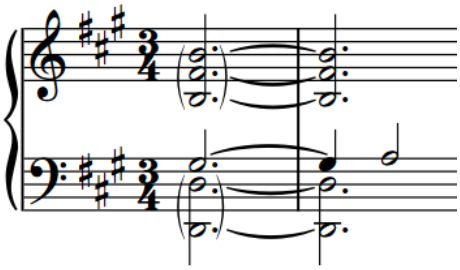
RESULT

Brackets appear at the start and end of the selected tie chains when **Bracket until end of tie chain** is activated, and only around the first note/chord when it is deactivated.

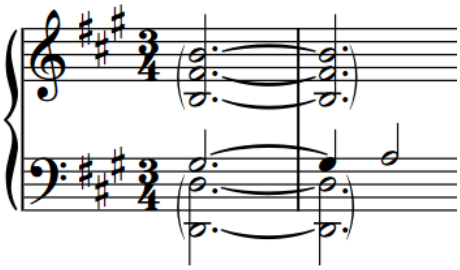
If you activated **Bracket until end of tie chain** for a single note in a bracketed chord, the bracket on the first chord is not split but an additional bracket appears at the end of the tie chain for the selected note only. If you deactivated **Bracket until end of tie chain** for a single note in a bracketed chord whose other notes are bracketed to the end of the tie chain, the bracket at the end of the tie chain is split.

If you selected notes on tablature, the automatic brackets shown around the second note/chord and all subsequent notes/chords in tie chains are updated to follow your property setting.

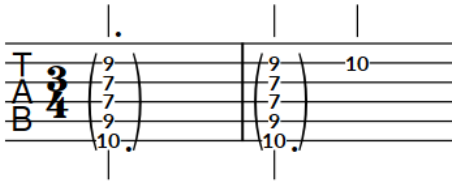
EXAMPLE



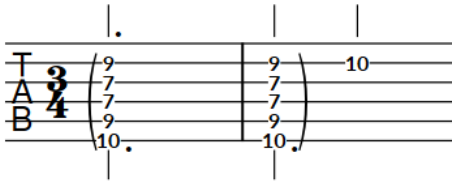
Brackets around only the first chords in tie chains on a notation staff



Brackets at the start and end of whole tie chains on a notation staff




Brackets around only the first chord in a tie chain, with automatic brackets shown on the second chord on tablature




Brackets around the start and end of the whole tie chain on tablature

RELATED LINKS

Ties on page 831

## Splitting brackets on chords

You can split brackets on any notehead within a chord. By default, Dorico Elements automatically shows a single bracket for all notes in a chord unless it contains very large gaps, in which case Dorico Elements automatically splits brackets.

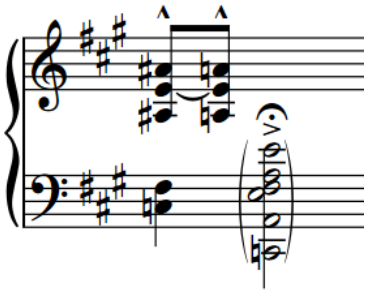
PROCEDURE

1. Select the individual notes in chords immediately above where you want to split brackets.
2. In the Properties panel, activate **Break bracket** in the **Bracketed Noteheads** group.

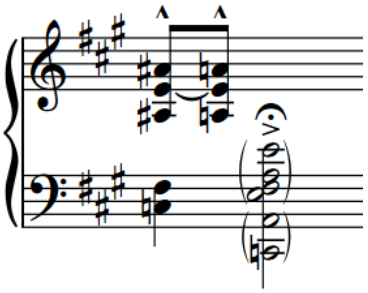
RESULT

Brackets are split immediately below the selected notes.

EXAMPLE



Chord with single round bracket



Chord with split round bracket

RELATED LINKS

Inputting chords on page 185

# Harmonics

Harmonics are pitches produced by touching resonating strings at specific positions along their length, allowing the corresponding harmonic partial to sound. Harmonics often have a high pitch with a glassy, purer sound than stopped pitches. There are two different types of harmonics: natural and artificial.

Harmonic partials are numbered according to their order in the harmonic series, which also correlates to the node on the string which produces them. For example, the second partial in the harmonic series is produced by the node halfway along a string, that is, the node that divides the string into two equal parts. The third partial is produced by the node that divides the string into thirds, and so on.

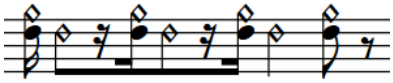
**Natural harmonics**

Natural harmonics are produced by touching an open string at one of its nodes and then bowing or plucking the string. The sounding pitch of the resulting harmonic varies according to the node and its corresponding partial in the harmonic series. For example, touching the node halfway along a string produces the second partial, which sounds an octave above the open string pitch.

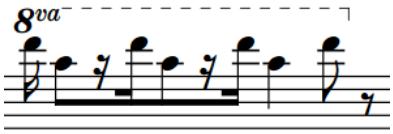
**Artificial harmonics**

Artificial harmonics are produced by stopping a string fully (as if playing a normal note) and then touching the string at one of the nodes of its stopped length. The sounding pitch of the resulting harmonic varies according to the node and its corresponding partial in the harmonic series. For example, touching the node that is the equivalent of a fourth higher than the stopped pitch produces the fourth partial, which sounds two octaves above the stopped pitch.

To produce artificial harmonics, players must both fully stop the string and touch the string at the correct node. This can be more difficult to produce than natural harmonics.



A passage for violin alternating between artificial and natural harmonics on the A string




The sounding pitches of the same passage

Dorico Elements supports multiple conventions for the notation of harmonics on stringed and fretted instruments, including for both natural and artificial harmonics. For artificial harmonics shown using two noteheads, one normal and one diamond, Dorico Elements automatically calculates the correct pitch for the touched pitch diamond notehead for the second to sixth harmonic partials. These pitches are reflected in playback, using dedicated sounds for harmonics if the corresponding playback device includes them.

RELATED LINKS

Hiding/Showing or parenthesizing accidentals on page 480
Changing the harmonic partial on page 647
Appearances/Styles of harmonics on page 648

# Turning notes into harmonics

You can turn existing notes into artificial and natural harmonics. Harmonics can represent either the sounding, touched, or stopped pitch.

PREREQUISITE

You have input the notes you want to turn into harmonics. However, the pitch you should input depends on the style/appearance you want to use.

- For natural harmonics, we recommend that you input the desired sounding pitch.
- For artificial harmonics, we recommend that you input the stopped pitch.

PROCEDURE

1. Select the notes you want to turn into harmonics.
2. In the Properties panel, activate **Type** in the **Harmonics** group.
3. Choose one of the following options:
    - **Artificial**
    - **Natural**

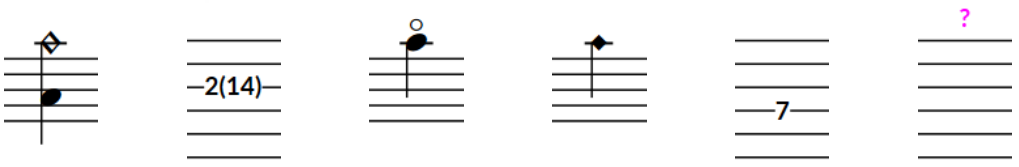
RESULT

The selected notes are turned into harmonics of the corresponding type. If the corresponding playback device has dedicated sounds for harmonics, the selected notes automatically use those sounds. The sounding pitch of artificial harmonics in playback is also changed accordingly.

- Artificial harmonics represent the second partial by default. They are shown with a diamond notehead indicating the touched pitch an octave above the selected notes. On tablature, the stopped fret is shown on the left and the touched fret is shown on the right in parentheses.
- Natural harmonics represent the sounding pitch by default. They are shown with a circle symbol above the selected notes. On fretted instrument notation staves, natural harmonics appear as black diamond noteheads. On tablature, the fret of the touched pitch is shown, if it can be calculated; if it cannot be calculated, a pink question mark is shown above the tablature.

EXAMPLE

The following examples show the default appearances of natural and artificial harmonics on different staves.




Artificial harmonic on notation staff (any instrument)

Artificial harmonic on tablature

Natural harmonic on non-fretted instrument staff

Natural harmonic on fretted instrument notation staff

Natural harmonic on tablature

Natural harmonic on tablature that cannot be calculated

AFTER COMPLETING THIS TASK

You can change the partial for harmonics. You can also change the appearance of natural harmonics and the type of artificial harmonics.

If you want to turn harmonics back into normal notes, deactivate **Type** in the **Harmonics** group.

RELATED LINKS
Inputting notes on page 164
Changing the appearance of natural harmonics on page 650
Changing the style of artificial harmonics on page 651
Tablature on page 809

# Changing the harmonic partial

By default, harmonics indicate the second partial in the harmonic series, which is an octave above the fundamental. You can change the partial for individual harmonics, for example, if you want a higher partial instead.

NOTE

Dorico Elements can only correctly calculate artificial harmonic partials for nodes two to six.

PROCEDURE

1. Select the harmonics whose partial you want to change.
2. In the Properties panel, activate **Partial** in the **Harmonics** group.
3. Change the value in the value field to the node at which the string should be touched to produce the partial you want.

RESULT

The partial of the selected harmonics is changed. For artificial harmonics using the **Normal** type, the pitch of the white diamond notehead/parenthesized fret number is updated automatically. The sounding pitch of artificial harmonics in playback is also changed accordingly.

EXAMPLE

**Artificial harmonic with default partial (notation and tablature)**


**Partial changed to the fifth (notation and tablature)**


RELATED LINKS
Tablature on page 809
Changing the style of artificial harmonics on page 651

# Hiding/Showing or parenthesizing harmonic accidentals

You can show harmonic accidentals in round or square brackets and hide/show accidentals individually, independently of hiding/showing or parenthesizing accidentals of stopped pitch notes.

PROCEDURE

1. Select the harmonics whose accidentals you want to hide/show or parenthesize.
2. In the Properties panel, activate **Accidental** in the **Harmonics** group.
3. Select one of the following options from the menu:
   - **Hide**
   - **Show**
   - **Round brackets**
   - **Square brackets**

RESULT

Accidentals on the selected harmonics are shown, hidden, or shown in round or square brackets.

NOTE

- Hiding accidentals does not affect the pitch of notes in playback.
- If you are hiding/showing many accidentals, we recommend that you consider changing the accidental duration rule.
- You can assign key commands for different accidental hiding, showing, and parenthesizing commands on the **Key Commands** page in **Preferences**.

AFTER COMPLETING THIS TASK

You can also hide/show or parenthesize accidentals on the normal noteheads that indicate the stopped pitch for artificial harmonics shown using diamond noteheads.

RELATED LINKS

Hiding/Showing or parenthesizing accidentals on page 480

# Appearances/Styles of harmonics

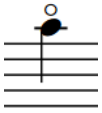
Both artificial and natural harmonics can be notated in different ways. In Dorico Elements, it is possible to indicate the desired sounding pitch, either the stopped or touched pitch, or both stopped and touched pitches for individual harmonics.

In this documentation we refer to “styles” of artificial harmonics, because one artificial harmonic style indicates the use of a different performance technique, and “appearances” of natural harmonics, as their different appearances do not indicate different performance techniques.

## Natural harmonics

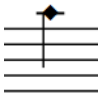
**Circle above**

Shows a harmonic circle symbol on the notehead side of notes. Usually indicates the desired sounding pitch of the harmonic. Used for natural harmonics on staves that do not belong to fretted instruments by default, such as violin.



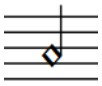
**Diamond notehead**

Changes the notehead of notes to a diamond notehead. The diamond notehead appears black/filled when the note is a quarter note or shorter, and white/unfilled when the note is a half note or longer. Usually indicates the touched pitch required. Used for natural harmonics on fretted instrument notation staves by default.

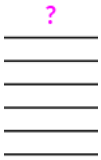


**White diamond notehead**

Changes the notehead of notes to a diamond notehead that is always unfilled, regardless of the duration of notes. Usually indicates the touched pitch required.



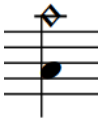
On tablature, the touched fret is always shown for natural harmonics, regardless of the selected appearance. If the touched fret cannot be calculated, a pink question mark is shown.



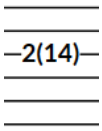

## Artificial harmonics

**Normal**

Shows two noteheads: one indicating the stopped pitch, the other the touched pitch. The touched pitch is automatically calculated based on the partial; the default partial is the second partial. On tablature, the stopped fret is shown on the left and the touched fret is shown on the right in parentheses. This is the default appearance of artificial harmonics on all staves.



**Normal** artificial harmonic on notation staff



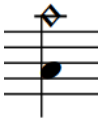

**Normal** artificial harmonic on tablature

**Pinch**

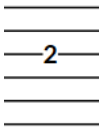
Shows two noteheads: one indicating the stopped pitch, the other the sounding pitch. The sounding pitch is automatically calculated based on the partial; the default partial is the second partial. On tablature, only the stopped fret is shown.

NOTE

Intended for fretted instruments only. A pinch is produced by the performer catching a resonating string at a node near the pick-ups, producing a high-pitched squeal. Also known as a “false harmonic” or “squeal”.



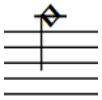
**Pinch** harmonic on notation staff



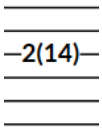

**Pinch** harmonic on tablature

**Single notehead (sounding)**

Shows a single notehead indicating the sounding pitch. On tablature, the stopped fret is shown on the left and the sounding pitch is shown on the right in parentheses.



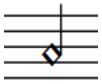
**Single notehead (sounding)** artificial harmonic on notation staff



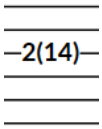

**Single notehead (sounding)** artificial harmonic on tablature

**Single notehead (stopped)**

Shows a single notehead indicating the stopped pitch. On tablature, the stopped fret is shown on the left and the touched fret is shown on the right in parentheses.



**Single notehead (stopped)** artificial harmonic on notation staff




**Single notehead (stopped)** artificial harmonic on tablature

RELATED LINKS

Tablature on page 809

## Changing the appearance of natural harmonics

By default, natural harmonics appear as normal noteheads with a circle shown above, which indicates the desired sounding pitch. You can change the appearance of natural harmonics

individually, for example, to show them as a white diamond notehead to indicate the touched pitch.

NOTE

These steps only apply to harmonics with the **Natural** type.

PROCEDURE

1. Select the natural harmonics whose appearance you want to change.
2. In the Properties panel, activate **Style** in the **Harmonics** group.
3. Select one of the following options from the menu:
   - **Circle above**
   - **Diamond notehead**
   - **White diamond notehead**

RESULT

The appearance of the selected natural harmonics is changed, including on fretted instrument notation staves. The touched pitch shown on tablature is not changed automatically.

NOTE

- Changing the appearance of natural harmonics does not automatically change their notated pitch. For example, if you want to change a sounding pitch **Circle above** harmonic to a touched pitch **White diamond notehead** harmonic, you must also change the pitch of the note.
- Dorico Elements automatically assigns natural harmonics with the **White diamond notehead** style to the lowest possible string for that harmonic. You can specify different strings if necessary.
- You can change the staff-relative placement of harmonic circle symbols by activating **Placement** in the **Harmonics** group of the Properties panel and choosing the option you want.

RELATED LINKS

Changing the pitch of individual notes on page 191
Specifying the string for individual notes on page 638

## Changing the style of artificial harmonics

By default, artificial harmonics appear as two noteheads: one normal, which indicates the stopped pitch, and one diamond, which indicates the touched pitch. You can change the style of artificial harmonics individually, for example, to indicate pinch harmonics.

NOTE

These steps only apply to harmonics with the **Artificial** type.

PROCEDURE

1. Select the artificial harmonics whose style you want to change.
2. In the Properties panel, activate **Style** in the **Harmonics** group.
3. Select one of the following options from the menu:
   - **Normal**

- **Pinch**
- **Single notehead (sounding)**
- **Single notehead (stopped)**

RESULT

The style of the selected artificial harmonics is changed.

NOTE

**Pinch** indicates the use of a different technique to produce the harmonic.

RELATED LINKS

Hiding/Showing or parenthesizing accidentals on page 480

# Ornaments

Ornaments are markings that indicate multiple notes are played in addition to the notated pitch. They are used to decorate music, such as in Baroque music, which is highly decorated with trills and other ornaments.

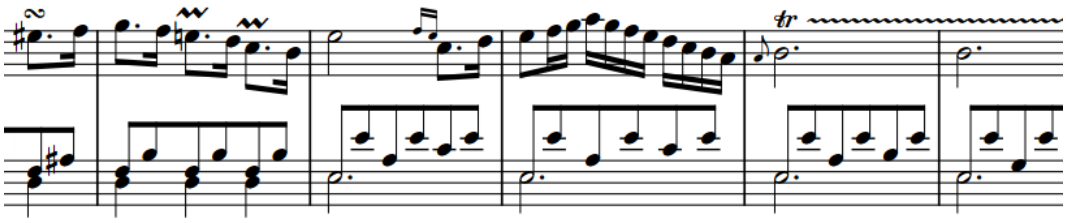
Over time, specific ways of notating how performers should play notes have developed and different ornament symbols indicate different patterns of decorative notes. Nonetheless, ornaments give some freedom to performers to embellish music in their own way.

Dorico Elements offers a range of ornament symbols to allow you to notate different styles of ornaments.

The term “ornaments” covers a wide range of decorative notes, including:

- Mordents
- Trills
- Turns
- Grace notes
- Acciaccaturas
- Appoggiaturas

In Dorico Elements, the term “ornaments” refers to ornament symbols and trill marks that are input above notes.



A phrase containing a turn, short trills, and a trill with extension line

RELATED LINKS

Input methods for ornaments, arpeggio signs, glissando lines, guitar bends, and jazz articulations on page 251
Grace notes on page 596
Positions of ornaments on page 654

## Changing ornament intervals

You can change the intervals of ornaments, both above and below the notated pitch, to indicate which pitches are played in the ornament. The intervals of ornaments are indicated by accidentals.

For some ornaments, you can only change the interval in one direction. For example, you can only change the interval above short trills and below mordents.

NOTE

These steps do not apply to trills.

PROCEDURE

1. Select the ornaments whose interval you want to change.
2. In the Properties panel, activate the appropriate properties for the selected ornaments in the **Ornaments** group:
   - **Interval above**
   - **Interval below**

   For trills, activate **Interval** in the **Trills** group of the Properties panel.
3. Change the value in the value field to the interval you want.
   - **0** or **4** and above shows no accidental.
   - **1** shows a flat.
   - **2** shows a natural.
   - **3** shows a sharp.

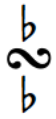
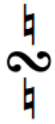
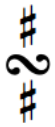
RESULT

The interval of the selected ornaments is changed.

NOTE

Some ornaments do not show accidentals either above or below, depending on their type.

EXAMPLE

| No accidentals | Flats above and below | Naturals above and below | Sharps above and below |
|---|---|---|---|
|  |  |  |  |

RELATED LINKS
Changing the intervals of existing trills on page 660

# Positions of ornaments

Ornaments, including trills, are placed above the notes to which they apply. They are only placed below the staff for down-stem voices in multiple-voice contexts.

Ornaments and trills are positioned outside of slurs by default. Similarly, they are positioned further from noteheads than articulations.

The center of ornaments aligns with the center of the notehead to which they apply. Trills are aligned differently, as the left side of trill marks aligns with the left edge of the notehead to which the trill applies.

Dorico Elements automatically positions ornaments correctly according to their type, and attaches them to their notehead.

You can move ornaments to different rhythmic positions in Write mode. They are automatically positioned to avoid collisions.

## Moving ornaments rhythmically

You can move ornaments to new rhythmic positions after they have been input.

PROCEDURE

1. In Write mode, select the ornaments you want to move.

   NOTE

   When using the mouse, you can only move one ornament at a time.

2. Move the ornaments in any of the following ways:
   - To move a single ornament to the next notehead on the staff, press **Alt/Opt-Right Arrow**.
   - To move a single ornament to the previous notehead on the staff, press **Alt/Opt-Left Arrow**.
   - To move them to the right according to the current rhythmic grid resolution, press **Ctrl/Cmd-Alt/Opt-Right Arrow**.
   - To move them to the left according to the current rhythmic grid resolution, press **Ctrl/Cmd-Alt/Opt-Left Arrow**.

     NOTE

     You can only move ornaments according to the current rhythmic grid resolution when multiple ornaments are selected.

   - Click and drag the ornament to the right/left to snap it to different rhythmic positions.

RESULT

The selected ornaments are moved to new rhythmic positions.

NOTE

Only one ornament can exist at each rhythmic position. If an ornament passes over another ornament as part of its move, the existing ornament is deleted.

Trills can overlap with other trills and ornaments. However, if the start of a trill passes over the start of another trill as part of its move, the existing trill is deleted.

You can undo these actions, but any ornaments/trills deleted in the process are only restored if you moved items using the keyboard.

## Changing the start position of trills

You can change whether the start position of individual trills is aligned with the notehead or with its accidental.

PROCEDURE

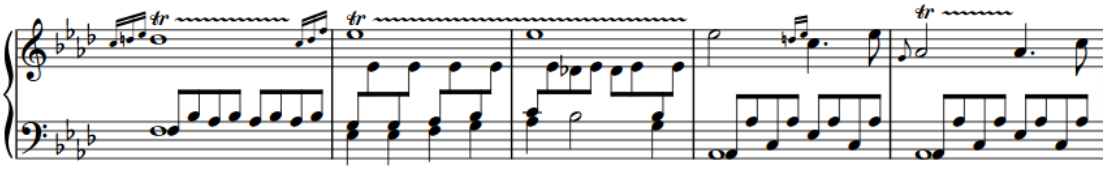
1. Select the trills whose start position you want to change.
2. In the Properties panel, activate **Start position** in the **Trills** group.
3. Choose one of the following options:
   - **Notehead**
   - **Accidental**

RESULT

The start position of the selected trills is changed.

# Trills

Trills are fast alternations between two notes, similar to a tremolo, that were a common decoration in Baroque, Classical, and Romantic music. Trill marks are usually added to a single note, to indicate the performed notes are the notated pitch and the note either a half-step or whole step above, and can have extension lines to show the duration of the trill.



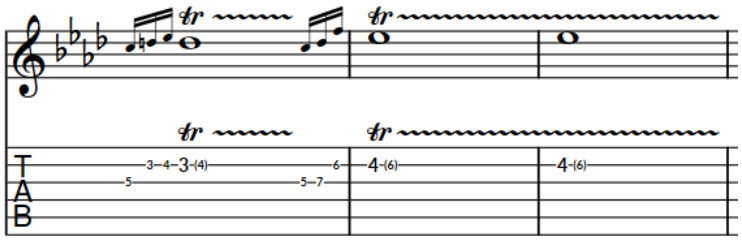
A phrase containing multiple trills with extension lines

Because of their legacy as an ornament, many performers interpret trills differently to tremolos: some players add more emphasis to the notated pitch in a trill and less on the trilled-to note but play both notes equally in tremolos.

The most common trills are to notes a major or minor second above, but it is also possible to specify other trill intervals.

In Dorico Elements, you can specify any trill interval, change their appearance on notation staves, and hear them in playback.

On tablature, the trilled-to pitch always appears as a parenthesized fret number.




Trills on a notation staff and tablature

RELATED LINKS

Input methods for ornaments, arpeggio signs, glissando lines, guitar bends, and jazz articulations on page 251
Trill intervals on page 659
Trill interval appearance on page 662
Trills in playback on page 664
Tablature on page 809

## Hiding/Showing trill marks

You can hide/show trill marks at the start of individual trills. This also hides/shows trill marks on all systems on which the trills extend.

PROCEDURE

1. Select the trills whose trill marks you want to hide/show.
2. In the Properties panel, activate **Show trill mark** in the **Trills** group.

3. Activate/Deactivate the corresponding checkbox.

RESULT

Trill marks are shown when the checkbox is activated, and hidden when the checkbox is deactivated.

When the property is deactivated, trill marks are shown by default.

## Changing the speed of trills

You can indicate different speeds for trills, including indicating a change of speed within a single trill, by changing the height and frequency of wiggles in their extension lines.

PROCEDURE

1. Select the trills whose speed you want to change.
2. In the Properties panel, activate the following properties, individually or together, in the **Trills** group:
   - **Start speed**
   - **End speed**
3. Select one of the following options from each property menu:
   - **Slow**
   - **Normal**
   - **Fast**

RESULT

The speed of the selected trills is changed. This affects both the frequency of wiggles in their extension lines and their playback speed.

If only **Start speed** is activated, the speed of the whole trill extension line is changed. If only **End speed** is activated, the speed of the end half of the trill extension line is changed.

EXAMPLE

A trill extension line starting slow and ending fast

AFTER COMPLETING THIS TASK

You can customize the playback speed of trills individually.

RELATED LINKS

Changing the playback speeds of trills on page 664

## Hiding/Showing speed changes in trill extension lines

You can hide/show speed changes in the extension lines for individual trills, for example, if you want to hear different speeds in playback but show extension lines with consistent wiggles.

PROCEDURE

1. Select the trills whose speed changes you want to hide/show.

2. In the Properties panel, activate/deactivate **Suppress drawing speed changes** in the **Trills** group.

RESULT

Speed changes are hidden when the property is activated, and shown when it is deactivated.

EXAMPLE

Trill speed changes shown

Trill speed changes hidden

## Hiding/Showing trill extension lines

You can hide/show the extension lines of individual trills.

PROCEDURE

1. Select the trills whose extension lines you want to hide/show.
2. In the Properties panel, activate/deactivate **Has trill line** in the **Trills** group.
3. Activate/Deactivate the corresponding checkbox.

RESULT

Trill extension lines are shown when the checkbox is activated, and hidden when the checkbox is deactivated.

When the property is deactivated, trill extension lines are only shown on tied notes by default.

RELATED LINKS

Changing the speed of trills on page 657
Changing the playback speeds of trills on page 664

## Lengthening/Shortening trills rhythmically

You can lengthen/shorten trills after they have been input. Trills can overlap with other trills and ornaments, so you can also lengthen/shorten trills to noteheads that already have ornaments.

PROCEDURE

1. In Write mode, select the trills you want to lengthen/shorten.

   NOTE

   When using the mouse, you can only lengthen/shorten one trill at a time.

2. Lengthen/Shorten the trills in any of the following ways:
   - To lengthen them by the current rhythmic grid resolution, press **Shift-Alt/Opt-Right Arrow**.
   - To shorten them by the current rhythmic grid resolution, press **Shift-Alt/Opt-Left Arrow**.
   - To lengthen a single trill to the next notehead, press **Ctrl/Cmd-Shift-Alt/Opt-Right Arrow**.

- To shorten a single trill to the previous notehead, press **Ctrl/Cmd-Shift-Alt/Opt-Left Arrow**.

  NOTE

  - You can only lengthen/shorten trills by the current rhythmic grid resolution when multiple trills are selected.
  - Key commands lengthen/shorten items by moving their end only.

- Click and drag the circular handle at the start/end of the trill to noteheads to the right/left.

RESULT

Single trills are lengthened/shortened according to the current rhythmic grid resolution or to the next/previous notehead, whichever is closer.

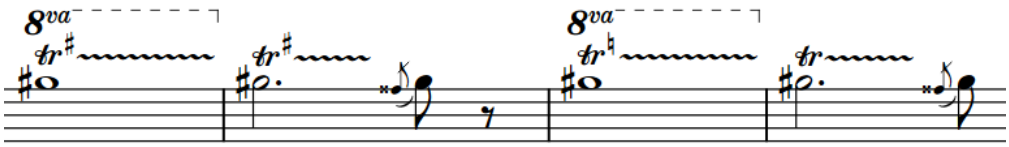
Multiple trills are lengthened/shortened according to the current rhythmic grid resolution.

RELATED LINKS

Positions of ornaments on page 654
Moving ornaments rhythmically on page 655

# Trill intervals

Trill intervals tell performers which notes to play and also affect the pitches used in playback in Dorico Elements. For example, a trill with a sharp accidental on an E indicates that the performer trills between E and F♯, rather than between E and F.




The different accidentals on these trills indicate changes in the trilled-to note.

If you do not specify an interval when inputting a trill, Dorico Elements calculates an appropriate interval based on the top note in the voice to which the trill belongs, the current key signature, and any accidentals earlier in the bar. For example, inputting a trill on an E♮ in C major produces a half-step/minor second trill interval to F♮. If there were a sharp accidental on the F earlier in the bar, the trill interval produced is a whole step/major second between the E♮ and F♯.

In open/atonal key signatures, Dorico Elements produces whole step/major second trill intervals by default.

You can specify trill intervals when inputting them with the popover, including at different noteheads in the same trill, and you can change their intervals after they have been input.

## Trills and accidentals

If required, Dorico Elements shows accidentals to clarify trill intervals. Dorico Elements also automatically shows accidentals on other notes in the bar if they have different accidentals to any upper notes of trills.

By default, trill marks themselves show intervals, unless the upper note is modified by an accidental in the key signature. If the upper note has been modified by an accidental earlier in the bar, trills always show the interval. If trills modify pitches modified by an accidental in the key signature, any subsequent notes of that pitch show the appropriate accidental automatically. Any cautionary accidentals required in the current and following bars are also shown automatically.

### Microtonal trill intervals

When using other tonality systems than 12-EDO, you can specify trill intervals based on diatonic steps and the total number of divisions from the written note. In 24-EDO, you can describe trill intervals based on their quality, such as major or minor. In tonality systems with a greater number of divisions or an unequal number of divisions between each diatonic step, you must specify trill intervals based on their octave divisions, as specifying only the interval quality is insufficient in such cases.

RELATED LINKS
Trill interval appearance on page 662

## Hiding/Showing trill interval accidentals

You can hide/show trill interval accidentals for individual trills.

NOTE

These steps only hide the accidentals shown in trill intervals, they do not hide auxiliary notes or Hollywood-style markings.

PROCEDURE

1. Select the trills whose accidentals you want to hide/show.
2. In the Properties panel, activate **Accidental** in the **Trills** group.
3. Choose one of the following options:
   - **Hide**
   - **Show**

RESULT

Accidentals in the selected trill intervals are hidden when you choose **Hide**, and shown when you choose **Show**.

NOTE

Trill accidentals are restated at each new pitch over which the trill extends.

RELATED LINKS
Changing the appearance of trill intervals on page 662

## Changing the intervals of existing trills

The default trill interval is a second, either major or minor depending on the context. In addition to specifying the interval when inputting trills with the ornaments popover, you can change the intervals of trills individually after they have been input.

PROCEDURE

1. In Write mode, select the trills whose interval you want to change.
2. In the Properties panel, activate **Interval** in the **Trills** group.
   The existing interval of the trill is shown as a number and quality.
3. Change the interval by changing the value in the value field.
4. Select one of the following interval qualities from the menu:

- **Diminished**
- **Minor**
- **Major**
- **Augmented**

RESULT

The interval of the selected trills is changed. By default, trill intervals appear as accidentals when the interval is a second and as auxiliary notes for all other intervals.

RELATED LINKS

Ornaments popover on page 251

## Changing intervals partway through trills

You can change the interval of trills multiple times within their duration, including before you have input notes, for example, if you want a trill to change seamlessly from a minor second in one bar to a major second in the next.

PROCEDURE

1. In Write mode, select one of the following:
   - The note whose trill interval you want to change.
   - An item or rest on the staff where you want to input notes and specify trill intervals.
2. Press **Shift-N** to start note input.
3. Press **Right Arrow** / **Left Arrow** to move the caret according to the current rhythmic grid resolution to the notehead where you want to change the trill interval.

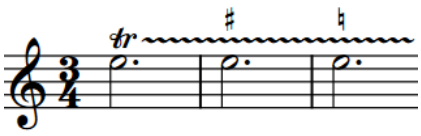
   NOTE

   You can only change trill intervals at noteheads.
4. Press **Shift-O** to open the ornaments popover.
5. Enter the trill interval you want into the popover. For example, enter **m3** for a minor third.
6. Press **Return** to close the popover.
7. Optional: Repeat steps 3 to 6 to change the trill interval at other noteheads in the trill.
8. Press **Esc** or **Return** to stop note input.

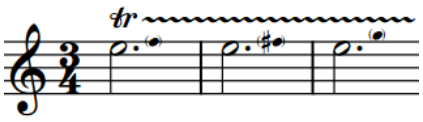
RESULT

The trill interval is changed at the corresponding noteheads. By default, all trill intervals in the trill appear as accidentals when the intervals are all seconds and as auxiliary notes when the trill contains at least one trill interval with a different interval.

EXAMPLE



Trill with interval changes shown as accidentals



Trill with interval changes shown as auxiliary notes

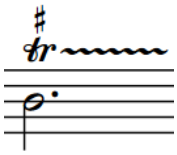
# Trill interval appearance

There are different accepted ways to present trill intervals on notation staves, including accidental symbols and the Hollywood convention of showing “H.T.” for a half-step (semitone) and “W.T.” for a whole step (tone).

In Dorico Elements, trill intervals can appear in the following ways on notation staves:

**Accidental**

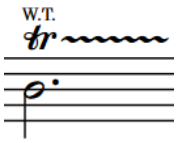
Indicates the trill interval using accidentals positioned above, below, or beside the **tr** mark. This is the default trill interval appearance in Dorico Elements for major or minor second trills.



**Hollywood-style**

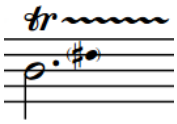
Indicates the trill interval using text.

- **H.T.** for half-step/minor second trills
- **W.T.** for whole step/major second trills




**Auxiliary note**

Indicates the trill interval using a small, parenthesized, stemless notehead shown in the staff immediately to the right of the first note to which the trill applies, and at the correct staff position for the trilled-to pitch. Auxiliary notes are used for all trill intervals that are not a major or minor second, but are automatically hidden for unison trills if the notehead design of the auxiliary note has not been overridden.



NOTE

On tablature, the trilled-to pitch always appears as a parenthesized fret number.

## Changing the appearance of trill intervals

You can change the appearance of trills with a second interval on notation staves individually, for example, if you want to show auxiliary notes on some trills to clarify a change in the trilled-to pitch.

NOTE

You can only change the trill interval appearance of trills with a major/minor second interval.

PROCEDURE

1. Select the trills whose trill interval appearance you want to change.
2. In the Properties panel, activate **Appearance** in the **Trills** group.
3. Select one of the following options from the menu:
   - **Accidental**
   - **Hollywood style**
   - **Auxiliary note**

RESULT

The appearance of the selected trill intervals on notation staves is changed. This does not affect their appearance on tablature.

AFTER COMPLETING THIS TASK

You can change the notehead design of individual auxiliary notes, for example, to show that the trilled-to note is a harmonic.

RELATED LINKS

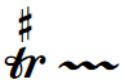
Changing the notehead design of individual noteheads on page 636

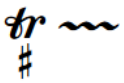
## Changing the position of trill interval indicators

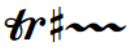
You can change where trill interval indicators, such as an accidental or W.T. marking, are positioned relative to individual trills.

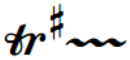
PROCEDURE

1. Select the trills whose interval indicator position you want to change.
2. In the Properties panel, activate **Interval position** in the **Trills** group.
3. Select one of the following options from the menu:
   - **Above**

     
   - **Below**

     
   - **On the right**

     
   - **Superscript**

RESULT

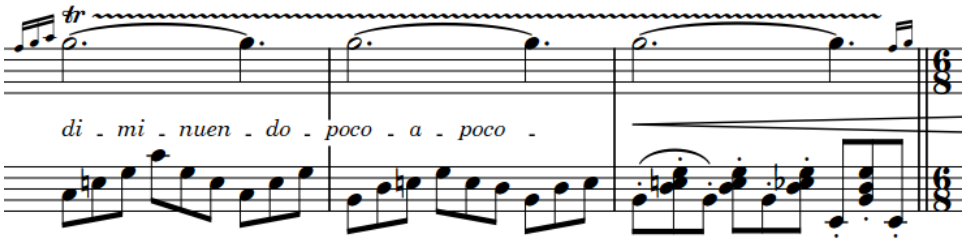
The position of interval indicators relative to the selected trills is changed.

# Trills in playback

Dorico Elements plays back trills by using a combination of sampled trills, when available, and triggering multiple notes.

Dorico Elements can play back sampled half-step (semitone) and whole step (tone) trills automatically if these playing techniques are defined in the VST expression map, which is the case for a number of instruments in HALion Symphonic Orchestra. For sound libraries that do not provide sampled trills, or for intervals beyond a whole step, Dorico Elements generates trills.

When playing generated trills, Dorico Elements incorporates grace notes immediately before and after trills. A single unslashed grace note on the initial trill note produces an appoggiatura, while multiple grace notes on the initial trill note are included in the trill pattern. Grace notes on the note immediately following a trill are also included in the trill pattern.




A trill with grace notes at both the start and end

Variable speeds within trills are included in playback, and you can change the playback speed of individual trills. Additionally, you can hide trill speed changes in trill extension lines whilst retaining the speed changes in playback.

In contemporary performance practice, trills are usually performed starting on the written note, while in the historical performance practice of the Baroque and Classical eras, trills are usually performed starting on the upper (trilled-to) note. You can change the default starting pitch for trills individually.

RELATED LINKS
Changing the speed of trills on page 657
Hiding/Showing speed changes in trill extension lines on page 657
Changing the starting pitch of trills on page 665

## Sampled vs. generated trills

Sampled trills are recorded, looped samples, whereas generated trills are produced by manually triggering separate notes.

Because they use fixed sounds, sampled trills typically offer no parameters that allow any kind of variation in the trill interpretation, such as different trill speeds or incorporating grace notes and termination notes into the pattern of trilled notes. By contrast, generated trills can provide greater flexibility but produce a less natural and realistic sound.

## Changing the playback speeds of trills

In addition to changing the speed of trills, which changes both the frequency of wiggles in their extension lines and their playback speed, you can also change the playback speed of each speed

variant in individual trills, for example, if you want to make the fastest part of an individual trill faster than your default setting.

PROCEDURE

1. Select the trills whose playback speeds you want to change.
2. In the Properties panel, activate any of the following properties, as appropriate for your selected trills:
   - **Slow trill speed**
   - **Normal trill speed**
   - **Fast trill speed**
3. Change the values in the value fields.

RESULT

The playback speed of the selected trills is changed. The values in the value fields correspond to the number of notes sounding per second.

RELATED LINKS

Changing the speed of trills on page 657
Hiding/Showing speed changes in trill extension lines on page 657

## Changing the starting pitch of trills

By default in Dorico Elements, trills start on the lower note, which is usually the written note. However, the accepted practice in Baroque and Classical music is to start trills on the upper note. You can change the starting pitch of trills individually.

PROCEDURE

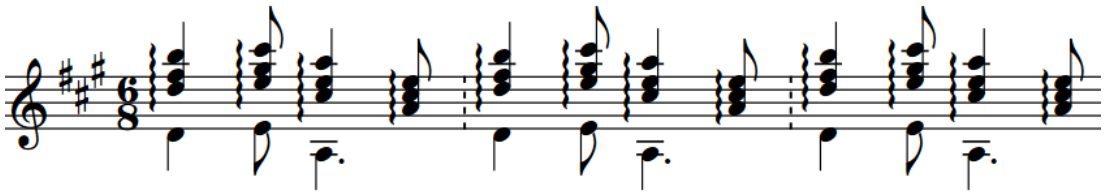
1. Select the trills whose starting note you want to change.
2. In the Properties panel, activate **Start on upper note** in the **Trills** group.
3. Activate/Deactivate the corresponding checkbox.

RESULT

The selected trills start on the upper note when the checkbox is activated, and on the lower note when the checkbox is deactivated.

# Arpeggio signs

Arpeggio signs are vertical lines that indicate chords are to be played arpeggiated, or “spread”, so that the notes in the chord are played very quickly one after another. Arpeggio signs are normally shown as vertical wavy lines.



Arpeggiated chords can be played in two directions:

- Upwards, starting from the bottom note in the chord.
- Downwards, starting from the top note in the chord.

It is most common for up arpeggio signs to have nothing at the top end, because chords are usually arpeggiated upwards, and for down arpeggio signs to have an arrow at the bottom, so these are the defaults in Dorico Elements. However, it is also accepted practice to show up arpeggio signs with an arrow at the top if down arpeggio signs are also used in the same piece of music.

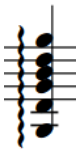
Arpeggio signs in Dorico Elements automatically span the range of all notes in the voices/staves to which they apply.

RELATED LINKS
Input methods for ornaments, arpeggio signs, glissando lines, guitar bends, and jazz articulations on page 251
Lines on page 719

## Types of arpeggio signs

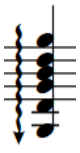
There are different types of arpeggio signs to convey the different arpeggiation directions and techniques.

**Up arpeggio**



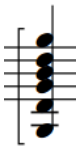
A vertical wavy line that indicates chords are to be arpeggiated from the bottom note upwards.

**Down arpeggio**



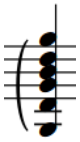
A vertical wavy line that indicates chords are to be arpeggiated from the top note downwards.

**Non arpeggio**



A bracket with straight lines that indicates all notes in the chord are to be played together, not arpeggiated.

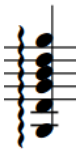
**Curved arpeggio**



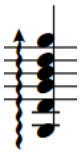
A curved line, similar to a slur but vertical, that some composers use to indicate gentle or partial arpeggiation.

You can show both up and down arpeggio signs with one of the following ends in Dorico Elements:

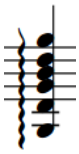
- Nothing
- Arrow
- Swash



Up arpeggio sign with nothing at the end



Up arpeggio sign with an arrow at the end



Up arpeggio sign with a swash at the end

## Changing the type of arpeggio signs

You can change the type of arpeggio signs after they have been input.

PROCEDURE

1. Select the arpeggio signs whose type you want to change.
2. In the Properties panel, select one of the following options from the **Arpeggio type** menu in the **Arpeggios** group:
   - **Non arpeggio**
   - **Up arpeggio**
   - **Down arpeggio**
   - **Up arpeggio (curve)**

RESULT

The type of the selected arpeggio signs is changed.

TIP

You can also change the arpeggio type by opening the ornaments popover and changing the entry.

RELATED LINKS
Ornaments popover on page 251
Changing existing items on page 309

## Changing the end appearance of arpeggio signs

Down arpeggio signs have an arrowhead at the bottom of the line by default, but up arpeggio signs have no arrowhead by default. You can change the appearance of the ends of arpeggio signs individually.

NOTE

These steps only apply to up and down arpeggio signs. They do not apply to curved or non arpeggio signs.

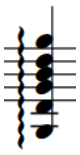
PROCEDURE

1. Select the arpeggio signs of any direction whose ends you want to change.
2. In the Properties panel, activate **Sign end** in the **Arpeggios** group.
3. Select the end you want from the menu:
   - **Nothing**
   - **Arrow**
   - **Swash**

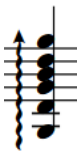
RESULT

The appearance of the ends of the selected arpeggio signs is changed.

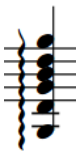
EXAMPLE



Up arpeggio sign with nothing at the end



Up arpeggio sign with an arrow at the end



Up arpeggio sign with a swash at the end

# Length of arpeggio signs

The length of arpeggio signs is determined by the pitch range of notes in the voices/staves to which the arpeggio sign applies.

Dorico Elements automatically adjusts the length of arpeggio signs if the pitches of the notes in the voices/staves to which the sign applies change, or you add notes to, or delete notes from, the chords.

# General placement conventions for arpeggio signs

Arpeggio signs are positioned to the left of the notes, including any applicable accidentals, to which they apply, but are positioned between grace notes and normal notes. They should appear within the same bar as the notes to which they apply, and not on the other side of the barline.

Dorico Elements makes automatic adjustments to note spacing and staff spacing to accommodate arpeggio signs and ensure they are positioned correctly.

Arpeggio signs should cover the whole vertical range of all notes in the chord to which they apply, and protrude slightly at each end. However, they do not need to cover the stems of notes. Dorico Elements automatically creates the lengths of arpeggio signs to cover the notes in chords, and adjusts their lengths if the notes in chords change or are deleted.

If an arpeggiated chord spans two staves, such as in a piano part, its arpeggio sign can extend across both staves.

You can move arpeggio signs to different rhythmic positions in Write mode.

RELATED LINKS
Length of arpeggio signs on page 668

## Moving arpeggio signs rhythmically

You can move arpeggio signs to new rhythmic positions after they have been input.

NOTE

- You cannot move arpeggio signs over rests, you can only move them to adjacent notes/chords in the same voice. If you want to move arpeggio signs along a phrase containing rests, we recommend deleting them and inputting new arpeggio signs at the new positions instead.
- You cannot move arpeggio signs rhythmically with the mouse.

PROCEDURE

1. In Write mode, select the arpeggio signs you want to move.
2. Move the arpeggio signs in any of the following ways:
   - Press **Alt/Opt-Right Arrow** to move them to the right.
   - Press **Alt/Opt-Left Arrow** to move them to the left.

RESULT

Arpeggio signs are moved to the right/left, according to the current rhythmic grid resolution.

If no notes exist at the next rhythmic position according to the rhythmic grid, the arpeggio sign is not shown. If you continue moving it to the right/left, it is shown again beside the next note at a rhythmic position that can be reached according to the current rhythmic grid resolution.

You can change the rhythmic grid resolution if you want to move arpeggio signs to notes at other rhythmic positions.

NOTE

- If you move arpeggio signs to the rhythmic position of a rest, they are deleted.
- Only one arpeggio sign can exist at each rhythmic position. If an arpeggio sign in your selection passes over another arpeggio sign as part of its move, the existing arpeggio sign is deleted.

RELATED LINKS

Input methods for ornaments, arpeggio signs, glissando lines, guitar bends, and jazz articulations on page 251

## Showing arpeggio signs before/after grace notes

You can show arpeggio signs before/after grace notes individually. By default, arpeggio signs are positioned immediately to the left of the notes to which they apply, and so are positioned between normal notes and grace notes.

PROCEDURE

1. Select the arpeggio signs you want to show before grace notes.
2. In the Properties panel, activate/deactivate **Arpeggio before grace notes** in the **Arpeggios** group.

RESULT

The selected arpeggio signs are shown before grace notes when the property is activated, and after grace notes when the property is deactivated.

# Changing arpeggio playback relative to the beat

You can change whether individual arpeggios are played before their notated position or after their notated position.

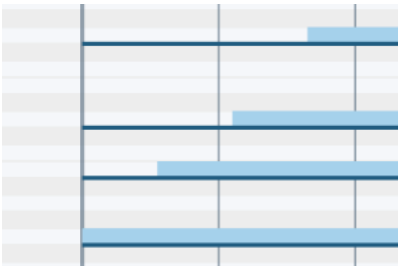
PROCEDURE

1. Select the arpeggio signs whose playback relative to the beat you want to change.
2. In the Properties panel, activate **Playback position** in the **Arpeggios Playback** group.
3. Choose one of the following options:
   - **Start on beat**
   - **End on beat**

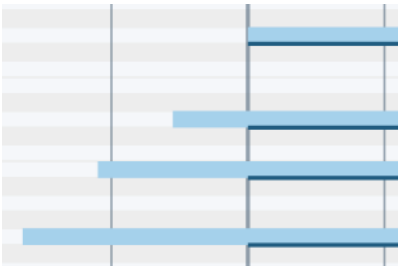
RESULT

The beat-relative position of the selected arpeggios in playback is changed.

EXAMPLE



Arpeggio starting on the beat



Arpeggio ending on the beat

# Changing the playback duration of arpeggios

You can change the duration of individual arpeggios in playback.

The duration of arpeggios is expressed as a fraction of the notated rhythm of chords. For example, an arpeggio on a quarter note (crotchet) chord with a note offset value of 1/2 lasts an eighth note (quaver), whereas with a note offset value of 1/8 it lasts a 32nd note.

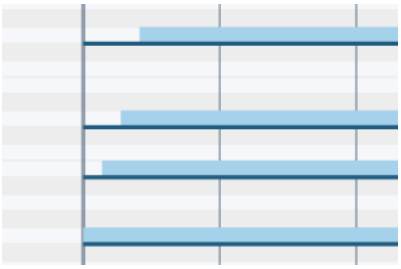
PROCEDURE

1. Select the arpeggio signs whose playback duration you want to change.
2. In the Properties panel, activate **Note offset** in the **Arpeggios Playback** group.
3. Change the playback duration of the selected arpeggio signs by changing the value in the value field.
4. Press **Return**.

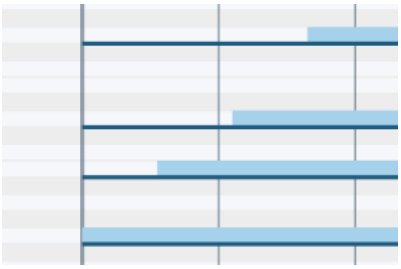
RESULT

The playback duration of the selected arpeggios is changed.

EXAMPLE



Arpeggiated chord with a note offset value of 1/8



Arpeggiated chord with a note offset value of 1/2

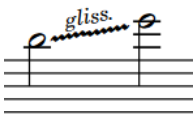
# Glissando lines

Glissando lines indicate a continuous transition between two notes, which can be smooth or in chromatic steps. They can have straight lines or wiggly lines, and can be shown with a text indication or as a line without text.

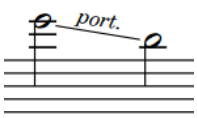
There are different conventions regarding the playing techniques for glissando and portamento. Some people understand glissando lines to indicate a chromatic scale between the two notes, either rising or falling in a series of semitones, and portamento lines to indicate a smooth, continuous glide between the two notes. However, the terms glissando and portamento can be used interchangeably in other cases.

You can input both glissando lines and portamento lines in Dorico Elements, and you can easily change their style after they have been input.

Glissando lines in Dorico Elements automatically follow the notes at each end, meaning if you change the pitch of either note, the glissando line end positions move accordingly.




An example glissando line with text shown and a wiggly line




An example portamento line with text shown and a straight line

RELATED LINKS

Input methods for ornaments, arpeggio signs, glissando lines, guitar bends, and jazz articulations on page 251
Changing the style of glissando lines on page 673
Lines on page 719
Playing technique continuation lines on page 713
Changing the pitch of individual notes on page 191

## General placement conventions for glissando lines

Glissando lines are positioned between noteheads and the steepness of their angle should reflect the interval between the notes: the steeper the angle, the greater the interval. The endpoints of glissando lines must be directly beside noteheads but not directly touching them.

Glissando lines must not collide with accidentals, and instead must stop short so the accidental can be clearly read. Dorico Elements automatically positions glissando lines so they do not collide with accidentals.

Usually, glissando lines join two adjacent noteheads because they indicate a gradual but constant change in pitch between those two notes, but they can also cross multiple notes.

Glissando lines can cross system breaks and page breaks. If text is shown for glissando lines that span system or page breaks, then that text is shown on every glissando line segment. By default, the start and end positions of each segment matches the original start and end points of the whole glissando line.

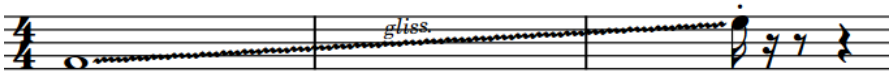
# Glissando lines across empty bars

In Dorico Elements, you can input glissando lines between any two notes, even if there are rests or other notes between them, and including between notes in different voices and notes on different staves.

For very long glissando lines that extend across multiple bars, you might not want to show pitches at the start of each bar, for example, to indicate that performers do not emphasize pitches during the course of the glissando, or that performers can play the glissando at their own speed. By default, Dorico Elements shows notes or rests in every bar.

Once you have input a glissando line between the selected notes, you can delete any rests between them.

EXAMPLE




A glissando line across multiple bars with no rests shown between the two notes

RELATED LINKS

Inputting glissando lines with the popover on page 257
Inputting glissando lines with the panel on page 258
Hiding/Showing bar rests in empty bars on page 776
Deleting rests on page 775
Turning explicit rests into implicit rests on page 774

# Changing the style of glissando lines

Glissando lines can be shown as straight lines or wiggly lines. You can change the glissando line style of glissando lines individually.

PROCEDURE

1. Select the glissando lines whose style you want to change.
2. In the Properties panel, activate **Glissando style** in the **Glissando Lines** group.
3. Choose one of the following options:
   - **Straight line**

     
   - **Wiggly line**

RESULT

The glissando line style is changed for the selected glissando lines.

TIP

- Deactivating **Glissando style** returns the selected glissando lines to the default style.
- You can also change the glissando style by opening the ornaments popover and changing the entry.

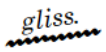
RELATED LINKS
Ornaments popover on page 251
Changing existing items on page 309

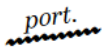
# Changing glissando line text

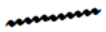
Glissando lines can be shown with text or without text. You can change the text of glissando lines individually.

PROCEDURE

1. Select the glissando lines whose text you want to change.
2. In the Properties panel, activate **Glissando text** in the **Glissando Lines** group.
3. Select one of the following options from the menu:
   - **Gliss.**

     
     
   - **Port.**

     
     
   - **No text**

RESULT

The text shown on the selected glissando lines is changed.

# Changing when glissando line text is shown

By default, glissando text is not shown when glissando lines are too short to accommodate the text. You can choose to show text on individual glissando lines always, or only if there is sufficient space.

PROCEDURE

1. Select the glissando lines whose setting for when text is shown you want to change.
2. In the Properties panel, activate **Glissando text shown** in the **Glissando Lines** group.
3. Choose one of the following options:
   - **Show if sufficient space**
   - **Always show**

RESULT

If **Show if sufficient space** is chosen, glissando line text is not shown if the glissando line is too short.

If **Always show** is chosen, glissando line text is always shown, even if the glissando line is short. However, this can cause the glissando line text to collide with other items, such as noteheads and stems.

TIP

You can increase the default gaps between noteheads by changing the default note spacing.

RELATED LINKS
Note spacing on page 361
Changing the default note spacing on page 361

# Glissando lines in playback

Glissando lines are reflected in playback using a sequence of notes, all a small interval apart, between the start and end notes for each glissando.

Glissandos belonging to harps consider the current harp pedaling when determining the pitches to use in playback. Glissandos for all other instruments use the 12-EDO chromatic scale, regardless of the current tonality system.

When glissando lines start or end on tie chains, their playback starts on the last note in tie chains and ends on the first note in tie chains.

By default in playback, glissandos sound across their full duration, but you can delay the start of glissandos in playback individually.

NOTE

Playing back glissando lines as a continuous, smooth slide is not yet supported. This is planned for future versions.

RELATED LINKS
Harp pedaling on page 690

## Delaying the start of glissandos in playback

You can delay the start of glissandos in playback so that they start partway through their duration. By default, glissandos sound for their full duration in playback.

PROCEDURE

1. Select the glissando lines whose playback start you want to delay.
2. In the Properties panel, activate **Delayed start** in the **Glissando Lines** group.
3. Optional: If you want to specify exactly how far through the glissando lines playback starts, activate **Delay** and change the value in the value field.

   The value represents fractions of a quarter note. For example, **1/2** delays the start of glissandos by an eighth note.

RESULT

If you activated **Delayed start** only, the playback of the selected glissando lines is starts halfway through their duration.

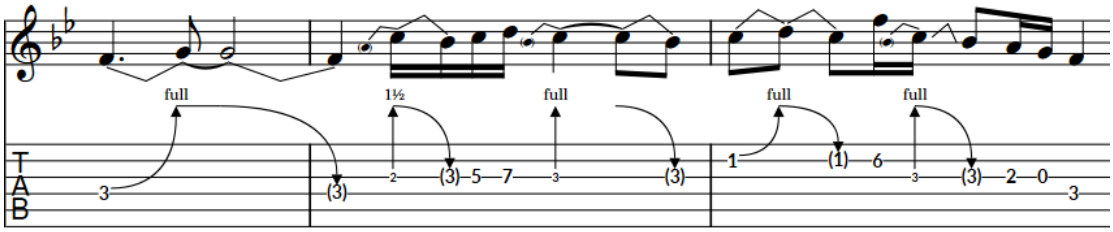
If you also activated **Delay**, playback of the selected glissando lines follows your set value.

# Guitar bends

The guitar bend is a technique commonly performed on electric guitars, where the performer pushes a string out of its normal alignment. Bending the string tightens it, which produces the characteristic pitch fluctuation.

In addition to guitar bends, where the player bends the string after playing a note, Dorico Elements supports guitar pre-bends. Guitar pre-bends require the player to bend the string before playing the note, so there is no change in pitch at the start of the note.

Performing a guitar bend often also involves sustaining the bent pitch before allowing the string to return to its natural position and un-bent pitch. In Dorico Elements, these actions are called a "guitar bend hold" and "release" respectively.

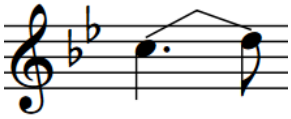



A phrase containing guitar bends, a guitar bend hold, guitar pre-bends, and releases, shown on both a notation staff and tablature

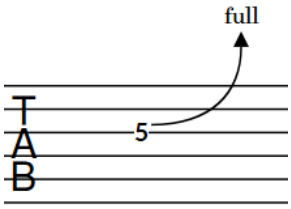
### Guitar bends

Guitar bends indicate that the performer should bend the string after playing a note, so that the pitch increases while the note sounds. In Dorico Elements, guitar bends join two notes: the start pitch and the pitch at the peak of the bend.

On notation staves, guitar bends are notated using an angled line between the noteheads at the start and end. On tablature, guitar bends are notated using an upwards-pointing curved line with an arrowhead at the top, with text or a number/fraction above the arrowhead to indicate the bend interval. The fret number of the end note is hidden automatically.

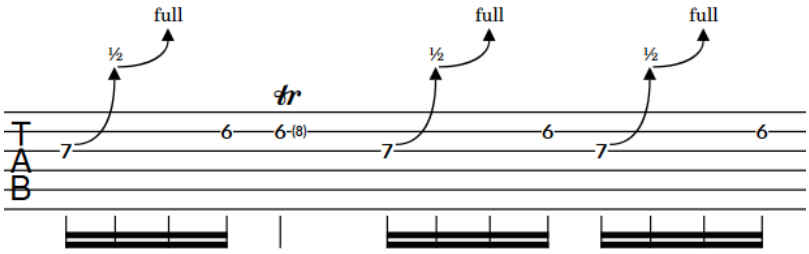


Guitar bend on notation staff




Guitar bend on tablature

Sequences of consecutive guitar bends are notated as bend runs on tablature.

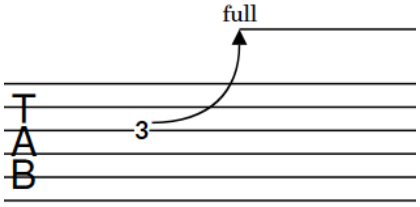



Guitar bend runs on tablature

### Guitar bend holds

Guitar bend holds indicate that the performer should maintain the pitch at the peak of a guitar bend. This is usually shown on tied notes.

On tablature, guitar bend holds are notated using a horizontal line. They are not notated on notation staves.

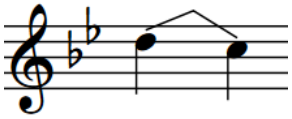



Guitar bend hold on tablature

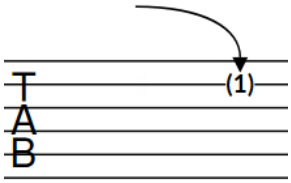
### Releases

Releases indicate that the performer should allow a bent string to return to its natural position, which decreases the pitch. In Dorico Elements, releases join two notes: the pitch at the peak of the bend and the end pitch.

On notation staves, releases are notated using an angled line between the noteheads at the start and end. On tablature, releases are notated using a downwards-pointing curved line with an arrowhead at the bottom, with a parenthesized fret number below the arrowhead to indicate the end pitch. The fret number of the start note is hidden automatically.



Release on notation staff




Release on tablature

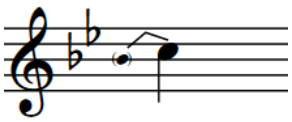
NOTE

Because you input releases in the same way as you input guitar bends, in this documentation, “guitar bends” refers to both guitar bend and release items in projects.

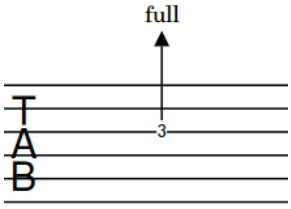
### Guitar pre-bends

Guitar pre-bends indicate that the performer should bend the string before playing the note, so that the start pitch is already increased, for example, to repeat a note that was at the end of a previous guitar bend. In Dorico Elements, guitar pre-bends apply to a single note.

On notation staves, guitar pre-bends are notated using an angled line between the noteheads at the start and end. However, unlike guitar bends, the parenthesized auxiliary notehead at the start is shown automatically as part of the pre-bend. On tablature, guitar pre-bends are notated using a vertical line with an arrowhead at the top, with text or a number/fraction above the arrowhead to indicate the pre-bend interval and a small fret number below the line to indicate the start pitch.



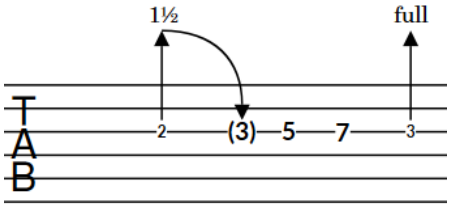
Guitar pre-bend on notation staff




Guitar pre-bend on tablature

**Bend intervals**

Bend intervals indicate the change in pitch, expressed in relation to whole steps. For example, **full** indicates a whole step guitar bend/pre-bend, **1/2** a half-step, and **1 1/2** a minor third.




A phrase showing two different pre-bend intervals, **1 1/2** and **full**

NOTE

- Guitar bends, releases, and pre-bends are not currently reflected in playback. This is planned for future versions.
- Stems, stem flags, and beaming always appear stem-up on tablature in single-voice contexts, which means they can collide with guitar bends.

RELATED LINKS

Input methods for ornaments, arpeggio signs, glissando lines, guitar bends, and jazz articulations on page 251
Inputting guitar pre-bends on page 262
Tablature on page 809
Hiding/Showing notation staves and tablature on page 810
String indicators on page 590
Lines on page 719

# Hiding/Showing guitar bend hold lines

Guitar bend hold lines indicate that the bend should be held for the duration of the note, which is usually a tied note. You can hide/show hold lines on guitar bends on tablature.

NOTE

These steps only apply to guitar bends. You cannot show hold lines on pre-bends or releases.

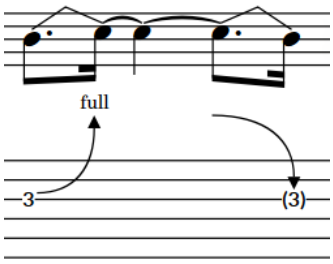
PROCEDURE

1. Select the guitar bends on which you want to hide/show hold lines. You can do this on notation staves and tablature.
2. In the Properties panel, activate/deactivate **Show hold** in the **Guitar Bends** group.

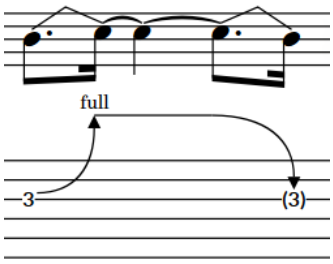
RESULT

Hold lines are shown on the selected bends on tablature when **Show hold** is activated, and hidden when it is deactivated.

EXAMPLE




Hold line hidden




Hold line shown

# Changing the direction of guitar pre-bends

You can change the direction of guitar pre-bends individually. By default, guitar pre-bends are positioned on the notehead-side of notes in single-voice contexts. In multiple-voice contexts, they are positioned on the stem-side of notes.

PROCEDURE

1. Select the guitar pre-bends whose direction you want to change.
2. In the Properties panel, activate **Pre-bend direction** in the **Guitar Techniques** group.
3. Choose one of the following options:
   - **Up**
   - **Down**

RESULT

The direction of the selected guitar pre-bends is changed.

TIP

You can change the direction of guitar bends by selecting them and pressing **F**. However, you cannot use this key command for guitar pre-bends.

RELATED LINKS

Changing the staff-relative placement of items on page 310

# Showing guitar bends as a dive and return

You can show existing guitar bends as a dive and return, which is a technique that uses the vibrato bar on guitars. Dives and returns appear differently on tablature than guitar bends.

PREREQUISITE

You have input guitar bends between the notes of each dive and return.

PROCEDURE

1. Select the guitar bends you want to show as a dive and return.

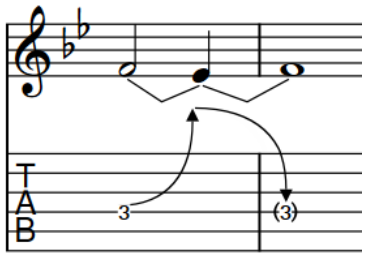
   For example, to show the notes F-E-F as a dive and return, select both guitar bends between F-E and E-F.
2. In the Properties panel, activate **Use vibrato bar** in the **Guitar Bends** group.

RESULT

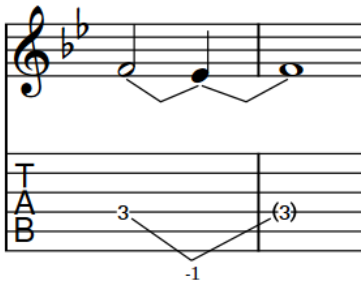
The selected guitar bends appear as V-shaped dives and returns on tablature. A number/fraction appears outside the staff at the point of the V to indicate the interval.

If the middle pitch is lower than the outer pitches, the V points downwards. If the middle pitch is higher than the outer pitches, the V points upwards.

EXAMPLE




A pair of guitar bends as they appear by default




A pair of guitar bends shown as a dive and return

RELATED LINKS

Input methods for ornaments, arpeggio signs, glissando lines, guitar bends, and jazz articulations on page 251
Tablature on page 809

# Hiding/Showing accidentals on guitar pre-bends

You can hide/show accidentals on guitar pre-bends individually, for example, to save horizontal space in a layout that also shows the interval clearly on tablature.

PROCEDURE

1. Select the guitar pre-bends whose accidentals you want to hide/show.
2. In the Properties panel, activate **Pre-bend accidental** in the **Guitar Techniques** group.
3. Choose one of the following options:
   - **Hide**
   - **Show**

RESULT

Accidentals on the selected guitar pre-bends are hidden when you choose **Hide**, and shown when you choose **Show**. This does not affect the interval shown for the selected guitar pre-bends on tablature.

# Jazz articulations

Jazz articulations in Dorico Elements cover a range of note ornamentations that are idiomatic to jazz music, and brass instruments in particular.

Although they are often known as jazz “articulations”, these techniques function more like ornaments than articulations because they change the pitch rather than the duration or attack of notes. For this reason, they are considered ornaments in Dorico Elements. They are found in the Ornaments panel, and you can also input them using the ornaments popover.

Jazz articulations can be shown as a curved line similar to a slur, which is called a “bend” in Dorico Elements, and as a straight line, which can be solid, dashed, or wiggly, which is called “smooth” in Dorico Elements.

Each note can have a single jazz articulation on each side of it, one before the note and one after. Jazz articulations after notes can have different lengths.

The following jazz articulations can be shown before notes:

**Plop**

An approach into the note from above.

Plop (bend)

Plop (smooth)

**Scoop/Lift**

An approach into the note from below. A bend approach is a scoop, a smooth approach is a lift.

Scoop

Lift (straight)

The following jazz articulations can be shown after notes:

**Doit**

A rise in pitch after the note.

Doit (bend)

Doit (smooth)

**Fall**

A lowering of pitch after the note.

Fall (bend)

Fall (smooth)

Additionally, there are other jazz ornaments commonly used by brass instruments that you can add to notes in the same ways as inputting jazz articulations.

NOTE

Jazz articulations are not currently reflected in playback.

RELATED LINKS

Ornaments popover on page 251
Input methods for ornaments, arpeggio signs, glissando lines, guitar bends, and jazz articulations on page 251

# Jazz ornaments

Jazz ornaments are notations that are commonly used in jazz music and by brass instruments, such as flips and smears, that are positioned outside of the staff rather than beside noteheads like jazz articulations.

Jazz ornaments behave more like other ornaments than jazz articulations, in that they are items separate from notes, and so can be selected independently of notes in Write mode and added to notes in addition to jazz articulations. Because they are so commonly used alongside jazz articulations, in Dorico Elements they are also included in the **Jazz** section in the Ornaments panel.

You can input jazz ornaments in the same ways as inputting other ornaments rather than jazz articulations.

The following ornaments are considered jazz ornaments in Dorico Elements:

- Flip

- Smear

- Jazz turn/Shake

- Bend

NOTE

Jazz articulations are not currently reflected in playback.

RELATED LINKS

Ornaments on page 653
Input methods for ornaments, arpeggio signs, glissando lines, guitar bends, and jazz articulations on page 251
Ornaments popover on page 251

# Positions of jazz articulations

In Dorico Elements, jazz articulations are automatically positioned relative to the noteheads to which they apply, with any other notations on those notes, such as rhythm dots, accidentals, and back notes, automatically considered.

When multiple notes in a chord have a jazz articulation, Dorico Elements considers the best way to align them based on how close to the noteheads they can be positioned and how many jazz articulations to show in total. Dorico Elements allows a maximum of one jazz articulation per space, meaning fewer jazz articulations than noteheads are sometimes shown on cluster chords.

# Changing the type/length of existing jazz articulations

You can change the type and length of jazz articulations after you have input them, for example, if you want to change a smooth doit to a long bend doit. You can specify the type/length of jazz articulations when using the Ornaments panel but not when using the ornaments popover.

PROCEDURE

1. In Write mode, select the notes whose jazz articulation you want to change.
2. In the Ornaments panel, click the jazz articulation you want in the **Jazz** section.

RESULT

The jazz articulation shown on the selected notes is changed.

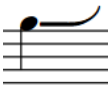
TIP

You can also change the type/duration of jazz articulations using the **In** and **Out** properties in the **Jazz Articulations** group of the Properties panel.

EXAMPLE

Short bend doit

Medium bend doit



Long bend doit

RELATED LINKS

Input methods for ornaments, arpeggio signs, glissando lines, guitar bends, and jazz articulations on page 251

# Changing the line style of smooth jazz articulations

You can change the line style of smooth jazz articulations individually. For example, if you want selected smooth falls to have straight lines instead of wavy lines.

PROCEDURE

1. Select the notes with smooth jazz articulations whose line style you want to change.

NOTE

You must select notes with smooth jazz articulations on the same side, for example, only select notes with smooth jazz articulations before them.

2. In the Properties panel, select one of the following line styles from the **In line style** menu and/or **Out line style** menu in the **Jazz Articulations** group:
   - **Straight**
   - **Wavy**
   - **Dashed**

NOTE

**In line style** is available when you select notes with smooth jazz articulations before them, and **Out line style** is available when you select notes with smooth jazz articulations after them. Both are available when you select notes with smooth jazz articulations on both sides.

RESULT

The line style of the selected smooth jazz articulations is changed.

TIP

You can reset jazz articulations back to their default line style by selecting them and choosing **Edit** > **Reset Appearance**.

EXAMPLE

Doit smooth with straight line

Doit smooth with wavy line

Doit smooth with dashed line

RELATED LINKS

Changing the type/length of existing jazz articulations on page 684
Input methods for ornaments, arpeggio signs, glissando lines, guitar bends, and jazz articulations on page 251

# Deleting jazz articulations

You can remove jazz articulations from notes after you have input them. However, because jazz articulations are considered an intrinsic part of notes rather than a separate item, you must select and delete them differently from other items.

PROCEDURE

1. In Write mode, select the notes from which you want to remove jazz articulations.
2. In the Ornaments panel, click **Remove** in the **Jazz** section.

RESULT

All jazz articulations are removed from the selected notes.

RELATED LINKS

Input methods for ornaments, arpeggio signs, glissando lines, guitar bends, and jazz articulations on page 251

# Page numbers

Page numbers are used to give each page a unique number, and indicate its position relative to other pages. Just as in newspapers and books, musical scores and parts use page numbers to make sure the music stays in the correct order.

Because you can have multiple flows in a single project in Dorico Elements, you do not need to change page numbers manually in most cases. However, if you have separate files that together make up a single piece, page number changes are necessary to make sure the page numbers continue seamlessly from movement to movement.

In such cases, you can change the default page numbers. For example, if you want to have four pages of front matter before the first page of music in the score, but you want the first page of music in the score to be shown as page 1, you can insert a page number change on the first page of music.

Page numbers are layout-specific in Dorico Elements, meaning you can change the page numbers in each layout independently. For example, you can change the page numbers in the score but show the default page numbers in the parts.

Page numbers in Dorico Elements use a text token to ensure the number is correct.

NOTE

You must have a text frame containing the page number token on every page on which you want page numbers to be shown.

The default master pages contain text frames with page number tokens. You can change the position of page number text frames in the master page editor, which changes the position of page numbers on all pages that use that master page. You can also move page number text frames on individual pages.

You can also change the type of number used to show page numbers in each layout. For example, if you want the front matter to use Roman numerals but the music pages to use Arabic numerals, you can change the type of number together with the page number.

RELATED LINKS

Text tokens on page 355

## Changing the page number numeral style

Page numbers can appear as Arabic or Roman numerals. You can change the numeral style of page numbers in each layout independently.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts whose page number numeral style you want to change.

   By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Page Setup** in the page list.
4. In the **Page Numbers** section, select one of the following options from the **Use** menu:

- **Number**
- **Roman numeral**

5. Click **Apply**, then **Close**.

RESULT

The page number numeral style is changed in the selected layouts.

# Hiding/Showing page numbers

You can hide/show page numbers in each layout independently, including specifying whether to hide/show a page number on the first page. For example, you can show page numbers on every page in the score but hide page numbers on the first page in the parts.

NOTE

To show page numbers, there must be a text frame containing the page number token on the page. The default master page formats for first pages do not contain text frames containing page number tokens, so you must add these if you want to show page numbers on first pages in your project that use the default master page formats.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to hide/show page numbers.

   By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Page Setup** in the page list.
4. In the **Page Numbers** section, select one of the following options from the **Visibility** menu:
   - **Always shown**
   - **Always hidden**
   - **Not on first page**
5. Click **Apply**, then **Close**.

RESULT

- If you select **Always shown**, page numbers are shown on all pages that have a text frame containing the page number token in the selected layouts.
- If you select **Always hidden**, page numbers are hidden on all pages in the selected layouts, including on pages that have a text frame containing the page number token.
- If you select **Not on first page**, page numbers are hidden on the first page in the selected layouts, but shown on all other pages that have a text frame containing the page number token.

NOTE

Your per-layout setting for whether page numbers are hidden/shown above flow headings affects whether page numbers are shown on pages where they are higher on the page than flow headings.

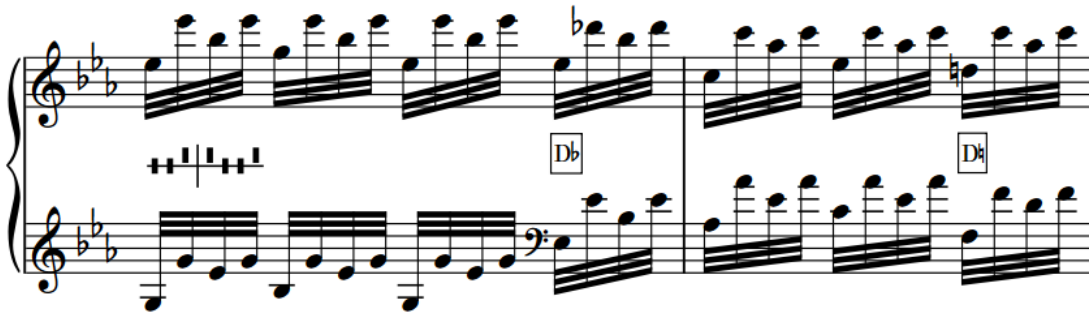
RELATED LINKS

Flow headings on page 329

Hiding/Showing information in running headers above flow headings on page 339

# Harp pedaling

Harp pedaling is a broad term that covers the specific requirements for notating music for harps. This primarily involves harp pedal diagrams, which are often necessary due to the way in which modern concert harps change their tuning.



A passage with a full harp pedal diagram at the start and two subsequent partial pedal changes

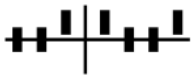
Harps have seven strings in each octave, one for each diatonic pitch C-B, unlike pianos, which have twelve keys in each octave, one for each semitone degree between C-B. Therefore, harps have a mechanical action to change their tuning that includes seven pedals, with each pedal controlling the pitch of the corresponding note in all octaves. These pedals are organized into two groups, one for each foot: three pedals for the left foot and four pedals for the right foot.

Each harp pedal has three possible positions:

1. Flat or highest position: lowers the pitch of the corresponding note by a semitone
2. Natural or middle position
3. Sharp or lowest position: raises the pitch of the corresponding note by a semitone

There are different ways to notate the pedal settings required for a piece of music or a passage within a piece. In Dorico Elements, you can show harp pedaling in the following ways:

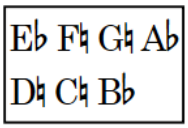
**Diagram**



Indicates the physical positions of the seven pedals. The vertical line represents the split between left-foot and right-foot pedals and the horizontal line represents the natural position.

- Pedals below the horizontal line indicate sharpened notes.
- Pedals above the horizontal line indicate flattened notes.

**Note Names**




Indicates the required accidentals for the seven diatonic pitches, arranged in two lines. Right-foot pedals are shown on top and left-foot pedals are shown below.

Any pitches that you input that do not fit with the current harp pedal diagram are considered out of range, and appear red when colors are shown for notes that are out of range. If you do not input any harp pedaling, Dorico Elements assumes all harp pedals are in their natural setting, as they would be for C major.

In Dorico Elements, you can input harp pedal diagrams using the playing techniques popover and you can automatically generate accurate harp pedal diagrams based on an entire flow or a specific passage of music. However, you can only input and show harp pedal diagrams on staves belonging to harp instruments; if you copy material from harp staves to other instruments, harp pedaling is automatically removed.

By default, harp pedaling is hidden in full score/custom score layouts and shown in part layouts. In layouts where harp pedaling is hidden, harp pedal diagrams are indicated by signposts. You can hide/show harp pedaling in each layout independently and hide individual harp pedal diagrams in layouts where harp pedaling is shown. You can also determine when to show partial harp pedaling, such as when only a single pedal must be changed at one time.

Harp pedal diagrams in Dorico Elements affect the pitches played back in glissando lines.

RELATED LINKS

Partial harp pedaling on page 694
Inputting harp pedal diagrams on page 272
Hiding/Showing harp pedaling in layouts on page 692
Hiding harp pedal diagrams individually on page 692
Calculating harp pedal diagrams based on existing music on page 272
Hiding/Showing colors for notes out range on page 639
Glissando lines in playback on page 675

# Changing the appearance of harp pedal diagrams

Harp pedaling can be shown as a diagram or using note names. You can change the appearance of harp pedal diagrams individually.

PREREQUISITE

Harp pedaling is shown in the current layout.

PROCEDURE

1. Select the harp pedal diagrams whose appearance you want to change.
2. In the Properties panel, activate **Appearance** in the **Harp Pedals** group.
3. Choose one of the following options:
   - **Diagram**
   - **Note Names**

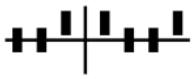
RESULT

The appearance of the selected harp pedal diagrams is changed in the current layout.

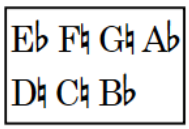
TIP

You can change the default appearance of harp pedaling in each layout independently in the **Harp Pedaling** section of the **Players** page in **Setup** > **Layout Options**.

EXAMPLE



Harp pedaling shown as a diagram




Harp pedaling shown using note names

RELATED LINKS

Partial harp pedaling on page 694
Inputting harp pedal diagrams on page 272
Calculating harp pedal diagrams based on existing music on page 272

# Hiding/Showing harp pedaling in layouts

You can input and calculate harp pedaling in any layout, but by default harp pedaling is not shown in full score layouts, as they are usually only useful for the performer. You can hide/show harp pedaling in each layout in your project independently of other layouts.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to hide/show harp pedaling.

   By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Players** in the page list.
4. In the **Harp Pedaling** section, activate/deactivate **Show harp pedaling**.
5. Click **Apply**, then **Close**.

RESULT

Harp pedaling is shown in the selected layouts when the checkbox is activated, and hidden when the checkbox is deactivated.

In layouts where harp pedaling is hidden, harp pedal diagrams are indicated by signposts.

NOTE

- You can hide individual harp pedal diagrams in layouts where harp pedaling is shown, but you cannot show individual harp pedal diagrams in layouts where harp pedaling is hidden.
- You can hide/show harp pedaling signposts by choosing **View** > **Signposts** > **Harp Pedals**. Harp pedaling signposts are shown when a tick appears beside **Harp Pedals** in the menu, and hidden when no tick appears.

# Hiding harp pedal diagrams individually

You can hide individual harp pedal diagrams in layouts in which harp pedaling is shown.

PREREQUISITE

Harp pedaling is shown in the current layout.

PROCEDURE

1. In the music area, open the layout in which you want to hide/show individual harp pedal diagrams.
2. Select the harp pedal diagrams you want to hide.
3. In the Properties panel, activate **Hide** in the **Harp Pedals** group.

RESULT

The selected harp pedal diagrams are hidden when **Hide** is activated. Signposts are shown at the position of each hidden harp pedal diagram. However, signposts are not printed by default.

Deactivating **Hide** shows the selected harp pedal diagrams again.

# Hiding/Showing borders on harp pedal diagrams

You can hide/show borders on individual note name harp pedal diagrams. For example, on systems with very tight vertical spacing, hiding borders on harp pedal diagrams can give you a little extra space.

NOTE

These steps only apply to harp pedal diagrams using note names.

PREREQUISITE

Harp pedaling is shown in the current layout.

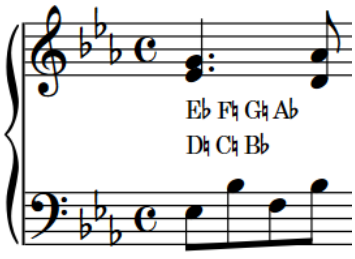
PROCEDURE

1. Select the note name harp pedal diagrams on which you want to hide/show borders.
2. In the Properties panel, activate **Border** in the **Harp Pedals** group.
3. Activate/Deactivate the corresponding checkbox.

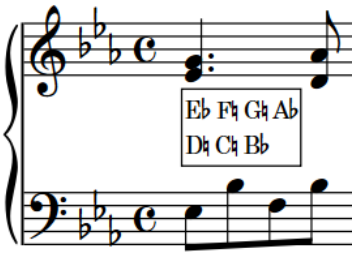
RESULT

Borders are shown on the selected note name harp pedal diagrams when the checkbox is activated, and hidden when the checkbox is deactivated.

EXAMPLE




Note name harp pedal diagram with border hidden




Note name harp pedal diagram with border shown

# Positions of harp pedal diagrams

By default, harp pedal diagrams are centered vertically between the two staves usually shown for harps.

You can move harp pedal diagrams to different rhythmic positions in Write mode. They are automatically positioned to avoid collisions.

## Moving harp pedal diagrams rhythmically

You can move harp pedal diagrams to new rhythmic positions after they have been input.

PROCEDURE

1. In Write mode, select the harp pedal diagrams or the signposts of harp pedal diagrams that you want to move.

   NOTE

   When using the mouse, you can only move one harp pedal diagram rhythmically at a time.

2. Move the harp pedal diagrams according to the current rhythmic grid resolution in any of the following ways:
   - Press **Alt/Opt-Right Arrow** to move them to the right.
   - Press **Alt/Opt-Left Arrow** to move them to the left.
   - Click and drag the harp pedal diagram to the right/left.

RESULT

The selected harp pedal diagrams are moved to new rhythmic positions.

NOTE

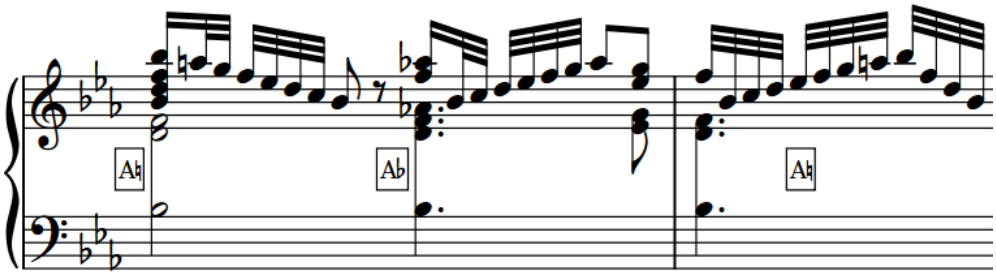
If moving harp pedal diagrams means some notes no longer fit with the current harp pedal diagram and colors are shown for notes out of range, these notes appear red.

RELATED LINKS

Hiding/Showing colors for notes out range on page 639

# Partial harp pedaling

Partial harp pedal diagrams only show the notes whose pedal setting must change at that position, rather than showing the required settings for all pedals. This can make those changes immediately clear to the performer, as they have fewer pedals to read.




Partial pedal diagrams for a sequence containing several quick pedal changes

You can allow partial harp pedaling for individual harp pedal diagrams and you can set a maximum threshold of pedal changes at a single position, above which all harp pedal diagrams must show all pedals. This is because performers are used to the pattern of note names in complete harp pedal diagrams, and if there are many changes in a partial harp pedal diagram, this can be harder to read than a complete one.

By default, Dorico Elements shows notes in partial harp pedal diagrams on two lines with right-foot pedals on top and left-foot pedals below.

NOTE

Only harp pedal diagrams using note names can be shown as partial.

RELATED LINKS

Inputting harp pedal diagrams on page 272

## Allowing/Disallowing partial harp pedaling

You can allow/disallow partial harp pedaling for individual note name harp pedal diagrams. The default setting in Dorico Elements is to allow partial harp pedaling for up to three pedal changes.

NOTE

- These steps only apply to harp pedal diagrams using note names.
- Harp pedal diagrams positioned at the very beginning of a flow can only appear as full harp pedal diagrams.

PREREQUISITE

Harp pedaling is shown in the current layout.

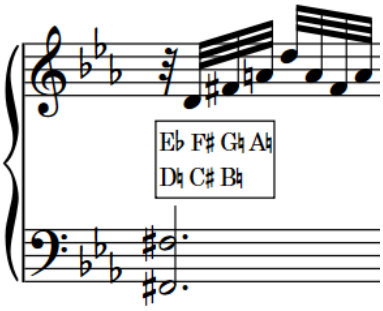
PROCEDURE

1. Select the note name harp pedal diagrams for which you want to allow/disallow partial harp pedaling.
2. In the Properties panel, activate **Partial pedaling** in the **Harp Pedals** group.
3. Activate/Deactivate the corresponding checkbox.

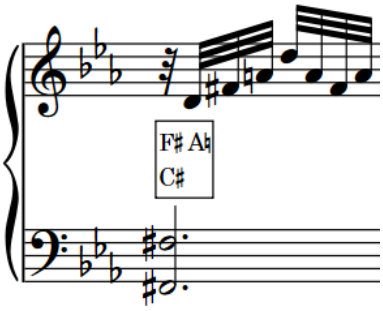
RESULT

Partial harp pedaling is allowed for the selected note name harp pedal diagrams when the checkbox is activated, and disallowed when the checkbox is deactivated.

EXAMPLE




Harp pedal diagram showing all pedals




Partial harp pedal diagram

RELATED LINKS

Hiding/Showing harp pedaling in layouts on page 692

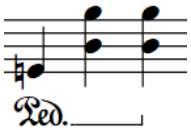
# Pedal lines

Pedal lines indicate to performers which piano pedals to use, and can also give performance instructions, such as how far down to depress the pedals and when to lift the pedal to clear the resonance.

Most pianos have either two or three pedals. These pedals are:

**Sustain pedal**

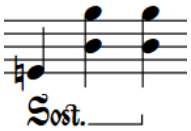
The sustain pedal controls the dampers on the piano strings, which is why it is also known as the “damper pedal”. It is also the most commonly used pedal. Depressing the sustain pedal removes the dampers, allowing the strings to resonate longer. Sustain pedals are usually on the right.




An example sustain pedal line

**Sostenuto pedal**

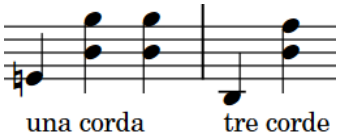
The *sostenuto* pedal only allows the strings of the notes currently depressed on the keyboard to resonate. It is also known as the “middle pedal” as it is usually in the middle of the other pedals.




An example sostenuto pedal line

**Una corda pedal**

The *una corda* pedal shifts the action inside the piano so that the hammers hit fewer strings than normal. Historically, this caused hammers only to hit one string, not the usual three, which is where the name comes from. Because this reduces the volume and impact of the sound, it is also known as the “soft pedal”.




An example una corda pedal line

Dorico Elements offers comprehensive notational and playback support for piano pedal lines. You can create pedaling for the sustain, *sostenuto*, and *una corda* pedals, with support for modern sustain pedaling techniques, including changing the pedal level over the course of a single pedal instruction.

In Dorico Elements, pedal lines are considered playing techniques because they alter the sound produced by the instrument. Therefore, pedal lines are included in the Playing Techniques panel in Write mode and you can input them using the playing techniques popover. However, pedal lines have additional, unique requirements that do not apply to other playing techniques, such as retakes, pedal level changes, start signs, end signs, and continuation lines.

RELATED LINKS
Input methods for playing techniques, pedal lines, string indicators, and harp pedal diagrams on page 263
Pedal lines in playback on page 707
Pedal line start signs, hooks, and continuation lines on page 703
Text pedal line signs on page 705
Lines on page 719
Playing technique continuation lines on page 713

# Sustain pedal retakes and pedal level changes

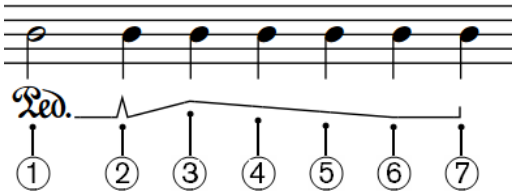
Pedal retakes indicate where a player should lift the sustain pedal, which dampens the piano's strings and clears the resonance, before depressing the pedal again. Pedal level changes indicate a change to how far the pedal is depressed.

Dorico Elements provides clear representations of pedal retakes and level changes.

NOTE

- In Dorico Elements, you cannot input pedal level changes. However, pedal level changes are shown if you import or open a project that contains them, and you can remove them in the same way as removing retakes.
- You can only add pedal retakes to sustain pedal lines.

EXAMPLE




Example pedal line with retake and level changes

**1** Ped. glyph
**2** Retake
**3** One quarter depressed
**4** Half depressed
**5** Three quarters depressed
**6** Fully depressed
**7** Line end hook

RELATED LINKS
Removing retakes and pedal level changes on page 699
Input methods for playing techniques, pedal lines, string indicators, and harp pedal diagrams on page 263

## Removing retakes and pedal level changes

You can remove pedal retakes and level changes without deleting the sustain pedal line or changing its rhythmic position.

PROCEDURE

1. In Write mode, select the note on the staff and at the rhythmic position of the retake or pedal level change you want to remove.

   NOTE

   You can only remove one retake or pedal level change at a time.

2. Remove the retake or pedal level change in any of the following ways:
   - Open the playing techniques popover, enter **nonotch** into the popover, then press **Return**.

     NOTE

     **nonotch** must be spelled as one word, without a space.

   - Choose **Edit** > **Pedal Lines** > **Remove Retake**. You can also choose this option from the context menu.

RESULT

The selected retake or pedal level change is removed, and the pedal line returns to its previous level as set by either the start of the pedal line, or the retake or pedal level change immediately preceding the one you removed.

RELATED LINKS

Playing techniques popover on page 263

# Positions of pedal lines

The default placement of pedal lines is below the bottom staff, even if there are only notes in the upper staff for the right hand. They are placed outside all other notations, including octave lines, slurs, and articulations.

If one pedal is used, it is placed as close to the bottom of the staff as possible, while remaining outside of all other notations.

If multiple pedals are used simultaneously, they are organized below the bottom of the staff as follows:

1. Sustain pedal: closest to the staff
2. *Sostenuto* pedal: below the sustain pedal line
3. *Una corda* pedal: furthest from the staff

The beginning of the glyph/text that indicates the start position of pedal lines aligns with the note to which it applies. If you are using a line end hook to indicate the end of pedal lines, the hook aligns with the note or rhythmic position to which it applies.

You can move pedal lines to different rhythmic positions in Write mode. They are automatically positioned to avoid collisions.

NOTE

You cannot move retakes rhythmically. You must remove them and input a new retake at the position you want.

RELATED LINKS

Text pedal line signs on page 705
Pedal line start signs, hooks, and continuation lines on page 703
Lengthening/Shortening pedal lines on page 701
Input methods for playing techniques, pedal lines, string indicators, and harp pedal diagrams on page 263

## Moving pedal lines rhythmically

You can move pedal lines to new rhythmic positions after they have been input. Any retakes or pedal level changes on the pedal lines are also moved.

NOTE

If you want to move retakes independently of the pedal line, you must first remove them from their original positions and input new retakes at the new positions.

PROCEDURE

1. In Write mode, select the pedal lines you want to move.

   NOTE

   When using the mouse, you can only move one pedal line rhythmically at a time.

2. Move the pedal lines in any of the following ways:
   - To move a single pedal line to the next notehead on the staff, press **Alt/Opt-Right Arrow**.
   - To move a single pedal line to the previous notehead on the staff, press **Alt/Opt-Left Arrow**.
   - To move them to the right according to the current rhythmic grid resolution, press **Ctrl/Cmd-Alt/Opt-Right Arrow**.
   - To move them to the left according to the current rhythmic grid resolution, press **Ctrl/Cmd-Alt/Opt-Left Arrow**.

     NOTE

     You can only move pedal lines according to the current rhythmic grid resolution when multiple pedal lines are selected.

   - Click and drag the pedal line to the right/left.

RESULT

The selected pedal lines are moved to new rhythmic positions.

NOTE

Pedal lines can only be moved along staves. If you want to move a pedal line across staves, you must delete the pedal line and input a new pedal line on the other staff.

RELATED LINKS
Lengthening/Shortening pedal lines on page 701
Input methods for playing techniques, pedal lines, string indicators, and harp pedal diagrams on page 263

## Changing the position of pedal lines relative to grace notes

You can change the start/end positions of individual pedal lines relative to grace notes.

PROCEDURE

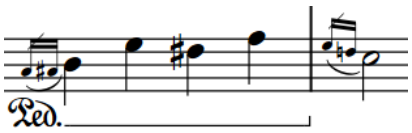
1. Select the pedal lines whose position relative to grace notes you want to change.
2. In the Properties panel, activate any of the following properties in the **Pedal Lines** group:
   - **Starts before grace notes**
   - **Ends before grace notes**
3. Activate/Deactivate the corresponding checkboxes.

RESULT

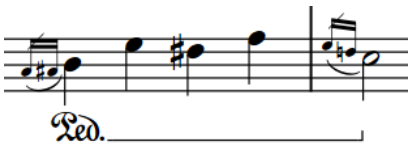
When the checkboxes are activated, the corresponding parts of the selected pedal lines are positioned before grace notes.

When the checkboxes are deactivated, the corresponding parts of the selected pedal lines are positioned after grace notes.

EXAMPLE



Pedal line starting/ending before grace notes



Pedal line starting/ending after grace notes

# Lengthening/Shortening pedal lines

You can lengthen/shorten pedal lines rhythmically after they have been input.

PROCEDURE

1. In Write mode, select the pedal lines you want to lengthen/shorten.

   NOTE

   When using the mouse, you can only lengthen/shorten one pedal line at a time.

2. Lengthen/Shorten the pedal lines in any of the following ways:
   - To snap the end of a single pedal line to the next notehead, press **Ctrl/Cmd-Shift-Alt/Opt-Right Arrow**.
   - To snap the end of a single pedal line to the previous notehead, press **Ctrl/Cmd-Shift-Alt/Opt-Left Arrow**.
   - To lengthen them by the current rhythmic grid resolution, press **Shift-Alt/Opt-Right Arrow**.

- To shorten them by the current rhythmic grid resolution, press **Shift-Alt/Opt-Left Arrow**.

  NOTE

  - You can only lengthen/shorten pedal lines according to the current rhythmic grid resolution when multiple pedal lines are selected.
  - When using the keyboard, you can only move the end of pedal lines. You can move the start of pedal lines by moving the whole line, or by clicking and dragging the start handle.

- Click and drag the circular handle at the start/end to the right/left.

RESULT

Single pedal lines are lengthened/shortened according to the current rhythmic grid resolution or to the next/previous notehead, whichever is closer.

Multiple pedal lines are lengthened/shortened according to the current rhythmic grid resolution.

RELATED LINKS

Positions of pedal lines on page 699
Moving pedal lines rhythmically on page 700

## Splitting pedal lines

You can split sustain pedal lines at any rhythmic position with an existing item along their length into two separate pedal lines.

NOTE

These steps only apply to sustain pedal lines.

PROCEDURE

1. Select an item on the staff and at the rhythmic position where you want to split the sustain pedal line.

   NOTE

   You can only split one pedal line at a time.

2. Choose **Edit** > **Pedal Lines** > **Split Pedal Line**. You can also choose this option from the context menu.

RESULT

The pedal line on the selected staff is split at the selected rhythmic position.

AFTER COMPLETING THIS TASK

You can move, lengthen/shorten, and edit both pedal lines independently.

RELATED LINKS

Moving pedal lines rhythmically on page 700
Pedal line start signs, hooks, and continuation lines on page 703
Text pedal line signs on page 705

## Merging pedal lines

You can merge existing sustain pedal lines together, for example, if you want to fill in a gap between two sustain pedal lines.

NOTE

These steps only apply to sustain pedal lines.

PROCEDURE

1. Select the sustain pedal lines on the same staff that you want to merge together.

   NOTE

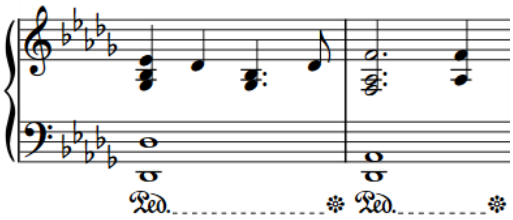
   You can only merge pedal lines on one staff at a time.

2. Choose **Edit** > **Pedal Lines** > **Merge Pedal Lines**. You can also choose this option from the context menu.

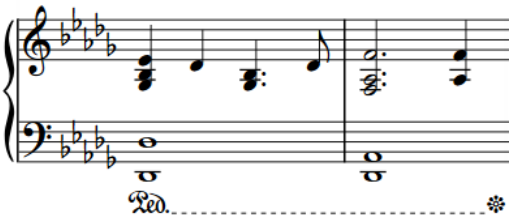
RESULT

The selected pedal lines are merged together into a single pedal line. If there were gaps between them, a continuation line is automatically shown across them.

EXAMPLE



Two separate pedal lines



Two pedal lines merged into one

AFTER COMPLETING THIS TASK

You can input retakes and pedal level changes, for example, if you want to show a retake at the position where previously one of the pedal lines started.

RELATED LINKS

Input methods for playing techniques, pedal lines, string indicators, and harp pedal diagrams on page 263

# Pedal line start signs, hooks, and continuation lines

Pedal lines normally comprise a start sign, a continuation line, and an end hook. This indicates clearly to performers where to depress each type of pedal, how long to keep it depressed, and where to lift it.

In Dorico Elements, you can change the appearance of each part of pedal lines individually, for example, if you want the start sign of an individual pedal line to show text instead of a glyph.

You can select whole pedal lines in Write mode and change most aspects of their appearance according to the type of pedal line, such as their continuation line or start sign.

# Changing the start sign appearance of pedal lines

You can change the appearance of the start of pedal lines individually. Pedal line start signs can be shown as variations of the traditional pedal line glyph, other symbols, or text.

PROCEDURE

1. Select the pedal lines whose start sign appearance you want to change.

   NOTE

   The pedal lines you select must be the same type, for example, only sustain pedal lines.

2. In the Properties panel, activate **Sign appearance** in the **Pedal Lines** group.
3. Select one of the options from the menu.
   The options are different according to the type of pedal line selected.

RESULT

The start sign appearance of the selected pedal lines is changed.

TIP

Deactivating **Sign appearance** returns the selected pedal lines to your default setting for start sign appearance.

AFTER COMPLETING THIS TASK

If you selected a text sign appearance, you can edit the text shown.

RELATED LINKS

Editing pedal line start text on page 706

# Changing the type of hook at the start/end of pedal lines

You can change the type of hook shown at the start/end of pedal lines individually.

NOTE

You can only change the start hook type of pedal lines that have a hook as their start sign, and you can only change the end hook type of pedal lines that have a continuation line.

PROCEDURE

1. Select the pedal lines whose hook type you want to change.
2. In the Properties panel, activate the following properties, individually or together, in the **Pedal Lines** group:
   - **Line start hook**
   - **Line end hook**
3. Select one of the following options from each menu:
   - **No Hook**
   - **Vertical Hook**
   - **Slant Hook**
   - **Inverse Hook**

RESULT

The hook type at the start/end of the selected pedal lines is changed.

## Changing the continuation line type of pedal lines

You can change the type of continuation line used for the different types of pedal lines individually.

PROCEDURE

1. Select the pedal lines whose continuation line type you want to change.
2. In the Properties panel, activate **Continuation type** in the **Pedal Lines** group.
3. Select one of the following continuation types from the menu:
   - **Line**
   - **Sign at End**
   - **Sign at End and Dashed Line**
   - **None**

RESULT

The continuation line type of the selected pedal lines is changed.

## Parenthesizing pedal line continuation signs

You can show individual pedal line continuation signs with/without parentheses. Pedal line continuation signs are shown by default at the start of new systems when pedal lines continue across system/frame breaks.

PROCEDURE

1. Select the pedal lines whose continuation sign appearance you want to change.
2. In the Properties panel, activate **Show continuation sign in parentheses** in the **Pedal Lines** group.
3. Activate/Deactivate the corresponding checkbox.

RESULT

Continuation signs are shown with parentheses when the checkbox is activated, and without parentheses when the checkbox is deactivated.

# Text pedal line signs

All types of pedal lines can have text as their start signs, instead of glyphs or hooks. You can override the text shown at the start of pedal lines that have text start signs, you can change the continuation text shown at the start of new systems, and you can override the restorative text shown at the end of *una corda* pedal lines.

### Pedal lines that use a text indication rather than a symbol

For pedal lines such as *una corda* or sustain that have text for their start sign, such as **Ped. Text**, rather than the more ornate symbol, you can override the text shown at the start of the pedal line and replace it with your preferred performance direction.

### Continuation sign/text

When pedal lines continue onto subsequent systems, a continuation sign/text is shown in parentheses by default. If the pedal line is using text for their start sign, such as **Ped. Text**, rather than a symbol, you can change the text shown at the start of a new system and replace it with your preferred performance direction.

### Una corda pedal lines

The equivalent to the final pedal lift for the *una corda* pedal marking is the indication to return to *tre corde*. You can override the *tre corde* text shown at the end of the pedal line and replace it with your preferred performance direction.

RELATED LINKS
Changing the start sign appearance of pedal lines on page 704

## Editing pedal line start text

You can change the text shown at the start of individual pedal lines that use text as their start sign.

PROCEDURE

1. Select the pedal lines whose start text you want to edit.
2. In the Properties panel, activate **Text** in the **Pedal Lines** group.
3. Enter the text you want into the value field.
4. Press **Return**.

RESULT

The text shown at the start of the selected pedal lines is changed.

Deactivating **Text** restores the default start text for the selected pedal lines.

NOTE

Deactivating properties permanently deletes any custom text entered.

RELATED LINKS
Changing the start sign appearance of pedal lines on page 704

## Editing pedal line continuation text

You can change the text shown at the start of subsequent systems when pedal lines continue across system/frame breaks.

NOTE

These steps only apply to pedal lines that use text as their start sign.

PROCEDURE

1. Select the pedal lines whose continuation text you want to edit.
2. In the Properties panel, activate **Continuation text** in the **Pedal Lines** group.
3. Enter the text you want into the value field.

4. Press **Return**.

RESULT

The continuation text shown at the start of subsequent systems for the selected pedal lines is changed.

Deactivating **Continuation text** restores the default continuation text for the selected pedal lines.

NOTE

Deactivating properties permanently deletes any custom text entered.

## Editing una corda pedal line restorative text

The equivalent to the final pedal lift for *una corda* pedal lines is the indication to return to *tre corde*. You can change the *tre corde* text shown at the end of individual *una corda* pedal lines.

NOTE

These steps only apply to *una corda* pedal lines that use text as their start sign.

PROCEDURE

1. Select the *una corda* pedal lines whose restorative text you want to edit.
2. In the Properties panel, activate **Restorative text** in the **Pedal Lines** group.
3. Enter the text you want into the value field.
4. Press **Return**.

RESULT

The restorative text shown at the ends of the selected *una corda* pedal lines is changed.

Deactivating **Restorative text** restores the default restorative text for the selected pedal lines.

NOTE

Deactivating properties permanently deletes any custom text entered.

# Pedal lines in playback

Pedal lines are automatically played back in Dorico Elements.

The three piano pedals send MIDI controllers as follows:

- Sustain pedal lines send MIDI controller 64 (Sustain).
- *Sostenuto* pedal lines send MIDI controller 66 (Sostenuto).
- *Una corda* pedal lines send MIDI controller 67 (Soft Pedal).

Some piano VST instruments, such as Pianoteq and Garritan CFX Concert Grand, support partial depression of the sustain pedal. Consult the manufacturer's documentation for more information.

# Pedal lines imported from MusicXML files

Sustain pedal lines can be imported from MusicXML files. MusicXML can only describe the sustain pedal, and it cannot describe changes in pedal depression level.

# Playing techniques

The term “playing techniques” covers a wide range of instructions intended to tell performers to modify the sound of the notes they are playing, for example, by changing their embouchure or changing the position of their bow, or by modifying their instrument, such as adding a mute or depressing a pedal.

In Dorico Elements, playing techniques can be expressed as symbols or as text. All available playing techniques can be found in the Playing Techniques panel in Write mode, organized by instrument family. For example, you can find pedal lines in the **Keyboard** section of the Playing Techniques panel.

NOTE

Because pedal lines have additional, unique requirements that do not apply to other playing techniques, such as retakes, start signs, and continuation lines, they are documented separately. Pedal lines also have their own group of the Properties panel that is separate from the **Playing Techniques** group.

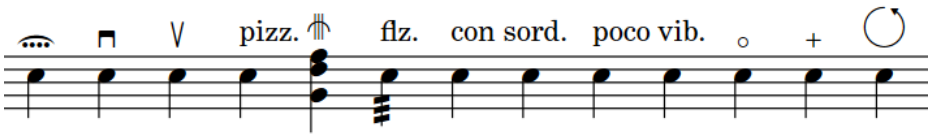
Adding playing techniques can change how the instrument plays back. For example, adding pizzicato to a violin staff activates a key switch that changes the sound produced by the VST instrument.

Many playing techniques that only appear once in the music nonetheless imply that the playing technique continues. For example, pizzicato usually appears once but applies until the next playing technique, such as arco. In Dorico Elements, you can show continuation lines after and between playing techniques to convey clearly to performers the notes to which you want them to apply. You can also group multiple playing techniques together.

Playing technique texts use a plain font, neither bold nor italic, so they are not confused with dynamics and expressive text.

NOTE

This does not apply to pedal lines, as they use a separate font style to other playing techniques.



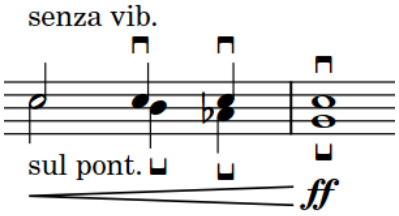

Some of the playing techniques in Dorico Elements

RELATED LINKS

Input methods for playing techniques, pedal lines, string indicators, and harp pedal diagrams on page 263
Playback playing techniques on page 717
Pedal lines on page 697
String indicators on page 590
Playing technique continuation lines on page 713
Groups of playing techniques on page 716

# Positions of playing techniques

Playing techniques, both as text and symbols, are placed above the staff by default. On vocal staves, they are placed above the staff and below dynamics. In multiple-voice contexts, playing techniques for the up-stem voices are placed above the staff and playing techniques for the down-stem voices are automatically placed below the staff.




Placement of playing techniques with two voices on the same staff

You can move playing techniques to different rhythmic positions in Write mode. They are automatically positioned to avoid collisions.

RELATED LINKS
Text pedal line signs on page 705
Changing the staff-relative placement of items on page 310

## Moving playing techniques rhythmically

You can move playing techniques to new rhythmic positions after they have been input, including individual playing techniques within a group.

PROCEDURE

1. In Write mode, select the playing techniques you want to move.

   NOTE

   - When using the mouse, you can only move one playing technique rhythmically at a time.
   - Moving multiple playing techniques in the same group at the same time ungroups them.

2. Move the playing techniques in any of the following ways:
   - To move a single playing technique to the next notehead on the staff, press **Alt/Opt-Right Arrow**.
   - To move a single playing technique to the previous notehead on the staff, press **Alt/Opt-Left Arrow**.
   - To move them to the right according to the current rhythmic grid resolution, press **Ctrl/Cmd-Alt/Opt-Right Arrow**.
   - To move them to the left according to the current rhythmic grid resolution, press **Ctrl/Cmd-Alt/Opt-Left Arrow**.

     NOTE

     You can only move playing techniques according to the current rhythmic grid resolution when multiple playing techniques are selected.

   - Click and drag the playing technique to the right/left to the notehead you want.

RESULT

The selected playing techniques are moved to new rhythmic positions.

NOTE

If a single playing technique passes over another playing technique as part of its move, the existing one is unaffected as multiple playing techniques can exist at the same rhythmic position. However, if you move multiple playing techniques together, any existing playing techniques they pass over are shortened or deleted accordingly.

You can undo this action, but any playing techniques shortened/deleted in the process are only restored if you moved playing techniques using the keyboard.

RELATED LINKS
Moving pedal lines rhythmically on page 700
Groups of playing techniques on page 716

# Adding text to playing techniques

You can add text above or alongside playing techniques after they have been input, for example, to clarify the intention of the playing technique.

NOTE

These steps do not apply to pedal lines.

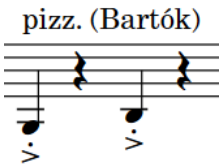
PROCEDURE

1. Select the playing techniques to which you want to add text.
2. In the Properties panel, activate **Alternative text** in the **Playing Techniques** group.
3. Enter the text you want into the value field.
4. Press **Return**.

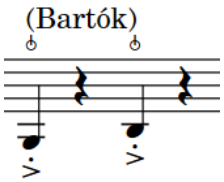
RESULT

The text you entered into the value field is shown directly after text playing techniques, and directly above symbol playing techniques.

EXAMPLE




Alternative text added to text playing technique




Alternative text added to symbol playing technique

RELATED LINKS
Text pedal line signs on page 705

# Hiding/Showing playing techniques

You can hide/show playing techniques individually, for example, if your expression map requires you to input a playing technique to trigger the correct playback but you do not want that technique to appear in the music.

PROCEDURE

1. Select the playing techniques you want to hide, or the signposts of playing techniques you want to show.
2. In the Properties panel, activate/deactivate **Hidden** in the **Playing Techniques** group.

RESULT

The selected playing techniques are hidden when **Hidden** is activated, and shown when it is deactivated.

Signposts are shown at the position of each hidden playing technique. However, signposts are not printed by default.

TIP

- If you do not want to show playing technique signposts, choose **View** > **Signposts** > **Playing Techniques**. Playing technique signposts are shown when a tick appears beside **Playing Techniques** in the menu, and hidden when no tick appears.
- You can assign a key command for **Hide/Show Item** on the **Key Commands** page in **Preferences**, which applies to chord symbols, playing techniques, and time signatures.

RELATED LINKS

Expression maps on page 439
Signposts on page 314

# Lengthening/Shortening playing techniques

You can lengthen/shorten the duration of playing techniques after they have been input, including string indicators outside the staff. Lengthening a playing technique that was added to a single note gives it duration.

NOTE

- You can only lengthen/shorten non-grouped playing techniques or the last playing technique in a group.
- Lengthening/Shortening playing techniques does not affect playback. The sounds produced in playback rely on the playback playing technique associated with the playing technique, the expression map settings, and sound libraries loaded in the project.

PROCEDURE

1. In Write mode, select the playing techniques you want to lengthen/shorten.

   NOTE

   When using the mouse, you can only lengthen/shorten one playing technique at a time. When using the keyboard, you can lengthen/shorten multiple playing techniques, but they must all have duration already.

2. Lengthen/Shorten the playing techniques in any of the following ways:

- To lengthen them by the current rhythmic grid resolution, press **Shift-Alt/Opt-Right Arrow**.
- To shorten them by the current rhythmic grid resolution, press **Shift-Alt/Opt-Left Arrow**.
- To snap the end of a single playing technique to the next notehead, press **Ctrl/Cmd-Shift-Alt/Opt-Right Arrow**.
- To snap the end of a single playing technique to the previous notehead, press **Ctrl/Cmd-Shift-Alt/Opt-Left Arrow**.

  NOTE

  - You can only lengthen/shorten playing techniques according to the current rhythmic grid resolution when multiple playing techniques are selected.
  - When using the keyboard, you can only move the end of playing techniques with duration. You can move the start of playing techniques with duration by moving them rhythmically, or by clicking and dragging the start handle.

- Click and drag the circular handle at the start/end to the right/left.

  NOTE

  Playing technique groups only have a single handle at their start and end, not individual handles for each playing technique within the group.

RESULT

Single playing techniques are lengthened/shortened according to the current rhythmic grid resolution or to the next/previous notehead, whichever is closer.

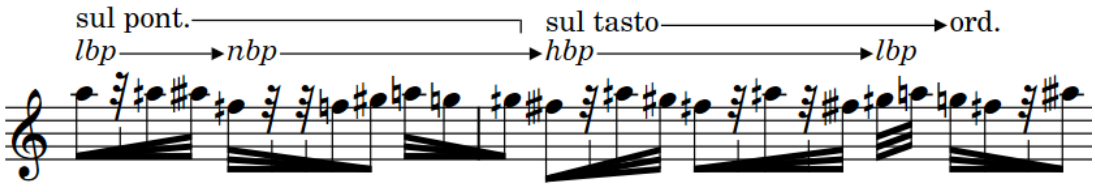
Multiple playing techniques are lengthened/shortened according to the current rhythmic grid resolution.

RELATED LINKS

Playing technique duration on page 714

# Playing technique continuation lines

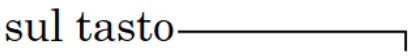
Playing technique continuation lines convey exactly the notes to which playing techniques apply, and can also indicate a gradual transition between playing techniques.




A phrase with multiple playing technique continuation lines

In Dorico Elements, there are the following types of playing technique continuation lines:

**Duration line**




Indicates a specific duration to which the playing technique applies. The duration line for most playing techniques is a solid line with a hook cap at the end.

Playing techniques show duration lines when the following conditions are met:

- The playing technique has duration.
- The continuation type for the playing technique is set to show lines.
- The playing technique is ungrouped or is the final playing technique in a group.

**Transition line**


Indicates that the playing technique at the start must gradually turn into the playing technique at the end over the duration specified by the line. The transition line for most playing techniques is a solid line with an arrow cap at the end.

Transition lines are automatically shown between playing techniques in groups.

NOTE

Playing technique continuation lines do not affect playback. The sounds produced in playback rely on the playback playing technique associated with the playing technique, the expression map settings, and the sound libraries loaded in the project.

RELATED LINKS
Groups of playing techniques on page 716
Lines on page 719
Line components on page 721

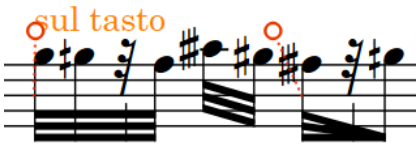
## Playing technique duration

In Dorico Elements, playing techniques have an explicit duration when they apply to a specific range, rather than from a single rhythmic position onwards. Playing techniques with duration can show continuation lines.

You can give duration to any playing technique in any of the following ways:

- Group playing techniques together
- Input playing techniques with an open end during note input and extend them
- Add playing techniques to a range of notes
- Lengthen playing techniques

In Write mode, playing techniques with duration have start and end handles that show their duration.




Start and end handles on a playing technique with duration

NOTE

Playing technique duration does not affect playback. The sounds produced in playback rely on the playback playing technique associated with the playing technique, the expression map settings, and the sound libraries loaded in the project.

RELATED LINKS
Grouping playing techniques together on page 716

Input methods for playing techniques, pedal lines, string indicators, and harp pedal diagrams on page 263
Lengthening/Shortening string indicators on page 591

## Hiding/Showing playing technique duration lines

You can hide/show duration lines for individual playing techniques. If you want to hide duration lines, you can choose to show nothing or *sim.*.

NOTE

These steps only apply to playing technique duration lines. They do not apply to playing technique transition lines.

PREREQUISITE

The playing techniques whose duration lines you want to hide/show have duration.

PROCEDURE

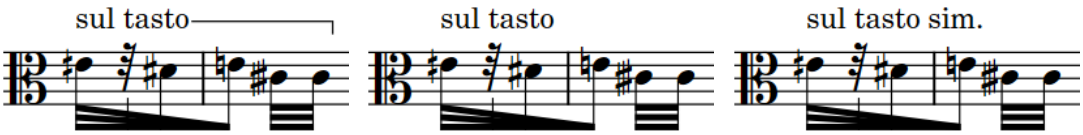
1. In Write mode, select the playing techniques whose duration lines you want to hide/show.
2. In the Properties panel, activate **Continuation type** in the **Playing Techniques** group.
3. Select one of the following options from the menu:
   - **None**
   - **sim.**
   - **Line**

RESULT

Duration lines are hidden after the selected playing techniques when you select None. When you select **sim.**, duration lines are hidden and *sim.* is shown once after each selected playing technique.

Duration lines are shown after the selected playing techniques when you select **Line**.

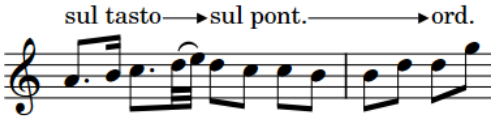
EXAMPLE



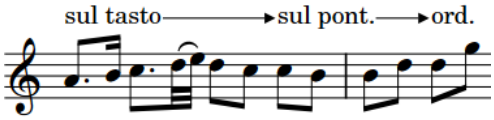

Duration line shown | Duration line hidden | Duration line hidden but sim. shown

# Groups of playing techniques

Groups of playing techniques are automatically aligned in a row and can be moved and edited as a group. When you move individual playing techniques within a group, the lengths of any continuation lines on either side automatically adjust to compensate.




A group of playing techniques

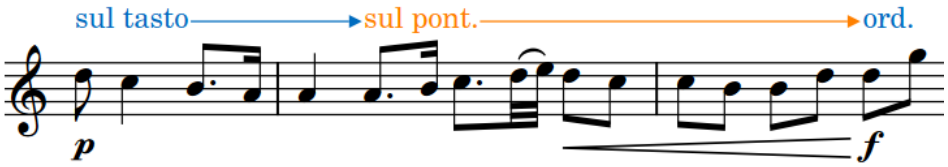



The same group of playing techniques with adjusted transition lines after the middle playing technique moved rhythmically

Two or more playing techniques are automatically grouped together if they are adjoining with duration between them and were added to existing notes together or input in sequence during note input.

Transition lines are automatically shown between playing techniques in groups. The final playing technique in playing technique groups can show a duration line if it has duration.

All of the playing techniques in a group are highlighted when any of the playing techniques in the group are selected.




NOTE

- You cannot group a playing technique group to another playing technique group, you can only group single playing techniques together or single playing techniques to an existing group.
- Groups of playing techniques apply project-wide, meaning you cannot have playing techniques grouped one way in some layouts but differently in other layouts.

RELATED LINKS
Playing technique continuation lines on page 713
Moving playing techniques rhythmically on page 710
Playing technique duration on page 714

## Grouping playing techniques together

You can manually group playing techniques together that were not automatically grouped when they were input. Grouped playing techniques are automatically aligned in a row, show transition lines between them, and can be moved and edited as a group.

NOTE

You cannot group a playing technique group to another playing technique group. You can only group single playing techniques together or single playing techniques to an existing group.

If you want to group a playing technique group to another playing technique group, you must first ungroup them.

PROCEDURE

1. In Write mode, select the playing techniques you want to group together.
2. Choose **Edit** > **Playing Techniques** > **Group Playing Techniques**. You can also choose this option from the context menu.

RESULT

The selected playing techniques are grouped together. Their durations are extended to reach the next playing technique in the group, and transition lines are shown between playing techniques in the group.

RELATED LINKS

Playing technique continuation lines on page 713

## Ungrouping playing techniques and removing playing techniques from groups

You can ungroup playing techniques so that all playing techniques in the group become ungrouped. You can also remove only selected playing techniques from groups while leaving other playing techniques in the group.

This applies to all layouts in which the playing techniques appear.

PROCEDURE

1. In Write mode, select the playing techniques you want to ungroup or remove from groups.
2. Do one of the following:
   - To ungroup all playing techniques in the selected groups, choose **Edit** > **Playing Techniques** > **Ungroup Playing Techniques**.
   - To remove only the selected playing techniques from their groups, choose **Edit** > **Playing Techniques** > **Remove Playing Technique from Group**.

   TIP

   You can also choose these options from the context menu.

RESULT

The selected playing techniques or all playing techniques are removed from the selected groups. Playing techniques that previously had transition lines now appear with duration lines

# Playback playing techniques

Playback playing techniques link together the playing technique items that you input into your music and techniques/articulations in sound libraries in order to produce the correct sounds in playback. They are used by expression and percussion maps to trigger the appropriate commands, such as key switches or control changes.

When you input a playing technique or articulation in Write mode, the corresponding expression map looks for the appropriate playback playing technique. For example, inputting *pizz.* playing techniques causes expression maps to use the **Pizzicato** playback playing technique to switch to the pizzicato sound for playback. If the expression map cannot locate the sound, the playback

playing technique applied either remains the same as the previous playback playing technique or reverts to the natural playback playing technique.

Custom playing techniques that use playback playing techniques which do not already exist in expression maps do not play back automatically. In order for them to play back appropriately, you must add them to the expression maps for each instrument for which you want to use them. You must also assign an action for each custom playing technique that determines how the switch required to execute the technique is controlled.

You can map playback playing techniques as required for different sound libraries in the **Expression Maps** dialog, including creating new combinations of existing playback playing techniques, such as **Legato** and **Tremolo**, which allows them to be used simultaneously.

You can see which playing techniques are in use at any particular rhythmic position in the **Playing Techniques** lane, which you can show by expanding individual instruments in Play mode.

TIP

- If you have input a playing technique but cannot hear a change in the sound, you might be using a combination of playing techniques that the expression map does not expect. For example, if you input a new playing technique without cancelling an existing playing technique, the expression map cannot process the two playing techniques together if the expression map does not have an entry for those two techniques combined.

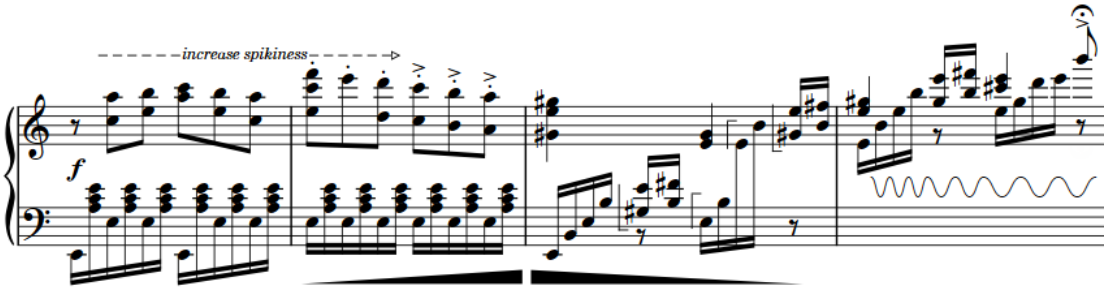
  To avoid playing technique clashes, input a “naturale”, or “nat.”, playing technique to return the software instrument to its natural state. You can then input new playing techniques without clashes. Alternatively, you can create a combination of those playing techniques in order to use them simultaneously.
- You can enable independent voice playback for individual instruments to hear different playing techniques in different voices simultaneously.

RELATED LINKS

Expression maps on page 439
Expression Maps dialog on page 440
Playing Technique Combinations dialog on page 446
Enabling independent voice playback on page 413
Creating new expression maps on page 447

# Lines

Lines can convey a variety of meanings in music, such as indicating which hand to use in piano music or a gradual change in bow pressure. In Dorico Elements, lines can be vertical, horizontal, or angled between notes and have different styles and appearances.




A phrase containing horizontal and vertical lines that convey a range of meanings

NOTE

Due to their generic designs, such as a dashed line with arrow end cap, lines in Dorico Elements have no definitive musical meaning and function primarily graphically, meaning they do not affect playback. Dorico Elements includes dedicated features for specific notations that affect playback if applicable, such as dynamics, arpeggios, glissandi, and trills.

The following types of lines are available in Dorico Elements:

**Horizontal lines**

Horizontal lines span a specified duration, that is, they start at one rhythmic position and end at a later rhythmic position. They might indicate a change over time, such as a wedge that represents bow pressure, or suggest a link between notes, such as a bracket spanning the theme in a fugue or a straight line between notes showing where a melody moves to a different staff.

Attachment types control the positions of horizontal lines and certain aspects of their functionality. Horizontal lines can have different attachment types at their start and end.

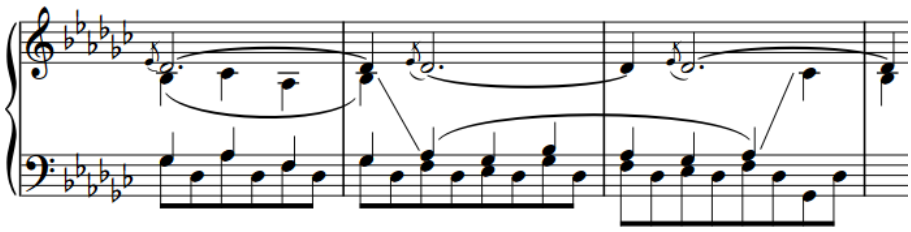
NOTE

You cannot change the attachment type of horizontal lines after they have been input.

In Dorico Elements, each end of horizontal lines can have the following attachment types:

- **Notehead-attached**

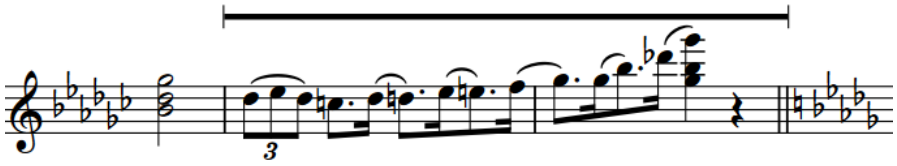
  Attached to an individual note independently of its rhythmic position, meaning that the ends of notehead-attached lines move with notes if you change their pitch or move them rhythmically. Notehead-attached lines can be both angled or horizontal, as their end positions and resulting angles are determined by the interval between the start and end notes.



A phrase containing two notehead-attached lines, showing where the melody moves between piano staves

- **Barline-attached**

  Attached to a rhythmic position and aligned with barlines, if their rhythmic positions coincide with barline positions. Barline-attached lines are always horizontal.

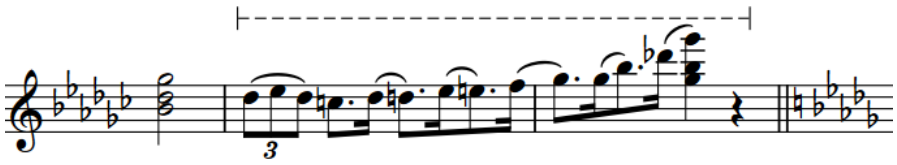


A barline-attached line spanning two full bars

- **Rhythmic position-attached**

  Attached to a rhythmic position and positioned relative to notes, chords, or rests at those rhythmic positions.

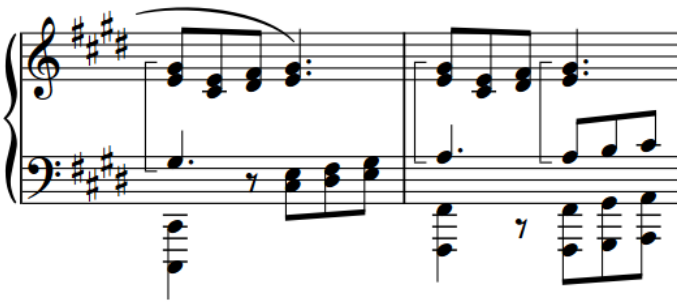
  Rhythmic position-attached lines are horizontal and placed above the staff by default. Their endpoints start to the left and end to the right of notes, chords, or rests at the corresponding rhythmic positions.



A rhythmic position-attached line spanning two full bars

**Vertical lines**

Vertical lines exist at a single rhythmic position and are positioned relative to notes, chords or rests at that position. They might convey details about a specific moment, such as indicating which hand to use for specific notes in piano music.



Vertical lines indicating which notes to play with the right hand

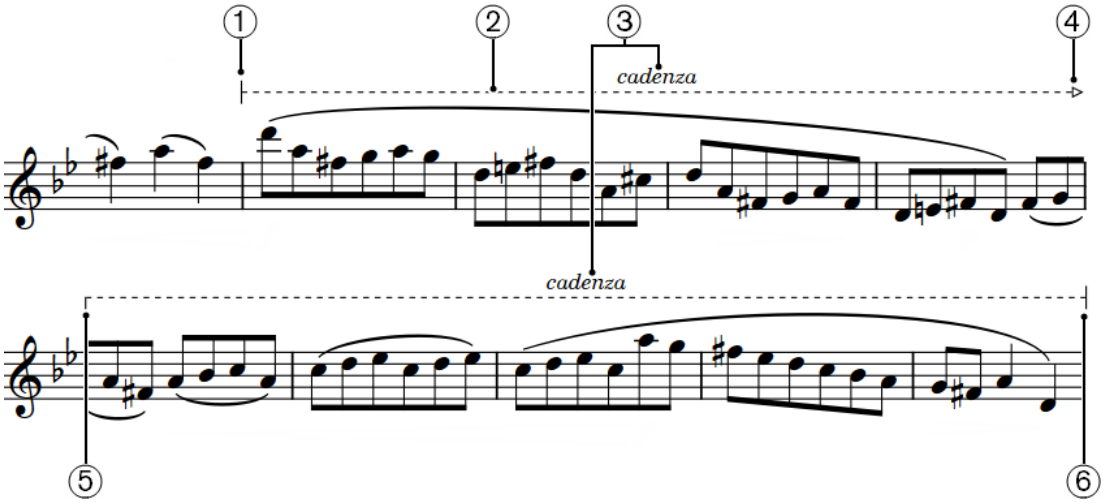
RELATED LINKS

Input methods for lines on page 275

Lines panel on page 276
Adding text to lines on page 730
Changing the placement of horizontal lines on page 724
Arpeggio signs on page 666
Glissando lines on page 672
Octave lines on page 552
Trills on page 656
Playing technique continuation lines on page 713
Pedal lines on page 697
Repeat endings on page 747
Guitar bends on page 676
Tuplet brackets on page 864

# Line components

In Dorico Elements, lines consist of multiple components that together function as a single item.




1 **Start cap**

Symbol shown at the start of lines.

2 **Line body**

Horizontal or vertical line, pattern, or wedge that makes up the main part of a line and extends across its entire length or height.

3 **Text**

Text shown in the middle of lines/line segments, centered by default. On vertical lines, text reads upwards by default.

4 **Continuation end cap**

Symbol shown at the end of segments of lines that continue across multiple systems.

5 **Continuation cap**

Symbol shown at the start of subsequent segments of lines that continue across multiple systems.

6 **End cap**

Symbol shown at the end of lines.

RELATED LINKS

Changing the body style of lines on page 729
Changing the caps of lines on page 729
Adding text to lines on page 730

Changing the position of text relative to horizontal lines on page 731
Changing the position of text relative to vertical lines on page 732
Playing technique continuation lines on page 713

# Positions of lines

The position of lines relative to notes and staves depends on the line type and, for horizontal lines, their attachment type.

**Notehead-attached horizontal lines**

Notehead-attached lines are positioned in relation to the corresponding noteheads, that is, starting to the right of the start note and ending to the left of the end note. They automatically follow the notes at each end, meaning if you change the pitch of either note or move them rhythmically, the line end positions move accordingly. Because their positions depend on the pitches of notes, they can appear both inside and outside the staff. If they are only attached to noteheads at one end, they remain horizontal but follow the staff position of the note to which they are attached.

**Barline-attached horizontal lines**

Barline-attached horizontal lines are placed above the staff by default. Their endpoints align with barlines if their duration coincides with barline positions. If their endpoints do not coincide with barlines, they are positioned like rhythmic position-attached lines.

**Rhythmic position-attached horizontal lines**

Rhythmic position-attached lines are placed above the staff by default. Their endpoints start to the left and end to the right of notes, chords, or rests at the corresponding rhythmic positions.

**Vertical lines**

Vertical lines are positioned to the left of the notes to which they apply, including any applicable accidentals, but are positioned between grace notes and normal notes. If multiple vertical lines exist at the same rhythmic position, the most recent line is positioned furthest to the right, that is, directly to the left of notes, chords or rests.

You can change the position/placement of lines in a variety of ways, such as showing vertical lines on the right of notes or changing the placement of horizontal lines to show them inside the staff.

RELATED LINKS

Changing the horizontal order of vertical lines on page 723
Showing vertical lines before grace notes on page 723
Changing the placement of horizontal lines on page 724

## Showing vertical lines on the right/left of notes

You can change the side of notes on which vertical lines appear, for example, to show selected vertical lines on the right side of notes.

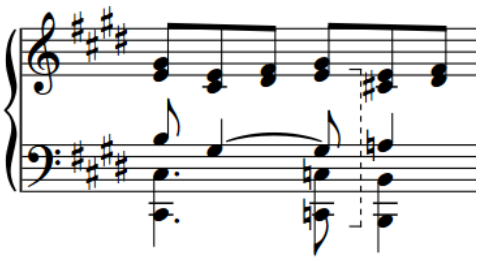
PROCEDURE

1. Select the vertical lines whose horizontal position you want to change.
2. In the Properties panel, activate **Side** in the **Vertical Lines** group.
3. Choose one of the following options:
   - **Left**
   - **Right**

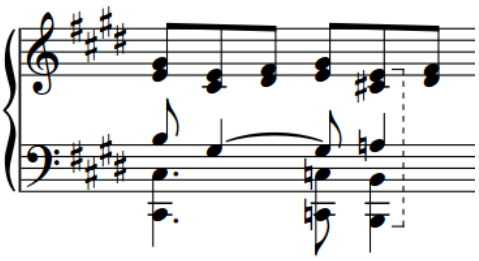
RESULT

The selected lines appear on the corresponding side of notes.

EXAMPLE



Vertical line on the left of notes



Vertical line on the right of notes

AFTER COMPLETING THIS TASK

You can change the order of vertical lines when multiple vertical lines exist at the same rhythmic position and on the same side of notes.

## Changing the horizontal order of vertical lines

You can change the horizontal order of vertical lines when multiple vertical lines exist at the same rhythmic position and on the same side of notes.

PROCEDURE

1. Select the vertical lines whose order you want to change.
2. In the Properties panel, activate **Column** in the **Vertical Lines** group.
3. Change the value in the value field.

RESULT

The order of the selected vertical lines relative to any other vertical lines at the same rhythmic positions is changed. Lines with higher **Column** values are placed further to the left, while lines with lower values are placed further to the right.

## Showing vertical lines before grace notes

You can position individual vertical lines so they appear to the left of grace notes. By default, vertical lines are positioned after grace notes, that is, between grace notes and normal notes.

PROCEDURE

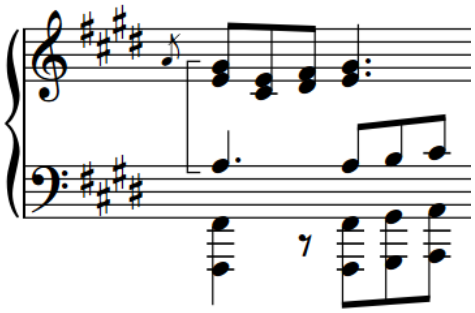
1. Select the vertical lines you want to show before grace notes.
2. In the Properties panel, activate **Line before grace notes** in the **Vertical Lines** group.

RESULT

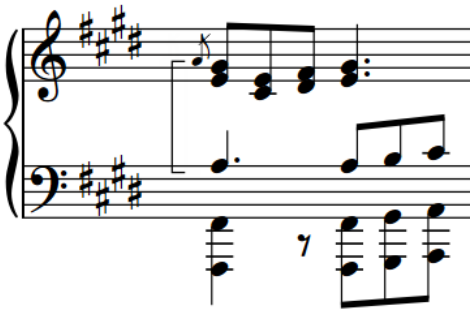
The selected vertical lines are positioned before grace notes.

Deactivating **Line before grace notes** shows the selected vertical lines after grace notes again.

EXAMPLE



Vertical line after grace notes



Vertical line before grace notes

## Changing the placement of horizontal lines

You can show individual horizontal lines above, below, or inside the staff. By default, horizontal lines are placed above the staff.

NOTE

These steps only apply to barline-/rhythmic position-attached horizontal lines.

PROCEDURE

1. Select the horizontal lines whose placement you want to change.
2. In the Properties panel, activate **Placement** in the **Horizontal Lines** group.
3. Select one of the following options from the menu:
   - **Above**
   - **Below**
   - **Inside staff**

RESULT

The placement of the selected horizontal lines is changed. Horizontal lines inside the staff are centered on the middle staff line by default.

TIP

You can also cycle through the different placement options for selected horizontal lines by pressing **F**.

AFTER COMPLETING THIS TASK

- You can change the staff position of lines shown inside the staff.
- You can erase the background of text on lines shown inside the staff.

RELATED LINKS

Changing the staff-relative placement of items on page 310

## Changing the staff position of horizontal lines inside the staff

You can change the staff position of horizontal lines shown inside the staff, including changing the staff position of the start/end of lines independently of each other, for example, if you want lines to appear angled.

PREREQUISITE

The horizontal lines whose staff position you want to change are placed inside the staff and have at least one barline-/rhythmic position-attached end.

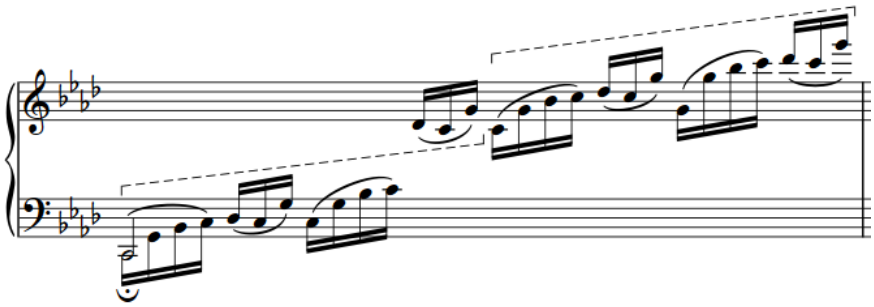
PROCEDURE

1. Select the horizontal lines placed inside the staff whose staff position you want to change.
2. In the Properties panel, activate the following properties, individually or together, in the **Horizontal Lines** group:
   - **Start position**
   - **End position**
3. Change the values in the value fields.

RESULT

The staff positions of the corresponding ends of the selected lines are changed according to the new values. For example, **0** is the middle line of the staff, **4** is the top line of the staff, and **-4** is the bottom line of the staff.

EXAMPLE



Horizontal lines inside the staff with different staff positions at their start/end

# Moving horizontal lines rhythmically

You can move barline-/rhythmic position-attached horizontal lines to new rhythmic positions after they have been input.

NOTE

- You cannot move notehead-attached starts/ends of horizontal lines rhythmically, except by moving the notes to which they are attached.
- Although you can use these key commands for vertical lines, you cannot move vertical lines over rests, you can only move them to adjacent notes/chords in the same voice. If you want to move vertical lines along a phrase containing rests, we recommend deleting them and inputting new vertical lines at the new positions instead.

PROCEDURE

1. In Write mode, select the lines you want to move.

NOTE

When using the mouse, you can only move one horizontal line rhythmically at a time.

2. Move the lines in any of the following ways:
   - To move a single horizontal line to the next notehead on the staff, press **Alt/Opt-Right Arrow**.
   - To move a single horizontal line to the previous notehead on the staff, press **Alt/Opt-Left Arrow**.
   - To move them to the right according to the current rhythmic grid resolution, press **Ctrl/Cmd-Alt/Opt-Right Arrow**.
   - To move them to the left according to the current rhythmic grid resolution, press **Ctrl/Cmd-Alt/Opt-Left Arrow**.

     NOTE

     You can only move horizontal lines according to the current rhythmic grid resolution when multiple lines are selected.

   - Click and drag the line to the right/left to the notehead you want.

     NOTE

     You cannot move vertical lines rhythmically with the mouse.

RESULT

The selected lines are moved to new rhythmic positions.

NOTE

If a single horizontal line passes over another line as part of its move, the existing one is unaffected as multiple lines can exist at the same rhythmic position. However, if you move multiple horizontal lines together or a single vertical line, any existing lines of the same type that they pass over are shortened or deleted accordingly.

You can undo this action, but any lines shortened/deleted in the process are only restored if you moved lines using the keyboard.

# Length of lines

Dorico Elements automatically calculates the appropriate length for both horizontal and vertical lines.

- The length of horizontal lines is determined by the rhythmic duration of the line. Horizontal lines with different attachment types are positioned differently, which can affect their graphical length. For example, barline-attached lines can appear longer than rhythmic position-attached lines with the same duration.
- The length of vertical lines is determined by the pitch range of notes in the voices/staves to which the line applies. Dorico Elements automatically adjusts the length of vertical lines if the pitches of notes in the voices/staves to which the lines apply change, or you add notes to, or delete notes from, chords.

You can lengthen/shorten both horizontal and vertical lines, for example, if you want an individual vertical line to extend above the top note in a chord.

# Lengthening/Shortening horizontal lines

You can lengthen/shorten horizontal lines rhythmically after they have been input.

NOTE

These steps only apply to barline-/rhythmic position-attached horizontal lines. You cannot lengthen/shorten notehead-attached horizontal lines, except by lengthening/shortening the notes to which they are attached.

PROCEDURE

1. In Write mode, select the horizontal lines you want to lengthen/shorten.

   NOTE

   When using the mouse, you can only lengthen/shorten one line at a time.

2. Lengthen/Shorten the lines in any of the following ways:
   - To lengthen them by the current rhythmic grid resolution, press **Shift-Alt/Opt-Right Arrow**.
   - To shorten them by the current rhythmic grid resolution, press **Shift-Alt/Opt-Left Arrow**.
   - To snap the end of a single line to the next notehead, press **Ctrl/Cmd-Shift-Alt/Opt-Right Arrow**.
   - To snap the end of a single line to the previous notehead, press **Ctrl/Cmd-Shift-Alt/Opt-Left Arrow**.

     NOTE

     - You can only lengthen/shorten lines according to the current rhythmic grid resolution when multiple lines are selected.
     - When using the keyboard, you can only move the end of lines. You can move the start of lines by moving lines rhythmically, or by clicking and dragging the start handle of a single line.
   - Click and drag the circular handle at the start/end to the right/left.

RESULT

Single lines are lengthened/shortened according to the current rhythmic grid resolution or to the next/previous notehead, whichever is closer.

Multiple lines are lengthened/shortened according to the current rhythmic grid resolution.

RELATED LINKS

Inputting horizontal lines on page 276
Moving horizontal lines rhythmically on page 725

# Lengthening/Shortening vertical lines

You can lengthen/shorten individual vertical lines to different staff positions. By default, vertical lines span the range of all notes in the same voice at the same rhythmic position.

PROCEDURE

1. Select the vertical lines you want to lengthen/shorten.

2. In the Properties panel, activate the following properties, individually or together, in the **Vertical Lines** group:
   - **Top position**
   - **Bottom position**
3. Change the values in the value fields.

RESULT

The vertical length of the selected lines is changed. Increasing the values moves the corresponding end up by staff positions, decreasing the values moves the corresponding end down by staff positions.

RELATED LINKS

Inputting vertical lines on page 278

## Changing the end position of horizontal lines

By default, rhythmic position-attached horizontal lines end immediately after the last note, chord, or rest at their end rhythmic position. You can change the end position of rhythmic position-attached horizontal lines individually, for example, if you want them to end immediately before the following note, chord, or rest.

NOTE

These steps only apply to rhythmic position-attached horizontal lines.

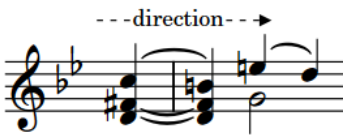
PROCEDURE

1. Select the rhythmic position-attached horizontal lines whose end position you want to change.
2. In the Properties panel, activate **Horizontal end position** in the **Horizontal Lines** group.
3. Select one of the following options from the menu:
   - **End at right-hand side of final note**
   - **End immediately before following note**

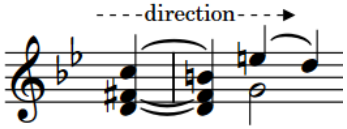
RESULT

The end position of the selected rhythmic position-attached horizontal lines is changed.

EXAMPLE




Horizontal line ending after final note




Horizontal line ending before following note

# Changing the body style of lines

You can change the body style of individual lines without changing their caps.

PROCEDURE

1. Select the lines whose body style you want to change.

   NOTE

   You must select either only horizontal lines or only vertical lines.

2. In the Properties panel, activate **Line body style** in either the **Horizontal Lines** or **Vertical Lines** group.
3. Select the style you want from the menu.

RESULT

The body style of the selected lines is changed.

NOTE

This does not affect the caps of the selected lines.

RELATED LINKS

Line components on page 721
Lines panel on page 276

# Changing the caps of lines

You can change the caps of individual lines without changing their body style.

PROCEDURE

1. Select the lines whose caps you want to change.

   NOTE

   You must select either only horizontal lines or only vertical lines.

2. In the Properties panel, activate the following properties, individually or together, in either the **Horizontal Lines** or **Vertical Lines** group:
   - To change the cap at the start/bottom of the selected lines, activate **Start cap**.
   - To change the cap at the end/top of the selected lines, activate **End cap**.
   - To change the cap at the start of segments of the selected horizontal lines on subsequent systems, activate **Continuation cap**.
   - To change the cap at the end of segments of the selected horizontal lines on subsequent systems, activate **Continuation end cap**.
3. Select the style you want from each menu.

RESULT

The corresponding caps of the selected lines are changed.

NOTE

This does not affect the body style of the selected lines.

# Changing the direction of lines

You can change the direction of both horizontal and vertical lines, for example, to make a horizontal line with an arrow end cap point to the left, or to make a vertical line with text appear upside-down with its text reading downwards.

PROCEDURE

1. Select the lines whose direction you want to change.

   NOTE

   You must select either only horizontal lines or only vertical lines.

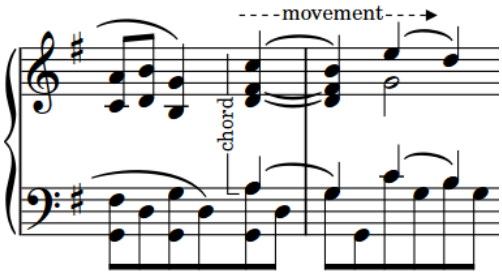
2. In the Properties panel, activate **Reverse** in either the **Horizontal Lines** or **Vertical Lines** group.

RESULT

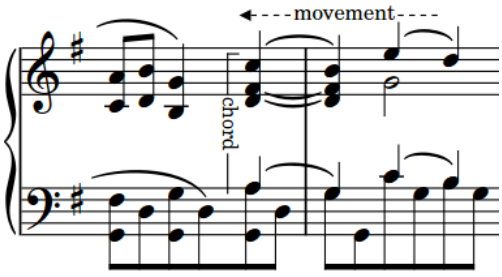
The direction of the selected lines is change. Text on vertical lines now reads downwards.

Deactivating **Reverse** returns the selected lines to their default direction.

EXAMPLE




Horizontal and vertical lines with default directions




Reversed horizontal and vertical lines

# Adding text to lines

You can add text to both horizontal and vertical lines, for example, to clarify the intention of the line.

PROCEDURE

1. Select the lines to which you want to add text.

   NOTE

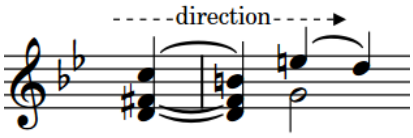
   You must select either only horizontal lines or only vertical lines.

2. In the Properties panel, activate **Text** in either the **Horizontal Lines** or **Vertical Lines** group.
3. Enter the text you want into the value field.
4. Press **Return**.

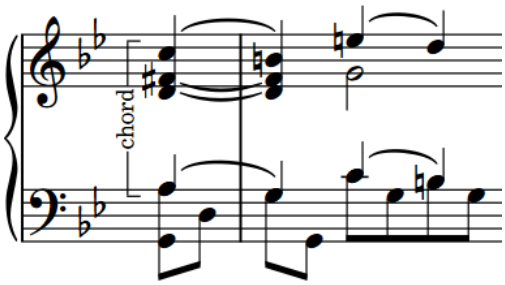
RESULT

The text you entered into the value field is shown centered in the middle of the selected lines. On vertical lines, it reads upwards.

EXAMPLE




Text on a horizontal line




Text on a vertical line

AFTER COMPLETING THIS TASK

- If you want text on vertical lines to read downwards, you can reverse the lines.
- You can erase the backgrounds of text on lines.

RELATED LINKS
Line components on page 721
Input methods for lines on page 275

## Changing the position of text relative to horizontal lines

You can change the position of text relative to horizontal lines, for example, to show text above horizontal lines. By default, text is centered on horizontal lines.

NOTE

Text on lines always appears in the middle of the line.

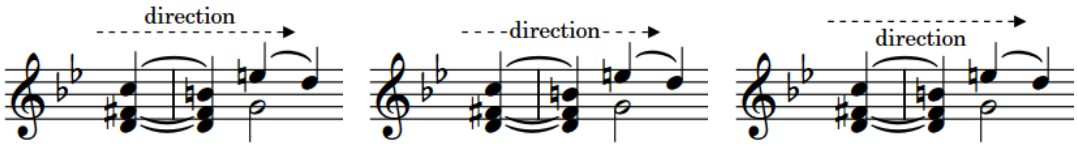
PROCEDURE

1. Select the horizontal lines whose text position you want to change.
2. In the Properties panel, activate **Text position** in the **Horizontal Lines** group.
3. Select one of the following options from the menu:
   - **Above**
   - **Centered**
   - **Below**

RESULT

The position of text relative to the selected horizontal lines is changed.

EXAMPLE




Text **Above** Text **Centered** Text **Below**

## Changing the position of text relative to vertical lines

You can change the position of text relative to vertical lines, for example, to show text on the left of vertical lines. By default, text is centered on vertical lines.

NOTE

Text on lines always appears in the middle of the line.

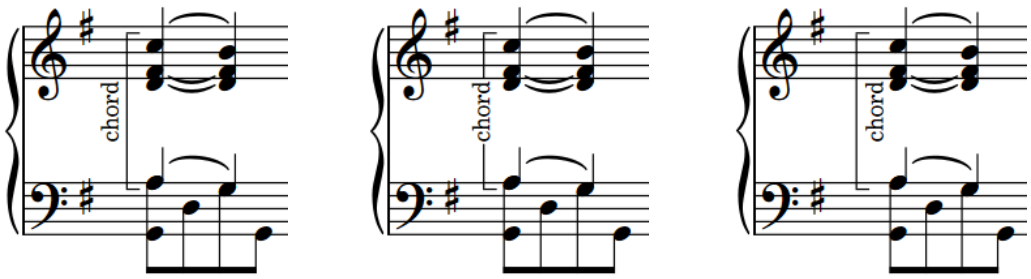
PROCEDURE

1. Select the vertical lines whose text position you want to change.
2. In the Properties panel, activate **Text position** in the **Vertical Lines** group.
3. Select one of the following options from the menu:
   - **Left**
   - **Centered**
   - **Right**

RESULT

The position of text relative to the selected vertical lines is changed.

EXAMPLE




Text **Left** Text **Centered** Text **Right**

# Rehearsal marks

Rehearsal marks are an ordered sequence of letters or numbers, which along with bar numbers, provide a reference point for music that has multiple players, and make the chronological sequence of the music clear.

They tell performers where they are in the piece, and allow performers to orient and co-ordinate themselves easily in rehearsals and concerts. Rehearsal marks can also be used to indicate significant changes in the music, and you can freely decide their positions.

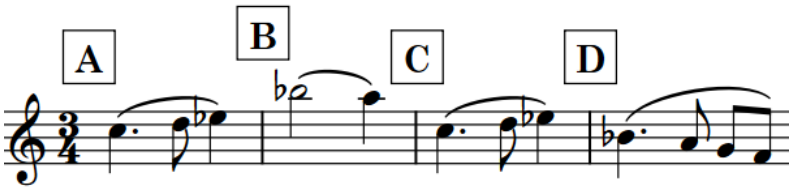
They can also be useful when preparing parts and scores, as you can use rehearsal marks and bar numbers to compare quickly a part to the score and check it is correct. In Dorico Elements, rehearsal marks follow an automatic sequence, ensuring there are never duplicate rehearsal marks.

In Dorico Elements, rehearsal marks are categorized as system objects. Therefore, rehearsal marks follow your per-layout settings for the visibility and positioning of system objects, which you can change on the **Staves and Systems** page in **Setup** > **Layout Options**.

RELATED LINKS
Inputting rehearsal marks on page 282
System objects on page 805
Changing the positions of system objects on page 805

## General placement conventions for rehearsal marks

Rehearsal marks should be at noticeable positions in the score so they can be seen easily. They should use a large, non-italic bold font, and be positioned above the system and outside the music.



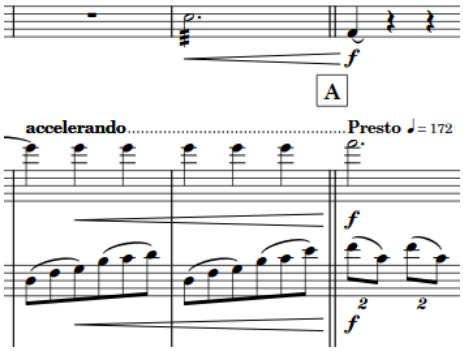

Rehearsal marks should be positioned above barlines, and not below the system. Although you can input rehearsal marks at rhythmic positions within a bar in Dorico Elements, this is not common practice. Depending on the style of music and the context, it can be helpful to input a double barline beneath each rehearsal mark.

In order to ensure they are easily noticeable, and cannot be confused with bar numbers if you are using numbers for rehearsal marks, rehearsal marks should be shown in an enclosure. You can change the shape and size of rehearsal mark enclosures in Dorico Elements.

The placement of rehearsal marks relative to the music is discretionary, but they are most helpful to players when they coincide with a change in the music, such as a tempo change or a change in texture. They are also helpful when placed at a point in the music where players are likely to start from in order to rehearse a specific section, such as a significant solo entry or the start of a difficult passage.

In general, it is good practice to place rehearsal marks at regular intervals as well as at significant moments. It is often recommended to have rehearsal marks every 5-20 bars to reduce the amount of bars players need to count before or after a rehearsal mark.

If a rehearsal mark coincides with a tempo change, you should position the tempo text to the right of the rehearsal mark. However, if space is tight, the text can be positioned above or below the rehearsal mark. The position of the rehearsal mark should remain clear, so it should not be moved away from the barline to which it applies, otherwise its position can be misunderstood. Dorico Elements automatically adjusts staff spacing to ensure rehearsal marks are correctly positioned.




The vertical spacing between the top two staves is increased to allow room for the rehearsal mark and the tempo marks.

RELATED LINKS
Inputting rehearsal marks on page 282
Input methods for bars and barlines on page 222

# Positions of rehearsal marks

Rehearsal marks are placed above the staff and at the same positions as other system objects.

You can move rehearsal marks to different rhythmic positions in Write mode. They are automatically positioned to avoid collisions.

Rehearsal marks are categorized as system objects in Dorico Elements, which you can show above the first bracket of selected instrument families. You can change the instrument families above which system objects appear in each layout independently, if you want rehearsal marks to appear at multiple vertical positions in each system in the full score only.

RELATED LINKS
Changing the positions of system objects on page 805

## Moving rehearsal marks rhythmically

You can move rehearsal marks to new rhythmic positions after they have been input.

PROCEDURE

1. In Write mode, select the rehearsal marks you want to move.

   NOTE

   When using the mouse, you can only move one rehearsal mark rhythmically at a time, and you can only drag it to existing barlines.

2. Move the rehearsal marks in any of the following ways:
   - Press **Alt/Opt-Right Arrow** to move them to the right.
   - Press **Alt/Opt-Left Arrow** to move them to the left.

- Click and drag the rehearsal mark to barlines to the right/left.

RESULT

A single rehearsal mark is moved to existing barlines to the right/left.

Multiple rehearsal marks are moved according to the current rhythmic grid resolution.

NOTE

Only one rehearsal mark can exist at each rhythmic position. If a rehearsal mark passes over another rehearsal mark as part of its move, the existing rehearsal mark is deleted and replaced by the rehearsal mark being moved.

You can undo this action, but any rehearsal marks deleted in the process are only restored if you moved the rehearsal mark using the keyboard.

# Deleting rehearsal marks

You can delete rehearsal marks. Deleting a rehearsal mark in any layout deletes the rehearsal mark from all layouts.

PROCEDURE

1. In Write mode, select the rehearsal marks you want to delete.
2. Press **Backspace or Delete**.

RESULT

The selected rehearsal marks are deleted. Any subsequent rehearsal marks are adjusted until the next change in the sequence or the end of the flow. For example, if you delete the first rehearsal mark, the second rehearsal mark shows either the letter A, the number 1, or the bar number, depending on your choice of sequence type.

# Changing the order of rehearsal marks

By default, the rehearsal mark sequence resets at the start of each flow. If you want the rehearsal mark sequence to continue across flows, for example, to avoid having multiple rehearsal marks with the same letter in the same project, you can change the index position of a rehearsal mark.

Changing the index position changes the shown number or letter. For example, index position 1 appears as rehearsal mark A or 1, position 2 appears as B or 2, and so on.

You can also change the index position of a rehearsal mark to avoid showing a letter that could easily be confused with another letter or another number, such as I or O.

PROCEDURE

1. Select the rehearsal mark whose index position you want to change.
2. In the Properties panel, activate **Index** in the **Rehearsal Marks** group.
3. Change the value in the value field.

RESULT

The selected rehearsal mark changes according to the **Index** value and its sequence type.

Any subsequent rehearsal marks in the same sequence follow the new index automatically. For example, if you changed a rehearsal mark from A to P, the next rehearsal mark changes from B to Q.

NOTE

You can also change the sequence type of rehearsal marks, for example, if you want rehearsal mark C to appear as rehearsal mark 3.

# Changing the rehearsal mark sequence type

Rehearsal marks can be letters, numbers, or bar numbers. You can change the sequence type of individual rehearsal marks, and create secondary rehearsal mark sequences.

In Dorico Elements, you can use all three available rehearsal mark sequences simultaneously. For example, you can have the main sequence of rehearsal marks showing letters, but also have a secondary sequence of numbers to mark different moments, perhaps entry points for a solo line, and also highlight prominent bar numbers within those sections.

PROCEDURE

1. Select the rehearsal mark whose sequence type you want to change.
2. In the Properties panel, activate **Sequence type** in the **Rehearsal Marks** group.
3. Select one of the following options from the menu:
   - **Letters**
   - **Numbers**
   - **Bar numbers**

RESULT

The selected rehearsal mark now displays a letter, a number, or the current bar number.

If it is the first rehearsal mark in either the letters sequence or the numbers sequence in the flow, it shows either A or 1. If there are already rehearsal marks in either the letters sequence or the numbers sequence in the flow, it shows the next letter or number according to the index.

NOTE

You can change the index of a rehearsal mark sequence independently of other rehearsal mark sequences. However, you cannot change the bar number sequence using this method.

RELATED LINKS

Adding bar number changes on page 506

# Adding prefixes/suffixes to rehearsal marks

You can add both prefixes and suffixes to individual rehearsal marks.

PROCEDURE

1. Select the rehearsal marks to which you want to add a prefix or suffix.
2. In the Properties panel, activate one of the following properties in the **Rehearsal Marks** group:
   - **Prefix**
   - **Suffix**

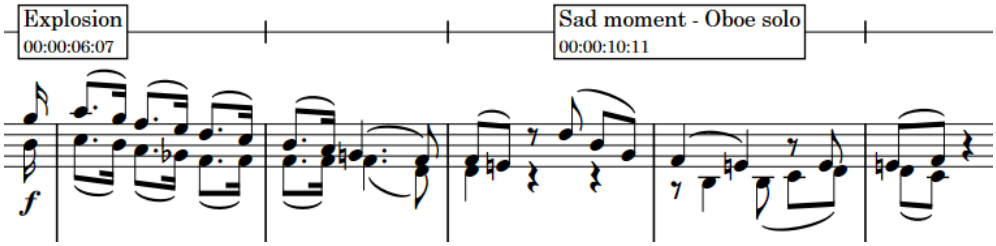
3. Enter the text you want into the value field.
4. Press **Return**.

RESULT

The text you entered into the value field is added to the selected rehearsal marks as a prefix or a suffix.

# Markers

Markers are labels locked to a particular position in time, most commonly in relation to a video. They typically indicate an important moment that requires musical prominence, and composers often use them to help shape the writing process.




Markers on a timecode staff showing custom text and timecodes

By default, markers in Dorico Elements show the default text “Marker” and also include the timecode of their fixed position in time.

In Dorico Elements, you can use markers in any project. However, because they are most commonly used in conjunction with video, markers are included in the Video panel in Write mode. There is also a **Markers** track in Play mode that displays markers, and allows you to input new ones.

You can use markers to help find suitable tempos for your project, as Dorico Elements can calculate possible tempos between important markers so that the markers occur on strong beats in the time signature.

Any markers you input are automatically included when you export MIDI.

RELATED LINKS

Inputting markers/timecodes on page 282
Editing marker text on page 740
Markers section of the Video panel on page 283
Markers track on page 407
Find Tempo dialog on page 284
Defining markers as important on page 741

## Hiding/Showing markers

By default, markers are shown in full score layouts and hidden in part layouts. You can hide and show markers in each layout independently, for example, if markers are helpful for the conductor to see but not for the players.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to hide/show markers.

   By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Markers and Timecode** in the page list.

4. Activate/Deactivate **Show markers**.
5. Click **Apply**, then **Close**.

RESULT

Markers are hidden/shown in the selected layouts.

# Changing the vertical position of markers

You can show markers above the system, below the system, or on a separate single-line staff above a selected bracketed instrument family group, which can make them clearer in the score. When markers are shown on a separate staff, timecodes are also automatically shown below the separate staff.

NOTE

You cannot show multiple timecode staves in a system.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to change the vertical position of markers.

   By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Markers and Timecode** in the page list.
4. In the **Markers** subsection, choose one of the following options for **Vertical position**:
   - **Above system**
   - **Below system**
   - **Timecode staff**
5. Optional: If you chose **Timecode staff**, select the bracketed instrument family above which you want to show the timecode staff from the **Position timecode staff above bracket** menu.
6. Click **Apply**, then **Close**.

RESULT

The vertical position of markers is changed in the selected layouts.

NOTE

- If you show markers on a timecode staff, timecodes are also shown on the staff by default. If you only want to show markers on a separate staff and exclude timecodes, you must then change **Timecode frequency on timecode staff** to **Never**.

  You can also change the vertical position of timecodes so they appear above/below the start of systems rather than on the timecode staff.
- You can change the default distance between the timecode staff and other staves on the **Vertical Spacing** page in **Setup** > **Layout Options**.

AFTER COMPLETING THIS TASK

You can change the frequency of timecodes on the timecode staff.

RELATED LINKS
Changing the timecode frequency on page 745
Changing the vertical position of timecodes on page 744

# Editing marker text

The default text shown in new markers is “Marker”. You can change the text shown in each marker individually.

PROCEDURE

1. Select the markers whose text you want to change.
2. In the Properties panel, activate **Marker text** in the **Markers** group.
3. Enter the text you want into the value field.
4. Press **Return**.

RESULT

The text shown in the selected markers is changed. It uses the **Marker Text Font** font style.

TIP

You can also enter custom text for markers when inputting them using the **Add Marker** dialog, and change marker text in the **Markers** section of the Video panel in Write mode.

RELATED LINKS
Add Marker dialog on page 283
Markers section of the Video panel on page 283

# Changing the timecodes of markers

You can change the timecode of markers, for example, if the video is edited and the marker now occurs ten seconds later.

NOTE

Because this changes where markers occur in the project, this also moves markers relative to the notated music.

PROCEDURE

1. In Write mode, click **Video** in the Notations toolbox to show the Video panel.
2. In the **Markers** section, double-click the timecode you want to change.
3. Enter the new timecode you want into the value field.
4. Press **Return**.

RESULT

The timecode of the marker is changed. The marker automatically moves relative to the music to reflect its new time position.

RELATED LINKS
Markers section of the Video panel on page 283

# Moving markers rhythmically

You can move markers to new rhythmic positions. However, as markers have a fixed position in time, moving markers relative to the notated music automatically changes the tempo on either side of the marker.

TIP

If you want to move a marker to a new time position, for example, if you want to move it from 25 seconds to 28 seconds, you must change the timecode of the marker.

PROCEDURE

1. In Write mode, select the marker you want to move.

   NOTE

   You can only move one marker at a time.

2. Move the marker according to the current rhythmic grid resolution in any of the following ways:
   - Press **Alt/Opt-Right Arrow** to move it to the right.
   - Press **Alt/Opt-Left Arrow** to move it to the left.
   - Click and drag it to the right/left.

RESULT

The selected marker is moved to a new rhythmic position. However, its fixed position in time is not changed. Therefore, the tempo immediately preceding the marker automatically updates so that the marker occurs at the correct time. For example, moving a marker to the right increases the preceding tempo.

Any gradual tempo changes between the preceding tempo change or the start of the flow and the marker are removed.

NOTE

The tempo change affects the positions of all other markers in the flow relative to the notated music.

RELATED LINKS

Inputting markers/timecodes on page 282

# Defining markers as important

You can define individual markers as important, which allows them to be considered when finding suitable tempos in the **Find Tempo** dialog.

PROCEDURE

1. In Write mode, click **Video** in the Notations toolbox to show the Video panel.
2. In the **Markers** section, activate the checkbox in the **Imp.** column for each marker you want to define as important.

RESULT

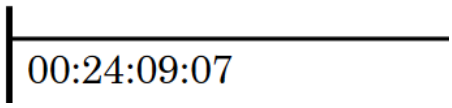
Markers with activated checkboxes are defined as important. The **Find Tempo** button at the bottom of the **Markers** section becomes available.

RELATED LINKS
Find Tempo dialog on page 284

# Timecodes

Timecodes indicate an exact position in time, usually in the context of a video. They allow precise synchronization between multiple elements, such as music and moving images, and can be used as a reference tool.

Timecodes are displayed in the format hh:mm:ss:ff, which is two-digit hours, minutes, seconds, and frames.




A timecode on a timecode staff

In Dorico Elements, you can specify the type of timecode from the following types:

**Non-drop frame timecodes**

Each frame is numbered sequentially from the preceding one without skipping any frame numbers.

Non-drop frame timecodes are shown with the suffix **fps** and use a colon separator between seconds and frames, for example, 00:00:01:05.

**Drop frame timecodes**

Some frame numbers are skipped in order to accommodate the difference in frame rate between 29.97 fps and 30 fps. In every minute except every tenth minute, two timecode numbers are dropped from the frame count.

Drop frame timecodes are shown with the suffix **dfps** and use a semicolon separator between the seconds and frames, for example, 00:00:01;05.

Timecodes in Dorico Elements are flow-specific, meaning you can set timecodes for each flow that are completely independent of the timecodes for other flows. You can set timecodes in the **Video Properties** dialog, including for flows without a video.

NOTE

The timecodes shown in flow cards in the **Flows** panel in Setup mode reflect the timecode at the start of the flow, which can be different to the timecode you set in the **Video Properties** dialog. For example, if you set the **Timecode start** to **02:00:00:00** but also set the **Flow attachment position** to **8** quarter note beats, and the tempo is 60 bpm, the timecode shown in the flow card is 01:59:52:00.


By default, timecodes appear in markers. You can show additional markers above/below the start of each system or below the timecode staff, if there is one, in each layout independently.

Additionally, you can change the time displayed in the **Transport** window to be the timecode rather than elapsed time, which is shown by default.

RELATED LINKS

Frame rates on page 146
Video Properties dialog on page 142
Changing the timecode frequency on page 745
Changing the content shown in the transport display on page 424

Markers on page 738
Changing the vertical position of markers on page 739
Changing the vertical position of timecodes on page 744

# Changing the initial timecode value

You can change the timecode at which each flow in your project starts, for example, if you are using a separate project for the second reel of a film. You can also change the initial timecode in projects without videos.

PROCEDURE

1. In Write mode, select an item in the flow whose initial timecode value you want to change.
2. In the Notations toolbox, click **Video** to show the Video panel.

   
3. In the Video panel, click **Properties** to open the **Video Properties** dialog.
4. In the **Video Properties** dialog, change the value for **Timecode start**.
5. Click **OK** to save your changes and close the dialog.

RESULT

The initial timecode for the flow in which you selected an item is changed.

RELATED LINKS

Timecodes on page 743
Changing the start position of videos on page 144

# Changing the vertical position of timecodes

You can show timecodes either above/below the start of systems or on a separate single-line staff, for example, if you might want to show timecodes above the start of systems in part layouts without showing markers or a separate timecode staff.

NOTE

You cannot show timecodes on multiple staves in a system.

PREREQUISITE

If you want to show timecodes on a separate staff, you have changed the vertical position of markers so they appear on a separate staff.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to change the vertical position of timecodes.

   By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Markers and Timecode** in the page list.
4. In the **Timecode** subsection, choose one of the following options for **Show timecode**:
   - **Above or below start of system**

- **Below timecode staff**

5. If you chose **Above or below start of system**, choose one of the following options for **Timecode position relative to system**:
   - **Above system**
   - **Below system**
6. Optional: If you chose **Above or below start of system**, change the gap between timecodes and the staff by changing the values in the **Offset at start of system** value fields.
7. Click **Apply**, then **Close**.

RESULT

The vertical position of timecodes is changed in the selected layouts.

NOTE

Your setting for **Timecode frequency on timecode staff** also applies when timecodes are shown above/below the start of systems.

RELATED LINKS

Changing the vertical position of markers on page 739

# Changing the timecode frequency

You can show timecodes at different intervals in layouts in which timecodes are shown on a separate staff. For example, you can show timecodes every bar in full score layouts but only at the start of each system in part layouts.

NOTE

We do not recommend that you show timecodes every bar in layouts with multi-bar rests, as the result is illegible overlapping timecodes. If you want to show timecodes in part layouts with multi-bar rests, we recommend either showing timecodes only at the start of each system or not showing multi-bar rests in the layout.

PREREQUISITE

Markers are shown in the selected layouts.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to change the timecode frequency.

   By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Markers and Timecode** in the page list.
4. Optional: If the selected layouts do not show timecodes on a separate staff, choose **Timecode staff** for **Vertical position**.
5. Choose one of the following options for **Timecode frequency on timecode staff**:
   - **Start of system**
   - **Every bar**
   - **Never**

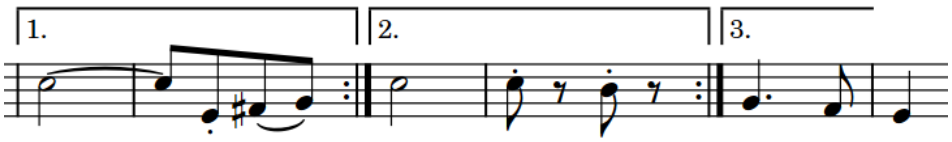
6. Click **Apply**, then **Close**.

RELATED LINKS
Hiding/Showing markers on page 738
Hiding/Showing multi-bar rests on page 777

# Repeat endings

For music with repeated passages, repeat endings show which bars are played at the end of each repetition, with different endings each time if required. They are also known as “volta lines”, or as “first and second endings”, but in this documentation, we refer to them as “repeat endings”.

Repeat endings comprise two or more segments, where each segment contains a different possible ending. When you input repeat endings, Dorico Elements automatically inputs an end repeat barline at the end of the first segment. Segments in repeat endings are clearly marked with solid lines above and number that indicate the playthroughs in which the segment is used.




A repeat ending with three possible endings

Dorico Elements allows you to create repeat endings containing any number of segments. However, you cannot change how playthroughs are divided across repeat ending segments.

In Dorico Elements, repeat endings are categorized as system objects. Therefore, repeat endings follow your per-layout settings for the visibility and positioning of system objects, which you can change on the **Staves and Systems** page in **Setup** > **Layout Options**.

RELATED LINKS

Input methods for repeats and tremolos on page 286
System objects on page 805
Changing the positions of system objects on page 805
Lines on page 719

## Changing the total number of playthroughs in repeat endings

By default, each segment in repeat endings is played once, so each segment shows a single digit that indicates the playthrough for which it is used. You can increase the total number of playthroughs for repeat endings individually so that segments are played more than once.

PROCEDURE

1. Select the repeat endings whose total number of playthroughs you want to change.
2. In the Properties panel, activate **No. times played** in the **Repeat Endings** group.
3. Change the value in the value field.

   NOTE

   You cannot have fewer playthroughs than the number of segments.

RESULT

The total number of playthroughs in the selected repeat endings is changed. Dorico Elements adds additional playthroughs to the last closed segment in the repeat ending.

NOTE

You cannot change how playthroughs are divided across repeat ending segments in Dorico Elements.

RELATED LINKS
Repeats in playback on page 417

# Lengthening/Shortening segments in repeat endings

You can increase/decrease the number of bars included in each segment of repeat endings by lengthening/shortening each segment independently.

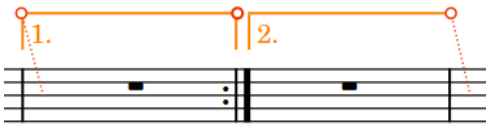
PROCEDURE

1. In Write mode, select the repeat ending you want to lengthen/shorten.

   NOTE

   You can only lengthen/shorten one repeat ending segment at a time.

2. Select the circular handle at the end of the segment you want to lengthen/shorten.

   The selected handle in the middle has a thicker line.

3. Click and drag the handle to the right/left to snap it to the next/previous barline.

   NOTE

   Segments must contain at least one bar.

4. Optional: Repeat steps 1 to 3 for each segment in the repeat ending.

RESULT

The selected segment is lengthened/shortened.

NOTE

- This does not automatically input or reposition repeat barlines. You must input repeat barlines as appropriate manually.
- You can also lengthen/shorten the final segment in a single repeat ending by selecting the repeat ending and using the following key commands:
  - Press **Shift-Alt/Opt-Right Arrow** to lengthen the final segment.
  - Press **Shift-Alt/Opt-Left Arrow** to shorten the final segment.

# Positions of repeat endings

Repeat endings are placed above the staff at the same positions as other system objects, and their hooks align with barlines. They are commonly positioned outside of other notations, but some long items, such as gradual tempo changes, can be placed above repeat endings.

You can move repeat endings to different rhythmic positions in Write mode.

Repeat endings are categorized as system objects in Dorico Elements, which you can show above the first bracket of selected instrument families. You can change the instrument families above which system objects appear in each layout independently, for example, if you want repeat endings to appear at multiple vertical positions in each system in the full score only.

RELATED LINKS
System objects on page 805
Changing the positions of system objects on page 805

## Moving repeat endings rhythmically

You can move repeat endings to different rhythmic positions after they have been input so they apply to different bars.

PROCEDURE

1. In Write mode, select the repeat ending you want to move.

   NOTE

   You can only move one repeat ending rhythmically at a time.

2. Move the repeat ending to the next/previous bar in any of the following ways:
   - Press **Alt/Opt-Right Arrow** to move it to the right.
   - Press **Alt/Opt-Left Arrow** to move it to the left.
   - Click and drag it to the right/left.

RESULT

The selected repeat ending is moved to the next/previous bar.

NOTE

- This does not automatically input or reposition repeat barlines. You must input repeat barlines manually as appropriate.
- Only one repeat ending can exist at each rhythmic position. If any part of a selected repeat ending collides with any part of another repeat ending as part of its move, the other repeat ending is deleted. However, its repeat barlines are not deleted.

  You can undo this action, but any repeat endings deleted in the process are only restored if you moved the repeat ending using the keyboard.

# Changing the appearance of individual final repeat ending segments

You can change the appearance of the line ends in the final segments of individual repeat endings.

PROCEDURE

1. Select the repeat endings whose final segment appearance you want to change.
2. In the Properties panel, activate **End of line** in the **Repeat Endings** group.
3. Select one of the following options from the menu:
   - **Open, short**
   - **Open, full length**

- **Closed**

RESULT

The end of the line of the final segment in the selected repeat endings is changed.

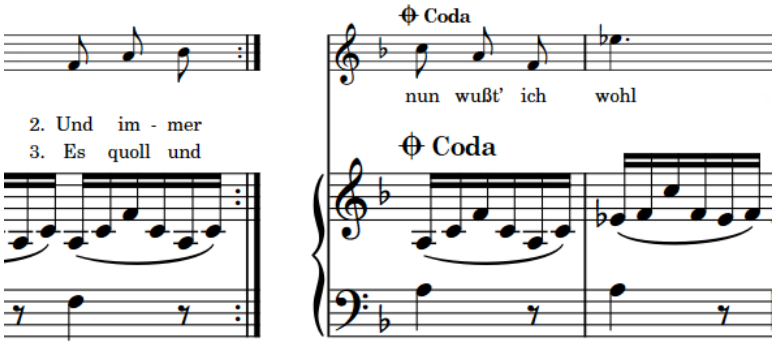
# Repeat endings in MusicXML files

All aspects of repeat endings can be imported from and exported in MusicXML files.

However, while MusicXML can represent this, segments in the middle of sets of endings cannot have an open right-hand end in Dorico Elements.

# Repeat markers

Repeat markers show that musical material is to be repeated, but unlike repeat endings, repeat markers often involve jumping to different positions and sections in the music instead of moving through the music consecutively.




In Dorico Elements, repeat markers are divided into the following types:

**Repeat jumps**

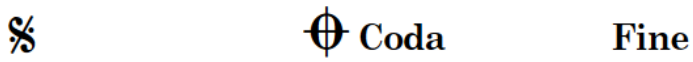
Specify the position from which players or playback must jump, such as *D.C. al Coda*. You can qualify the conditions under which repeat jumps are used, such as "second time only".

Repeat jumps are right-aligned with their rhythmic position, meaning their text or symbol ends at that rhythmic position and extends to the left.


**Repeat sections**

Specify the destinations for jumps, such as *segno* or *coda*, or where the music should end, such as *Fine*. In Dorico Elements, coda sections that start mid-system are automatically separated from the preceding music with a gap.

Repeat markers are left-aligned with their rhythmic position, meaning their text or symbol starts at that rhythmic position and extends to the right.




By default, repeat markers are shown on a single line.

RELATED LINKS

Input methods for repeats and tremolos on page 286
Repeats in playback on page 417

# Changing the index for repeat markers

You can change the index of individual repeat markers, for example, if a flow requires two different codas with different symbols so players can tell them apart.

By default, all repeat markers of the same type have the same appearance, even when there are multiple repeat markers in the flow.

NOTE

You cannot change the index of *Fine* or *D.C.* repeat markers.

PROCEDURE

1. Select the repeat marker whose index you want to change.
2. In the Properties panel, activate the following properties, individually or together as appropriate for your selection, in the **Repeat Markers** section:
   - **Marker index**
   - **'Jump to' index**
3. Change the values in the value fields.

   NOTE

   You can only enter values between 1 and 3.

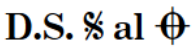
RESULT

**Marker index** changes the order of the selected repeat marker relative to other repeat markers of the same type.

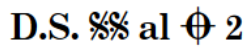
**'Jump to' index** changes the destination of the selected repeat marker.

EXAMPLE

If you have two codas in a flow with two different D.S. al Coda markers, you might set **Marker index** to **1** for the first coda and **2** for the second, then set **'Jump to' index** to **1** for the first D.S. al Coda marker and **2** for the second.




D.S. al Coda marker with default indexes




D.S. al Coda marker with both indexes set to 2

# Editing repeat marker text

You can change the text shown in individual repeat markers, for example, if you are typesetting a score with an unusual repeat marker instruction.

PROCEDURE

1. Select the repeat markers whose text you want to change.
2. In the Properties panel, activate **Custom text** in the **Repeat Markers** group.
3. Enter the text you want into the value field.
4. Press **Return**.

RESULT

The text shown in the selected repeat markers is changed. This replaces the text in the selected repeat markers without removing any symbols.

# Positions of repeat markers

Repeat markers are placed above the staff by default, and at the same positions as other system objects. Coda sections are separated from the preceding music by a gap in the system.

You can move repeat markers to different rhythmic positions in Write mode.

You can change the default staff-relative placement of repeat markers in each layout independently in the **Repeat Markers** section of the **Staves and Systems** page in **Setup** > **Layout Options**.

Repeat markers are categorized as system objects in Dorico Elements, which you can show above the first bracket of selected instrument families. You can change the instrument families above which system objects appear in each layout independently, for example, if you want repeat markers to appear at multiple vertical positions in each system in the full score only.

RELATED LINKS

Changing the staff-relative placement of repeat markers on page 753
Changing the positions of system objects on page 805

## Moving repeat markers rhythmically

You can move repeat markers to new rhythmic positions after they have been input.

PROCEDURE

1. In Write mode, select the repeat markers you want to move.

   NOTE

   When using the mouse, you can only move one repeat marker rhythmically at a time.

2. Move the selected repeat markers according to the current rhythmic grid resolution in any of the following ways:
   - Press **Alt/Opt-Right Arrow** to move them to the right.
   - Press **Alt/Opt-Left Arrow** to move them to the left.
   - Click and drag the repeat marker to the right/left.

RESULT

The selected repeat markers are moved to new rhythmic positions.

## Changing the staff-relative placement of repeat markers

You can show repeat markers either above, below, or both above and below the staff in each layout independently.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to change the staff-placement of repeat markers.

By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.

3. Click **Staves and Systems** in the page list.
4. In the **Repeat Markers** section, choose one of the following options for **Default placement for repeat jumps and 'Fine'**:
   - **Above staff**
   - **Below staff**
   - **Above and below bottom staff**
5. Click **Apply**, then **Close**.

RESULT

The staff-relative placement of all repeat markers is changed in the selected layouts.

# Including/Excluding repeats in playback after repeat jumps

By default, Dorico Elements plays back all playthroughs in all types of repeat structures. You can manually include/exclude repeats indicated by repeat markers, repeat endings, and repeat barlines in playback after individual repeat jumps.

NOTE

You can only include/exclude repeats after repeat jumps, such as *D.C. al Fine* and *D.S. al Coda*.

PROCEDURE

1. Select the repeat jumps after which you want to include/exclude repeats in playback.
2. In the Properties panel, activate **Replay repeats** in the **Repeat Markers** group.
3. Activate/Deactivate the corresponding checkbox.

RESULT

Repeats are included in playback after the selected repeat jumps when the checkbox is activated, and excluded from playback when the checkbox is deactivated.

# Changing the number of playthroughs at repeat barlines

End repeat barlines typically indicate that the preceding music is played through twice. You can change the number of playthroughs for each end repeat barline individually.

PROCEDURE

1. Select the end repeat barlines whose number of playthroughs you want to change.
2. In the Properties panel, activate **Play n times** in the **Time Signatures** group.
3. Change the value in the value field.

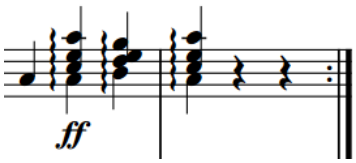
   NOTE

   The minimum value is **2**.

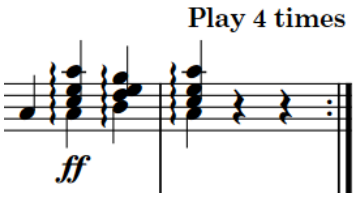
RESULT

The number of times the music preceding the selected end repeat barlines is played through is changed. A marker is shown at system object positions that indicates the number of playthroughs set when this is **3** or more.

EXAMPLE




Final repeat barline with the default 2 playthroughs set




Final repeat barline with 4 playthroughs set and marker shown

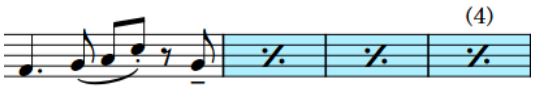
RELATED LINKS

Including/Excluding repeats in playback after repeat jumps on page 754
Changing the total number of playthroughs in repeat endings on page 747
Repeats in playback on page 417

# Bar repeats

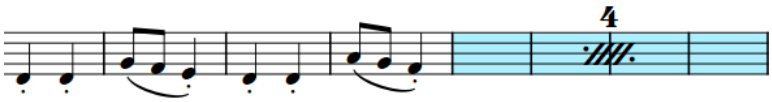
Bar repeats indicate that the musical material in preceding bars must be repeated exactly, but without notating that material again. Bar repeats can comprise groups of one, two, or four bars.

For example, a one-bar repeat indicates that the material in one bar is repeated, meaning every bar in the region repeats the same material. A four-bar repeat indicates that the material in the previous four bars is repeated.




One-bar repeat region


Two-bar repeat region




Four-bar repeat region

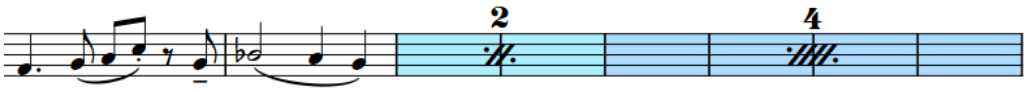
This notational short-hand can make repetitive music easier to read, as performers must only read the repeated phrase once and then simply count how many times they repeat it. Bar repeats can also save horizontal space, as bar repeat symbols are usually narrower than the equivalent fully written-out bars.

In Dorico Elements, bar repeat regions are used to display bar repeats, meaning as many bar repeat symbols as necessary to fill the region are shown automatically.

In Write mode, each region has a handle at the start and end, which you can use to move and lengthen/shorten regions.

By default, bar repeat regions are highlighted with a colored background. As you zoom out, the highlights become more opaque, which is especially useful when viewing full score layouts in galley view. These highlights are considered annotations, are not printed by default, and you can hide and show them.

You can also show adjacent bar repeat regions, for example, if you want to use a two-bar repeat in the first iteration of a phrase, and then a four-bar repeat to indicate the whole phrase is repeated. When two different bar repeat regions are adjacent, they alternate highlight colors to ensure the separate regions are always identifiable.




Phrase containing two adjacent bar repeat regions

RELATED LINKS

Inputting bar repeats on page 297
Repeats popover on page 286
Bar repeat counts on page 759
Bar repeat grouping on page 761
Hiding/Showing bar repeat region highlights on page 759
Moving bar repeat regions on page 757

Lengthening/Shortening bar repeat regions on page 758
Hiding/Showing multi-bar rests on page 777
Annotations on page 476

# Changing the length of the repeated phrase in bar repeat regions

You can change the number of bars that make up the repeated phrase in individual bar repeats after you have input them, for example, if you want the region to repeat the previous two bars rather than the previous four bars.

NOTE

You cannot repeat more bars than exist before the bar repeat region. For example, if a bar repeat region follows the first notated bar in a flow, you cannot increase the number of bars in the repeated phrase.

PROCEDURE

1. Select the bar repeat regions whose phrase length you want to change.
2. In the Properties panel, select one of the following options from the **No. bars** menu in the **Bar Repeat Regions** group:
   - **One bar**
   - **Two bars**
   - **Four bars**

RESULT

The number of bars that make up the repeated phrase in the selected bar repeat regions is changed. This is also reflected in playback.

TIP

- Any dynamics you add within bar repeat regions affect the playback of the repeated music.
- You can also change the length of the repeated phrase by opening the repeats popover and changing the entry.

RELATED LINKS

Bar repeat grouping on page 761
Inputting bar repeats on page 297
Repeats popover on page 286
Changing existing items on page 309

# Moving bar repeat regions

You can move bar repeat regions to different rhythmic positions after they have been input.

PROCEDURE

1. In Write mode, select the bar repeat region you want to move.

   NOTE

   You can only move one bar repeat region at a time.

2. Move the bar repeat region to other bars in any of the following ways:
   - Press **Alt/Opt-Right Arrow** to move it to the right.
   - Press **Alt/Opt-Left Arrow** to move it to the left.
   - Click and drag it to the right/left.

RESULT

The selected bar repeat region is moved to bars to the right/left.

When you move bar repeat regions using the keyboard, they are moved to the right by the duration of their grouping, for example, two-bar repeats are moved two bars to the right. However, when you move them to the left, they are always moved to the next bar, regardless of their grouping.

When you move bar repeat regions using the mouse, they are always moved to the next/previous bar.

NOTE

Only one bar repeat region can exist at each rhythmic position. If any part of a selected bar repeat region collides with any part of another bar repeat region as part of its move, the other bar repeat region is shortened to accommodate the one you moved. In some cases, this means the grouping of the other bar repeat region is changed or it is deleted entirely.

You can undo this action and restore the previous length of the other bar repeat region.

# Lengthening/Shortening bar repeat regions

You can lengthen/shorten bar repeat regions after they have been input.

PROCEDURE

1. In Write mode, select the bar repeat region you want to lengthen/shorten.

   NOTE

   You can only lengthen/shorten one bar repeat region at a time.

2. Lengthen/Shorten the bar repeat region in any of the following ways:
   - To lengthen it by the duration of its grouping, press **Shift-Alt/Opt-Right Arrow**.
   - To shorten it by the duration of its grouping, press **Shift-Alt/Opt-Left Arrow**.

     NOTE

     Key commands lengthen/shorten items by moving their end only.

   - Click and drag the start/end handle to the next/previous bar.

RESULT

The selected bar repeat region is lengthened/shortened.

NOTE

- The minimum length of a bar repeat region is one bar. If you shorten regions with longer groupings, such as every four bars, the length of the region is halved until a one-bar repeat region remains.
- Only one bar repeat region can exist at each rhythmic position. If any part of a selected bar repeat region collides with any part of another bar repeat region when it is lengthened/

shortened, the other bar repeat region is shortened to accommodate this. In some cases, this means the grouping of the other bar repeat region is changed or it is deleted entirely.

You can undo this action and restore the previous lengths of all bar repeat regions involved.

RELATED LINKS
Bar repeats on page 756
Bar repeat grouping on page 761
Hiding/Showing multi-bar rests on page 777

# Hiding/Showing bar repeat region highlights

You can hide/show colored highlights for bar repeat regions at any time, for example, if you want to show the highlights when inputting music but hide them when engraving.

PROCEDURE

- Choose **View** > **Highlight Bar Repeat Regions**.

RESULT

Highlights on bar repeat regions are shown when a tick appears beside **Highlight Bar Repeat Regions** in the menu, and hidden when no tick appears.

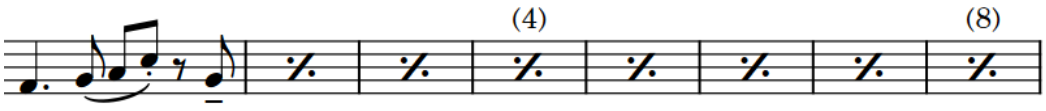
# Bar repeat counts

Bar repeat counts are numbers shown at regular intervals either above or below bar repeats, to help players keep track of how many bars have passed. The intervals are usually based on typical musical phrases, such as every four or eight bars.

NOTE

Bar repeat counts are only shown on one-bar repeat regions.

Because bar repeats must start with a fully notated phrase of at least one bar, the bar repeat count starts from the notated bar rather than the first bar in the bar repeat region. For example, the third bar in a bar repeat region shows the count number 4, as that bar is the fourth time the original notated bar is played. Each bar repeat region has its own separate count.




Bar repeat region with counts shown every four bars

In Dorico Elements, you can change the start count of each bar repeat region, how frequently bar repeat counts are shown, and whether they are parenthesized.

RELATED LINKS
Changing the bar repeat count appearance on page 761
Changing the bar repeat count frequency on page 760
Repeats popover on page 286
Inputting bar repeats on page 297
Hiding/Showing bar number ranges on multi-bar rests on page 501

# Changing the start count of bar repeats

You can change the number from which individual bar repeats start, for example, if you want to notate the first bar in a repeated phrase at the start of each system but show a continuous count across multiple bar repeats.

NOTE

- The start count applies to the first bar in the bar repeat, which is the notated bar. For example, changing the start count of a one-bar repeat region lasting three bars to **5**, with bar repeat counts shown every four bars, causes the count at the end of the bar repeat region to show the number 8.
- Bar repeat counts are only shown on one-bar repeat regions.

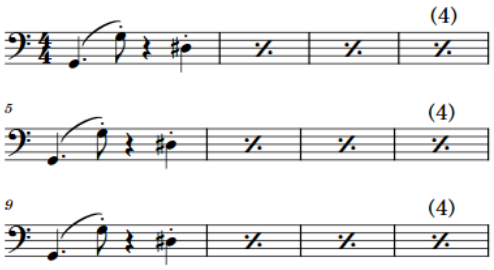
PROCEDURE

1. Select the one-bar repeat regions whose start count you want to change.
2. In the Properties panel, activate **Count from** in the **Bar Repeat Regions** group.
3. Change the value in the value field.

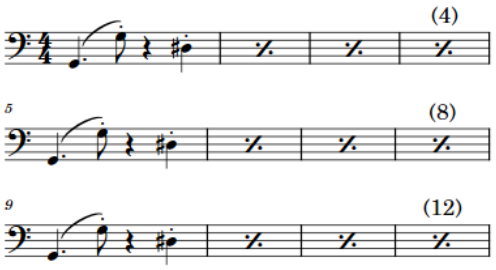
RESULT

The number and position of bar repeat counts on the selected bar repeats is changed. For example, changing the start count from 1 to 2, with counts shown every four bars, causes the count to appear on the second bar in the bar repeat region instead of the third.

EXAMPLE




Separate bar repeats on multiple systems in the same part layout with the default count




Separate bar repeats on multiple systems in the same part layout with their counts changed to imply a continuous region

RELATED LINKS

Bar repeat counts on page 759

# Changing the bar repeat count frequency

You can change how often counts are shown on individual one-bar repeat regions, for example, if you want to show the count after eight bars on a single bar repeat region.

NOTE

Bar repeat counts are only shown on one-bar repeat regions.

PROCEDURE

1. Select the one-bar repeats whose count frequency you want to change.
2. In the Properties panel, activate **Count frequency** in the **Bar Repeat Regions** group.
3. Change the value in the value field.

RESULT

The count frequency is changed for the selected bar repeat regions.

RELATED LINKS

Bar repeat counts on page 759
Hiding/Showing bar number ranges on multi-bar rests on page 501

## Changing the bar repeat count appearance

You can show individual bar repeat counts with or without parentheses, or not show any repeat count at all.

NOTE

Bar repeat counts are only shown on one-bar repeat regions.

PROCEDURE

1. Select the one-bar repeats whose count appearance you want to change.
2. In the Properties panel, activate **Count appearance** in the **Bar Repeat Regions** group.
3. Select one of the following options from the menu:
   - **Parenthesized**
   - **No parentheses**
   - **Don’t show**

RESULT

The appearance of counts on the selected bar repeat regions is changed.

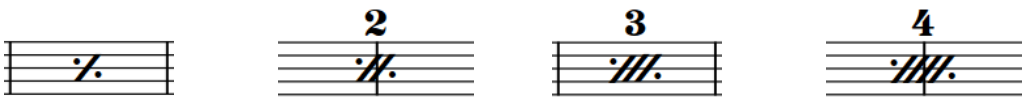
RELATED LINKS

Changing the bar repeat count frequency on page 760

# Bar repeat grouping

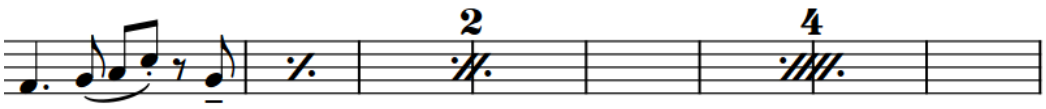
Bar repeat grouping allows you to condense longer bar repeat regions, which can be helpful in very regular music as it can simplify the overall phrasing.

The symbols shown on the staff are different for the different groupings, and two-bar and four-bar repeats also show a number to indicate how many bars are included in the group.



One-bar repeat symbol | Two-bar repeat symbol | Three-bar repeat symbol | Four-bar repeat symbol

You can specify the grouping when inputting bar repeats, and you can change the grouping of bar repeats after they have been input. Depending on where the bar repeat region starts and ends relative to the written material, Dorico Elements automatically adjusts the displayed symbols to achieve an accurate result. For example, an eight-bar phrase containing a single notated bar followed by seven one-bar repeats grouped every four bars is automatically shown with a one-bar repeat, two-bar repeat, then four-bar repeat to fill the seven bars.




Eight-bar phrase with seven one-bar repeats grouped every four bars

RELATED LINKS
Repeats popover on page 286
Inputting bar repeats on page 297

## Changing bar repeat grouping

You can change how bar repeats are grouped after they have been input, for example, if you want to group a region of one-bar repeats every two bars.

PROCEDURE

1. Select the bar repeat regions whose grouping you want to change.
2. In the Properties panel, select one of the following options from the **Group every** menu in the **Bar Repeat Regions** group:
   - **One bar**
   - **Two bars**
   - **Four bars**

   NOTE

   The options available depend on the minimum length of the selected bar repeat regions. For example, if you select bar repeat regions that last three bars, only **One bar** and **Two bars** are available in the menu.

RESULT

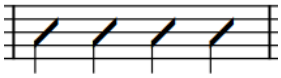
The grouping in the selected bar repeat regions is changed. Dorico Elements automatically calculates the clearest way to group the region. For example, an eight-bar phrase containing a single notated bar followed by seven one-bar repeats grouped every four bars is automatically shown with a one-bar repeat, two-bar repeat, then four-bar repeat to fill the seven bars.

# Rhythm slashes

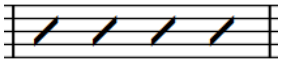
Rhythm slashes are diagonal lines positioned on staves that are used to indicate that performers should play something, but without specifying the exact rhythms and pitches. They are often accompanied by chord symbols to indicate the set of notes the performer should use.

There are two different types of rhythm slashes:

- Slashes with stems, which usually indicate the rhythm to be played, but not the pitches.



- Slashes without stems, which do not usually indicate either rhythms or pitches.



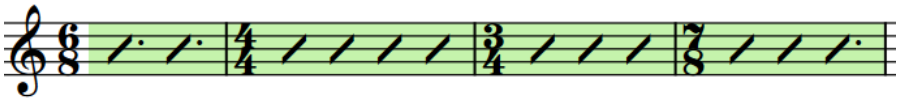
Slashes with stems are also known as “rhythmic notation”, and slashes without stems are also known as “slash notation”.

In Dorico Elements, you can present both types of rhythm slashes simultaneously by using a combination of slash regions and slash voices.

RELATED LINKS
Slash voices on page 890
Inputting slash regions on page 297
Inputting notes into slash voices on page 173
Chord symbols on page 532
Hiding/Showing chord symbols on page 534

## Slash regions

Slash regions automatically display rhythm slashes as appropriate for the meter throughout their duration, for example, they show four slashes per bar in 4/4 and two slashes per bar in 6/8. A single slash region can extend across multiple different meters.



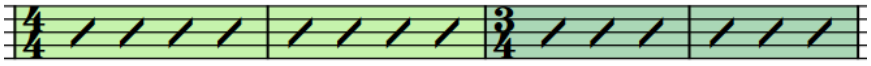
A single slash region covering multiple different meters

Multiple slash regions can exist at the same rhythmic position. When slash regions overlap, Dorico Elements treats this as a multiple-voice context and changes the staff position of slashes automatically.

By default, slash regions are highlighted with a colored background. As you zoom out, the highlights become more opaque, which is especially useful when viewing full score layouts in galley view. These highlights are considered annotations, are not printed by default, and you can hide and show them.

In Write mode, each region has a handle at the start and end, which you can use to move and lengthen/shorten regions.

When two different slash regions are adjacent, they alternate highlight colors to ensure the separate regions are always identifiable.



Two adjacent slash regions with different highlight colors

You can use slash regions and slash voices in the same project and at the same rhythmic positions, for example, you can input a slash region where you do not want to be specific about the rhythm, then input notes in a slash voice for a single bar where you want to specify an exact rhythm.

TIP

Because rhythm slashes are often accompanied by chord symbols to indicate the set of notes the performer should use, you can hide/show chord symbols in slash/chord symbol regions on instrument staves where chord symbols are hidden.

RELATED LINKS
Slash voices on page 890
Slash region counts on page 769
Slashes in multiple-voice contexts on page 765
Moving slash regions on page 768
Lengthening/Shortening slash regions on page 768
Hiding/Showing chord symbols on page 534
Chord symbol regions on page 535
Annotations on page 476

## Hiding/Showing slash region highlights

You can hide/show the colored highlights for slash regions at any time, for example, if you want to show the highlights when inputting music but hide them when engraving.

PROCEDURE

- Choose **View** > **Highlight Slash Regions**.

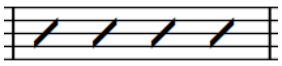
RESULT

Highlights on slash regions are shown when a tick appears beside **Highlight Slash Regions** in the menu, and hidden when no tick appears.

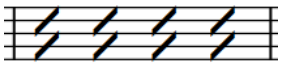
RELATED LINKS
Slash voices on page 890

# Slashes in multiple-voice contexts

Multiple slash regions and slash voices can exist at the same rhythmic positions. In multiple-voice contexts for slash voices and when slash regions overlap, Dorico Elements automatically changes their staff position and offset to accommodate all slashes as legibly as possible.



Single slash region



Two slash regions, one up-stem and one down-stem

You can also control the positions of rhythm slashes relative to each other manually by changing their stem/voice direction and by changing their staff position.

RELATED LINKS
Note positions in multiple-voice contexts on page 886
Changing the voice of existing notes on page 319
Changing the staff position of rhythm slashes on page 766

## Changing the voice direction of slash regions

You can change the voice direction of slash regions individually. When multiple slash regions overlap, this affects their stem directions.

PROCEDURE

1. Select any part of each slash region whose voice direction you want to change.
2. In the Properties panel, activate **Voice direction** in the **Slash Regions** group.
3. Choose one of the following options:
   - **Up**
   - **Down**

RESULT

The voice direction, and therefore stem direction, of the selected slash regions is changed.

NOTE

This only affects the direction of stems in slash regions on the middle line of the staff and when multiple slash regions exist at the same rhythmic position. For example, if you change the voice direction of a slash region on the bottom line of the staff to **Down**, its stem direction does not change if it does not overlap with another slash region.

RELATED LINKS
Stem direction on page 814

# Changing the staff position of rhythm slashes

You can change the staff position of rhythm slashes in both slash voices and slash regions, for example, to accommodate other notes at the same rhythmic positions better. By default, rhythm slashes are positioned on the middle line of the staff.

PROCEDURE

1. Select the rhythm slashes whose staff position you want to change.
   - For notes in slash voices, you must select every note whose staff position you want to change.
   - For slash regions, you can select any part of each region whose staff position you want to change.
2. In the Properties panel, activate **Slash pos.** in the corresponding group for the type of rhythm slash whose staff position you want to change:
   - **Notes and Rests** for notes in slash voices
   - **Slash Regions** for slash regions
3. Change the value in the value field.

RESULT

The staff position of the selected rhythm slashes is changed. For example, changing the **Slash pos.** value to **4** positions rhythm slashes on the top line of a five-line staff, while **-4** positions them on the bottom line.

If any of the rhythm slashes have stems, their stem direction is adjusted automatically.

RELATED LINKS

Stem direction on page 814

# Hiding/Showing notes alongside slash regions

You can hide/show notes at the same rhythmic positions as slash regions, for example, if you want to input notes to hear in playback but only want to show the slash region, or if you want to notate suggested notes in addition to the slash region.

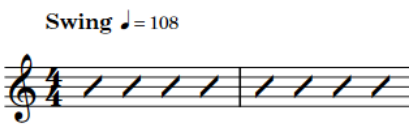
PROCEDURE

1. Select any part of each slash region alongside which you want to hide/show other notes.
2. In the Properties panel, activate/deactivate **Show other voices** in the **Slash Regions** group.

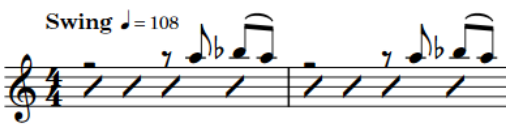
RESULT

All notes in other voices present alongside the selected slash regions are shown when **Show other voices** is activated, and hidden when it is deactivated.

EXAMPLE




Notes hidden alongside a slash region




Notes shown alongside a slash region

RELATED LINKS
Slash regions on page 763
Slash voices on page 890
Hiding/Showing slash region highlights on page 764

## Hiding/Showing padding rests before/after slash regions

You can hide/show padding rests before/after slash regions that start partway through bars individually, for example, if you have other notes at those positions and the rests would be misleading.

By default, Dorico Elements automatically shows implicit padding rests around slash regions that start/end partway through bars, so that the full duration of each bar is clear.

PROCEDURE

1. Select any part of each slash region whose padding rests you want to hide/show.
2. In the Properties panel, activate the following properties, individually or together, in the **Slash Regions** group:
   - **Hide rests before start**
   - **Hide rests after end**

RESULT

Padding rests are hidden on the corresponding side of the selected slash regions. For example, activating both properties hides padding rests both before and after the selected slash regions.

RELATED LINKS
Implicit vs. explicit rests on page 773

# Splitting slash regions

You can split slash regions after they have been input, for example, if you later want to input more precise notation in the middle of an existing slash region.

PROCEDURE

1. In Write mode, select a slash in each slash region you want to split, immediately to the right of where you want to split them.
2. Press **U**.

RESULT

The slash regions are split immediately to the left of the selected slashes. Each part now has its own start/end handles, which you can use to lengthen/shorten each part independently.

RELATED LINKS
Changing the slash region count frequency on page 770
Lengthening/Shortening slash regions on page 768

# Moving slash regions

You can move slash regions to different rhythmic positions after they have been input. Because multiple slash regions can exist at the same rhythmic position, you can also move slash regions so they overlap with other slash regions.

PROCEDURE

1. In Write mode, select any part of each slash region you want to move.
2. Move the selected slash regions according to the current rhythmic grid resolution in any of the following ways:
   - Press **Alt/Opt-Right Arrow** to move them to the right.
   - Press **Alt/Opt-Left Arrow** to move them to the left.

   NOTE

   You cannot move slash regions rhythmically with the mouse.

RESULT

The selected slash regions are moved to new rhythmic positions.

NOTE

If a single slash region passes over another slash region as part of its move, the existing one is unaffected as multiple slash regions can exist at the same rhythmic position. Where slash regions overlap, the staff positions of slashes are automatically adjusted.

However, when you move multiple slash regions together, any existing slash regions they pass over are shortened or deleted accordingly.

You can undo this action, but any slash regions shortened/deleted in the process are only restored if you moved slash regions using the keyboard.

RELATED LINKS

Slashes in multiple-voice contexts on page 765
Changing the voice direction of slash regions on page 765

# Lengthening/Shortening slash regions

You can lengthen/shorten slash regions after they have been input. Because multiple slash regions can exist at the same rhythmic position, you can also lengthen/shorten slash regions so they overlap with other slash regions.

PROCEDURE

1. In Write mode, select any part of each slash region you want to lengthen/shorten.

   NOTE

   When using the mouse, you can only lengthen/shorten one slash region at a time.

2. Lengthen/Shorten the selected slash regions in any of the following ways:
   - To lengthen them by the current rhythmic grid resolution, press **Shift-Alt/Opt-Right Arrow**.
   - To shorten them by the current rhythmic grid resolution, press **Shift-Alt/Opt-Left Arrow**.

- Click and drag the circular handle at the start/end to the right/left.

RESULT

The selected slash regions are lengthened/shortened according to the current rhythmic grid resolution. If any part of them overlap rhythmic positions with other slash regions, the staff positions of slashes are automatically adjusted to accommodate multiple slash regions at the same positions.

RELATED LINKS

Slashes in multiple-voice contexts on page 765
Changing the voice direction of slash regions on page 765

# Hiding/Showing stems in slash regions

You can hide/show stems on slashes in individual slash regions. By default, slashes in slash regions are shown without stems.

PROCEDURE

1. Select any part of each slash region in which you want to hide/show stems.
2. In the Properties panel, activate **Slash type** in the **Slash Regions** group.
3. Choose one of the following options:
   - **With stems**
   - **Without stems**

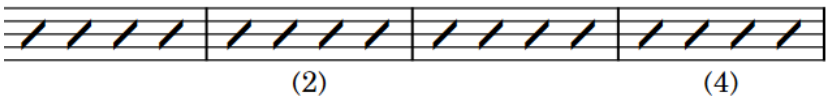
RESULT

Stems are hidden in the selected slash regions when you choose **Without stems**, and shown when you choose **With stems**.

# Slash region counts

Slash region counts are numbers shown at regular intervals, either above or below slash regions, to help players keep track of how many bars have passed. The intervals are usually based on typical musical phrases, such as every four or eight bars.

By default, slash region counts are shown every four bars and are placed below the staff. Each slash region has its own separate count.




Slash region with counts shown every two bars

In Dorico Elements, you can change the start count of each slash region, how frequently slash region counts are shown, their staff-relative placement, and whether they are parenthesized.

RELATED LINKS

Slash regions on page 763

# Changing the start count of slash regions

You can change the number from which individual slash region counts start, for example, if you want to input more precise notation between two slash regions but want the count to appear to continue across the regions.

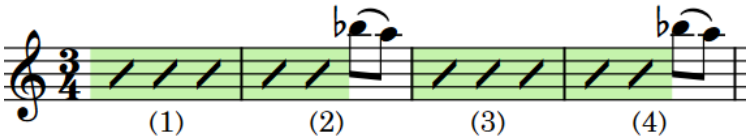
PROCEDURE

1. Select any part of each slash region whose start count you want to change.
2. In the Properties panel, activate **Count from** in the **Slash Regions** group.
3. Change the value in the value field.

RESULT

The number and position of counts on the selected slash regions is changed. For example, changing the start count from 1 to 2, with counts shown every four bars, causes the count to appear on the third bar in the slash region instead of the fourth.

EXAMPLE




Two separate slash regions, where the start count on the second region has been changed so it appears to continue on from the first region.

# Changing the slash region count frequency

You can change how frequently counts are shown on slash regions individually, for example, if you want to show the count after eight bars on a single slash region. By default, slash region counts are shown every four bars.

PROCEDURE

1. Select any part of each slash region whose count frequency you want to change.
2. In the Properties panel, activate **Count frequency** in the **Slash Regions** group.
3. Change the value in the value field.

RESULT

The count frequency is changed for the selected slash regions.

RELATED LINKS

Splitting slash regions on page 767

# Changing the slash region count appearance

You can show individual slash region counts with or without parentheses, or not show any count at all.

PROCEDURE

1. Select any part of each slash region whose count appearance you want to change.
2. In the Properties panel, activate **Count appearance** in the **Slash Regions** group.
3. Select one of the following options from the menu:

- **Parenthesized**
- **No parentheses**
- **Don’t show**

RESULT

The appearance of counts on the selected slash regions is changed.

## Changing the staff-relative placement of slash region counts

You can show the counts on individual slash regions either above or below the staff.

NOTE

Changing the staff-relative placement of slash region counts affects all counts on the region. You cannot change the placement of a single count independently of other counts on the same slash region.

PROCEDURE

1. Select any part of each slash region whose count staff-relative placement you want to change.
2. In the Properties panel, activate **Count position** in the **Slash Regions** group.
3. Choose one of the following options:
   - **Above**
   - **Below**

RESULT

The staff-relative placement of all counts on the selected slash regions is changed.

# Rests

Rests are markings with a rhythmic value that indicate no note is played for that duration. Each note duration has an equivalent rest, for example, a quarter note rest is different to a sixteenth note rest.

All notes and rests within a bar must add up to the duration of the bar, according to the prevailing time signature.

The table shows some examples of notes and the rests with the equivalent rhythmic value.

| Duration | Note | Rest |
|---|---|---|
| Half |  |  |
| Quarter |  |  |
| Eighth |  |  |
| Sixteenth |  |  |

During note input, Dorico Elements automatically fills the gaps between notes with implicit rests of the appropriate duration. Therefore, it is usually not necessary to input rests in Dorico Elements.

RELATED LINKS
Implicit vs. explicit rests on page 773
Inputting rests on page 182
Deleting rests on page 775
Inputting notes on page 164

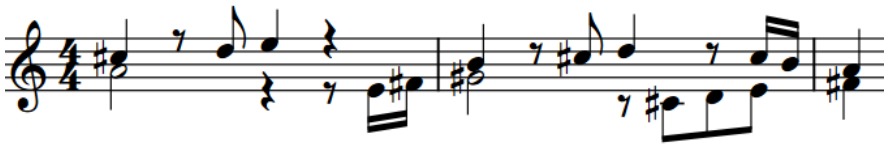
## General placement conventions for rests

Rests are positioned at the rhythmic position at the start of their duration, and not in the middle of beats as this can cause confusion over when the rest begins and ends. Rests are aligned with other items at the same rhythmic position.

The only exception is whole bar rests, which are positioned at the visual center of bars. This way, they are clearly distinguishable from half note and whole note rests that are followed by notes in the same bar.

Rests stay within the staff wherever possible. They do not move above or below the staff when the notes around them are very high or very low.

However, on staves with multiple voices, rests are placed higher on the staff, or above the staff, for up-stem voices and lower on the staff, or below the staff, for down-stem voices.



Example rest positions in a multiple-voice context

Rests in multiple voices must not overlap. You can consolidate rests so that only one is shown when multiple voices have a rest of the same duration at the same rhythmic position.

The precise vertical positioning of rests is limited, as their detailed shapes require specific positions relative to staff lines and staff spaces.

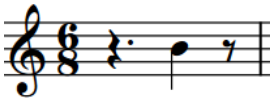
RELATED LINKS
Deleting rests on page 775
Turning explicit rests into implicit rests on page 774

# Implicit vs. explicit rests

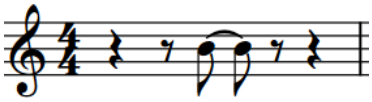
Implicit rests are automatically shown between the notes you input, and their duration automatically follows the time signature and their position in the bar. Explicit rests are rests that are explicitly entered during note input by forcing their duration, or rests that were imported from a MusicXML file.

Dorico Elements notates implicit rests according to the current time signature, for example, different implicit rests are shown in 6/8 compared to 4/4. This also applies if you later change the time signature for existing notes and rests.

Therefore, it is not necessary to input rests in Dorico Elements, as implicit rests are automatically shown around the notes that you input. You can turn implicit rests into explicit rests by forcing their duration to be fixed.



A quarter note input at the fourth eighth note of the bar in a 6/8 time signature has a dotted quarter implicit rest at the start of the bar.



A quarter note input at the fourth eighth note of the bar in a 4/4 time signature has two implicit rests, a quarter and an eighth, at the start of the bar.

Explicit rests cannot be suppressed when using the **Starts voice** and **Ends voice** properties to hide rests before the first note in voices and after the last note in voices.

You can show rest colors to see which rests are implicit and which are explicit in your project.

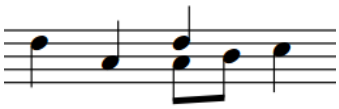
RELATED LINKS
Inputting rests on page 182
Inputting notes on page 164
Forcing the duration of notes/rests on page 169
Turning explicit rests into implicit rests on page 774
Deleting rests on page 775
Hiding/Showing rest colors on page 775

# Implicit rests in multiple-voice contexts

In Dorico Elements, implicit rests are shown automatically to fill in rhythmic positions around notes, including when there are multiple voices on the staff. However, in these contexts you might want more control over when and where rests are shown.

Usually, rests or notes are shown for whole bars when voices contain at least one note in the bar. This helps make the rhythmic position of every note in all voices in the bar immediately clear.

When there are multiple voices on a staff, implicit rests are shown in every bar in which there are notes of any duration in more than one voice. However, there might be circumstances in which you do not want to show rests either before the first note in a voice or after the last note in a voice when there are multiple voices on the staff. For example, it can be useful to hide rests when a voice is being used to show passing notes within a bar that otherwise contains a single melodic line.



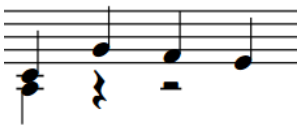
A second voice used to notate passing notes

TIP

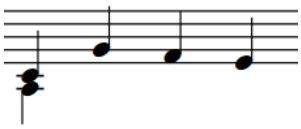
By default, Dorico Elements consolidates rests when multiple voices have rests of the same duration at the same rhythmic position.

You can show multiple rests at individual rhythmic positions by changing the vertical position of rests.

You can hide rests before the first note in voices and after the last note in voices individually by activating properties in the Properties panel. You can show rests that you have hidden by deactivating the corresponding property.



A phrase with multiple voices showing implicit rests.



The same phrase without implicit rests.

You can also delete rests from selected passages.

RELATED LINKS
Moving rests vertically on page 778
Deleting rests on page 775

# Turning explicit rests into implicit rests

Implicit rests and explicit rests behave differently. For example, you can hide implicit rests using the Properties panel, but you cannot hide explicit rests or rests with forced durations.

NOTE

You can only hide implicit rests using **Starts voice** and **Ends voice** in the **Notes and Rests** group of the Properties panel.

PROCEDURE

1. In Write mode, select the explicit rests you want to turn into implicit rests.
2. Press **Backspace or Delete**.

RESULT

The selected explicit rests are now implicit rests. You can check this by showing rest colors.

RELATED LINKS

Hiding/Showing rest colors on page 775
Deleting rests on page 775

# Hiding/Showing rest colors

You can hide/show rest colors, which causes implicit rests and explicit rests to appear with different colors.

When rest colors are shown, rests in your project appear gray if they are implicit, and black if they are explicit. For example, this can be useful to help diagnose why rests do not disappear when you activate **Starts voice** and **Ends voice**, as these properties only hide implicit rests.

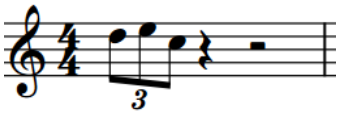
PROCEDURE

- Choose **View** > **Note And Rest Colors** > **Implicit Rests**.

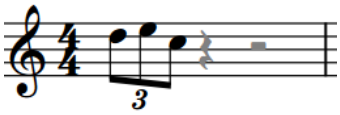
RESULT

Rest colors are shown when a tick appears beside **Implicit Rests** in the menu, and hidden when no tick appears.

EXAMPLE



Rests colored black, as they appear without implicit rests shown



Rests colored gray to indicate implicit rests

AFTER COMPLETING THIS TASK

You can delete rests that you have identified as explicit rests. The implicit rests that replace them now respect the **Starts voice** and **Ends voice** properties.

# Deleting rests

You can delete both implicit rests and explicit rests, for example, if you want to hide rests before/after notes in another voice used to show passing notes.

NOTE

You cannot delete rests from unpitched percussion instruments.

PROCEDURE

1. In Write mode, select the rests you want to delete.

   TIP

   You can select rests individually, or make a larger selection that contains the rests you want to delete.

2. Choose **Edit** > **Remove Rests**.

RESULT

All rests in the selection are deleted. This is done by automatically activating **Starts voice** and **Ends voice** in the **Notes and Rests** group of the Properties panel so that no rests are shown in the selected regions.

TIP

You can undo deleting rests immediately.

You can also show rests again later by selecting the notes or rests immediately to the right/left of deleted rests and deactivating the corresponding **Starts voice** or **Ends voice** properties in the **Notes and Rests** group of the Properties panel.

RELATED LINKS

Rests on page 772
Implicit vs. explicit rests on page 773
Large selections on page 303
Implicit rests in multiple-voice contexts on page 774

# Hiding/Showing bar rests in empty bars

You can hide/show bar rests in empty bars in each layout in your project independently of other layouts. For example, you can hide bar rests in full score layouts but show bar rests in part layouts.

Bar rests are usually shown in empty bars in music to indicate to performers that they have nothing to play. However, there are contexts in which it is preferable to hide bar rests in empty bars, and instead leave the bar completely empty.

For example, hiding bar rests in empty bars is sometimes the preferred visual aesthetic in large scores, so that it is quicker to identify bars containing music. You can also hide bar rests in layouts where you want to include other instructions, such as verbal indications for performers to do something other than play notated pitches.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to hide/show bar rests in empty bars.

   By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Players** in the page list.
4. In the **Bar Rests and Multi-bar Rests** section, activate/deactivate **Show bar rests in empty bars**.

5. Click **Apply**, then **Close**.

RESULT

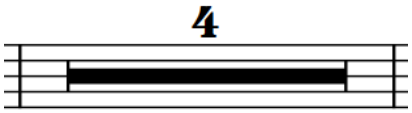
All bar rests in empty bars in the selected layouts are shown when the checkbox is activated, and hidden when the checkbox is deactivated.

RELATED LINKS

Hiding/Showing multi-bar rests on page 777

# Multi-bar rests

Multi-bar rests group two or more consecutive empty bars together into a single unit, commonly shown with a thick horizontal line positioned on the middle staff line, known as an “H-bar”. They can reduce the horizontal space required by multiple empty bars and make it easier for players to find their place in the music.




A multi-bar rest representing four empty bars

NOTE

Multi-bar rests are automatically split by items positioned within their range, such as system text, rehearsal marks, and holds and pauses. This includes when the items are invisible, except for hidden tempo marks, such as those input in the **Time** track in Play mode. However, if items are positioned at the start of the first bar in a multi-bar rest, that bar remains part of the subsequent multi-bar rest.

You can hide/show multi-bar rests in each layout independently in Dorico Elements, and you can hide/show bar number ranges below them.

By default, the multi-bar rest bar counts only appear once between the staves of grand staff instruments.

RELATED LINKS

Hiding/Showing bar number ranges on multi-bar rests on page 501
Time track on page 400

## Hiding/Showing multi-bar rests

You can hide/show multi-bar rests in each layout in your project independently of other layouts, and choose whether bar repeats are consolidated into multi-bar rests. For example, you can hide multi-bar rests in full score layouts but show multi-bar rests in part layouts.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to hide/show multi-bar rests.

   By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Players** in the page list.

4. In the **Bar Rests and Multi-bar rests** section, choose one of the following options for **Consolidate**:
   - **None**
   - **Multi-bar Rests**
   - **Multi-bar Rests and Bar Repeats**
5. Click **Apply**, then **Close**.

RESULT

- When you choose **None**, no multi-bar rests are shown in the selected layouts. Each empty bar is shown separately.
- When you choose **Multi-bar Rests**, any adjacent empty bars are consolidated into multi-bar rests in the selected layouts. However, bar repeats prevent the consolidation of multi-bar rests, even if there are no other notes in those bars.
- When you choose **Multi-bar Rests and Bar Repeats**, any adjacent empty bars or bars that only contain bar repeats are consolidated into multi-bar rests in the selected layouts. Multi-bar rest counts are also shown above consolidated bar repeats.

RELATED LINKS
Bar repeats on page 756
Multi-bar rests on page 777
Hiding/Showing bar number ranges on multi-bar rests on page 501

# Moving rests vertically

You can change the vertical position of rests individually, for example, if you want to change the staff line from which a whole bar rest hangs, or you want to show rests for all voices at a particular rhythmic position.

Moving rests vertically shows multiple rests at that rhythmic position if more than one voice on the staff has a rest of the same duration. By default, Dorico Elements consolidates rests in multiple-voice contexts and automatically positions rests in multiple-voice contexts to avoid collisions.

NOTE

You cannot change the vertical position of rests when using the mouse.

PROCEDURE

1. Select the rests whose vertical positions you want to change, or rests at the rhythmic positions where you want to see rests for every voice.
2. In the Properties panel, activate **Rest pos.** in the **Notes and Rests** group.
3. Change the value in the value field.

RESULT

Increasing the value moves rests upwards, decreasing the value moves rests downwards. Position 0 is the middle line of the staff.

If there are multiple voices on the staff with rests of the same duration, multiple rests are now shown.

Deactivating **Rest pos.** returns the selected rests to their default positions.

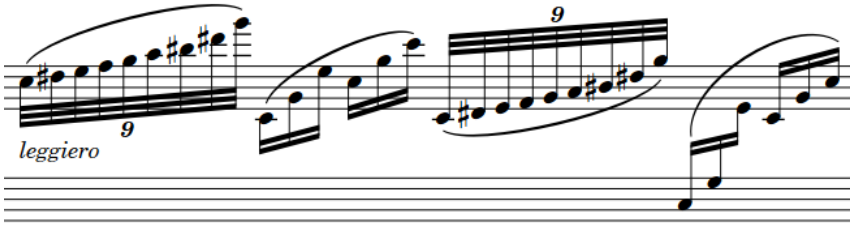
RELATED LINKS
Note spacing on page 361

# Slurs

Slurs are tapered, curved lines that join notes to indicate legato articulation and phrasing.

Depending on the context and the instrument to which they apply, slurs can have additional meanings to simply marking phrases. For example, for wind players, a slur indicates that all the notes in the phrase are played in the same breath and without re-tonguing or re-articulating any notes. For string players, a slur indicates that all the notes in the phrase are played legato and under one bow. For singers, slurs indicate that more than one note is sung to the same syllable.

Slurs can be placed both above and below the staff, depending on the stem directions of the notes to which they apply. In order to keep slur endpoints close to notes, slurs are placed outside articulations on notes in the middle of slurs, but between notes and larger articulations on the first/last notes of slurs. For example, accents and stress marks are placed outside the ends of slurs but staccato and tenuto marks are placed inside the ends of slurs by default.




Slurs both above and below the staff, including a cross-staff slur

NOTE

Slurs must not be confused with ties, which look superficially similar, but instead join notes of the same pitch to indicate that they are played as a single note. In that sense, ties are part of rhythmic notation, while slurs are considered articulation.

RELATED LINKS

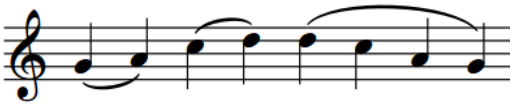
Inputting slurs on page 202
Ties on page 831

## General placement conventions for slurs

The staff-relative placement of slurs, and therefore their curvature direction, depends on the stem direction of the notes within the slur. Depending on whether slurs are placed on the notehead or stem side of notes, their endpoint positions are different.

### Slur direction

A slur on a single staff always curves upwards and is placed above the notes, unless all of the notes under the slur are up-stem, in which case it curves downwards and is placed below the notes. If a slur applies to a mixture of up-stem and down-stem notes, it is placed above the staff and curves upwards.



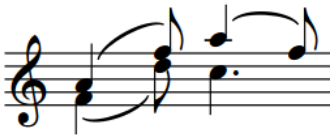
Examples of the slur direction changing according to the stem direction

NOTE

In jazz scores, slurs are sometimes treated as an articulation and so positioning all slurs above the staff is preferred.

### Stem-side slurs between unbeamed notes

In Dorico Elements, slurs appear between the stems of unbeamed notes when placed on their stem side, and the default setting is for them to attach a short distance from the end of the stem.

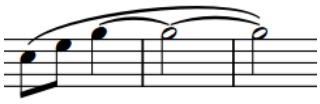


RELATED LINKS
Slur endpoint position relative to other items on page 783

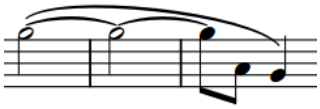
## Slur position relative to tie chains

There are different conventions for the position of slurs relative to tie chains in music for modern use and historical editions.

Modern practice is for slurs to start on the first note in tie chains, and end on the last note in tie chains. This makes the full length of the phrase visually clear to the performer, which helps their performance, and is the default in Dorico Elements.

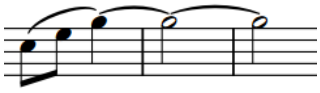


Slur ending on the last note in a tie chain

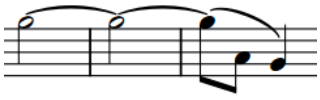


Slur starting from the first note in a tie chain

However, in historical editions, slurs might end on the first note in a tie chain, and start on the last note in a tie chain. Both of these changes save vertical space, as shorter slurs do not extend as far above or below a staff.



Slur ending on the first note in a tie chain



Slur starting on the last note in a tie chain

## Changing the position of slurs relative to tie chains

You can change the position of individual slurs relative to tie chains, including slurs starting on grace notes, for example, to save vertical space.

PROCEDURE

1. Select the slurs whose position relative to tie chains you want to change.
2. In the Properties panel, activate the following properties, individually or together, in the **Slurs** group:
   - **Start pos. in tie chain**
   - **End pos. in tie chain**
3. Choose one of the following options for each property:
   - **First note**
   - **Last note**

RESULT

The position of the selected slurs relative to tie chains is changed.

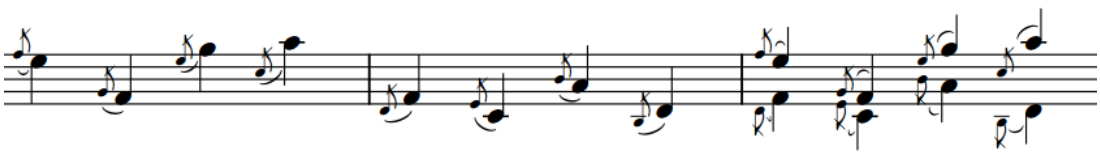
# Slur placement relative to grace notes

There are specific placement rules that affect slurs when they start from a grace note and end on a normal note immediately following the grace note.

These rules are:

- Slurs connect noteheads rather than stems.
- Slurs are scaled to match the proportions of grace notes.
- Slurs must not obscure ledger lines.
- Slurs are placed above notes if they would collide with the accidental of a standard note when placed below the notes.

Due to the general placement conventions of grace notes, slurs in Dorico Elements appear below grace notes and curve downwards by default. Slurs starting from grace notes only appear above notes and curve upwards in up-stem voices in multiple-voice contexts.



Automatic changes to the curvature direction of slurs on grace notes in multiple-voice contexts

RELATED LINKS

Changing the curvature direction of slurs on page 788
Changing the stem direction of notes on page 816
General placement conventions for grace notes on page 597

## Slur position relative to staff lines

Slur endpoints must not touch staff lines, and the high point of the arcs of slurs should not stop on staff lines.

This is the convention because a slur whose arc peaks on a staff line can create the appearance of a triangular wedge between the staff line and the curve of the slur. If a slur peaks on a staff line, you can adjust its height so that it peaks either above/below the staff.

NOTE

Although Dorico Elements automatically ensures slur endpoints do not touch staff lines, manual adjustments might be necessary to position the arcs of slurs correctly.

## Slur endpoint position relative to other items

In order to avoid collisions, the default positions of slur endpoints vary depending on whether slurs are placed on the notehead side or stem side of notes, their position relative to staff lines, and whether articulations, ties, and other slurs exist at the same rhythmic position.

### Slur endpoints relative to noteheads and stems

The default position of slur endpoints relative to noteheads is 1/2 space above a notehead in a space on the staff, and 1/4 space above a notehead on a line on the staff.

NOTE

This value affects all slur collisions in your project.

### Slur endpoints relative to articulations

By default, articulations of force and stress are placed outside slur endpoints, and articulations of duration are placed inside slur endpoints, which automatically raises the endpoints.

### Slur endpoints relative to ties and other slurs

The default position of slur endpoints is 1/4 space above an existing slur that starts/ends on the same note.

RELATED LINKS
Articulations on page 485

# Cross-staff and cross-voice slurs

Cross-staff slurs start on one staff and end on another staff, and cross-voice slurs start in one voice and end in another voice.

Dorico Elements positions cross-staff and cross-voice slurs in the same way as it positions standard slurs, so their appearance might be the same as standard slurs. You can move and lengthen/shorten cross-staff and cross-voice slurs in the same ways as standard slurs; however, they do not behave in the same way.

For example, you cannot move cross-voice slurs to notes on the same staff in other voices, and you cannot lengthen cross-voice slurs to notes on the same staff in other voices. You also cannot shorten cross-voice slurs if noteheads under the slur are not in one of the voices in which the slur started/ended.

You can only move and lengthen/shorten cross-staff slurs to notes on the same staff as the corresponding endpoint. For example, if a cross-staff slur covers a phrase that starts on the bottom staff and ends on the upper staff, you can only shorten the cross-staff slur to the first note on the upper staff, you cannot shorten it to any notes on the bottom staff.

The different voices can be on the same staff, or on different staves.

RELATED LINKS
Lengthening/Shortening slurs on page 786
Moving slurs rhythmically on page 786

## Inputting cross-staff and cross-voice slurs

You can input cross-staff and cross-voice slurs. For example, musical phrases in grand staff instruments, such as piano and harp, can span both staves and may need slurs to join them.

PROCEDURE

1. In Write mode, select the note from which you want the slur to start, in any voice or staff.
2. **Ctrl/Cmd**-click the note where you want the slur to end, in any voice and on any staff belonging to the same instrument as the note in step 1.

   NOTE

   Only select those two notes.
3. Press **S**.

RESULT

A cross-voice or cross-staff slur is input spanning the select notes. It is placed either above or below the notes, depending on the stem direction of the notes within the selection.

AFTER COMPLETING THIS TASK

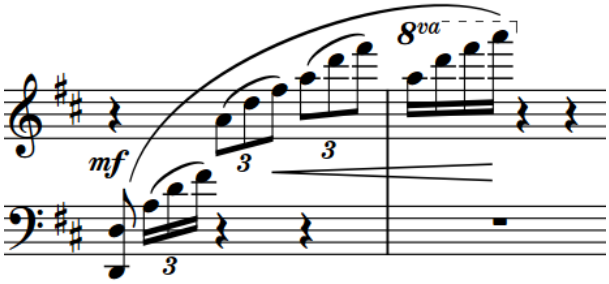
You can change the curvature direction of individual slurs.

RELATED LINKS
Changing the curvature direction of slurs on page 788

# Nested slurs

Nested slurs are two or more slurs used simultaneously, where the overarching slur shows the structure of the phrase and the inner slurs show the articulation within the phrase. They are also known as “slurs within slurs”.

Depending on the stem directions within the overarching outer slur, inner slurs may appear on the opposite side of the staff to the outer slur.




A phrase with nested slurs

You can input nested slurs in the same ways as inputting standard slurs. By default, Dorico Elements makes automatic adjustments to their positioning to avoid collisions.

RELATED LINKS
Slur collision avoidance on page 791

## Inputting nested slurs during note input

You can input nested slurs directly during note input, for example, if you already know how you want to phrase the notes you are currently inputting.

PROCEDURE

1. In Write mode, start note input.
2. Press **S** twice to start two slurs from the currently selected note.
   One slur is the inner slur, the other slur is the outer slur.
3. Input your notes.
   The slurs extend automatically as you continue inputting notes, even if there are rests between the notes you input.
4. Press **Shift-S** once to end the inner slur on the currently selected note.
5. Continue inputting notes.
6. Optional: Start/End other inner slurs.
7. Press **Shift-S** again to end the outer slur on the currently selected note.

RELATED LINKS
Nested slurs on page 784

## Adding nested slurs to existing notes

You can add multiple slurs to existing notes so that they appear as nested slurs.

PROCEDURE

1. In Write mode, select the notes you want to include in the outer slur.
2. Press **S** to input the outer slur.
3. Select the notes within the outer slur that you want to place under an inner slur.
4. Press **S** to input the inner slur.
5. Optional: Repeat steps 3 and 4 for any other inner slurs you want.

   NOTE

   - You can input the outer slur and inner slurs in any order as Dorico Elements automatically adjusts slurs so that shorter slurs are positioned within longer slurs, and makes sure they do not collide.
   - Slur collisions are not automatically avoided if you activate **Disable auto curve adjustment** in the **Slurs** group of the Properties panel for individual notes.

RELATED LINKS
Slur collision avoidance on page 791

# Moving slurs rhythmically

You can move slurs to new rhythmic positions after they have been input.

PROCEDURE

1. In Write mode, select the slur you want to move.

   NOTE

   You can only move one slur rhythmically at a time.

2. Move the slur to other noteheads on the staff in any of the following ways:
   - Press **Alt/Opt-Right Arrow** to move it to the next notehead on the staff.
   - Press **Alt/Opt-Left Arrow** to move it to the previous notehead on the staff.
   - Click and drag it to the right/left.

RESULT

The slur is moved to other noteheads on the staff.

NOTE

The rhythmic duration of the slur is usually maintained. However, depending on the rhythms it crosses as it moves, the slur may cover longer/shorter durations than before it was moved.

# Lengthening/Shortening slurs

You can change the length of slurs rhythmically after they have been input.

NOTE

You can only lengthen/shorten cross-staff slurs to notes on the same staff as the corresponding endpoint, and you can only lengthen/shorten cross-voice slurs to notes in the same voice as the corresponding endpoint.

PROCEDURE

1. In Write mode, select the slurs you want to lengthen/shorten.

   NOTE

   When using the mouse, you can only lengthen/shorten one slur at a time.

2. Lengthen/Shorten the slurs in any of the following ways:
   - Press **Shift-Alt/Opt-Right Arrow** to lengthen the slur to the next notehead.
   - Press **Shift-Alt/Opt-Left Arrow** to shorten the slur to the previous notehead.

     NOTE

     Key commands lengthen/shorten items by moving their end only. You can move the start of slurs by moving the whole slur, or by clicking and dragging the start handle.

   - Click and drag the start/end of the slur to the next/previous notehead.

RESULT

The selected slurs are lengthened/shortened.

RELATED LINKS
Moving slurs rhythmically on page 786
Cross-staff and cross-voice slurs on page 783

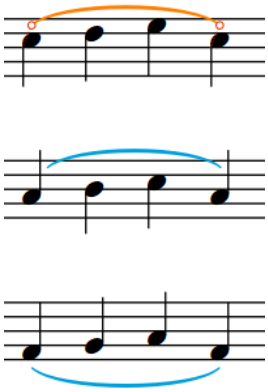
# Linked slurs

Slurs of the same duration at the same rhythmic position on multiple staves can be linked together. This happens automatically when you copy and paste slurs or material including slurs between staves, or enter them simultaneously.

If slurs are linked, moving one slur in the linked group moves any slurs linked to it in the same way. Similarly, lengthening or shortening a slur in a linked group lengthens or shortens any slurs linked to it in the same way.

However, deleting one slur in a linked group only deletes the slur selected, not the whole group.

Linked slurs appear highlighted when any slur in the linked group is selected.



Three linked slurs with the top slur selected

You can also manually link and unlink slurs.

RELATED LINKS
Inputting slurs on page 202
Unlinking slurs on page 788
Disabling automatic linking of dynamics and slurs when pasting on page 309

# Linking slurs together

Dorico Elements automatically links slurs of the same duration at the same rhythmic positions together when you copy and paste slurs or material including slurs between staves, or enter them simultaneously. However, you can also link slurs together manually.

PROCEDURE

1. In Write mode, select the slurs you want to link together.

   NOTE

   Only slurs that have the same duration and start at the same position can be linked together.

2. Choose **Edit** > **Slurs** > **Link**. You can also choose this option from the context menu.

RESULT

The selected slurs are linked together.

## Unlinking slurs

You can unlink slurs manually that were automatically linked together, for example, if you want to lengthen/shorten them independently of each other.

PROCEDURE

1. In Write mode, select a slur from each linked group you no longer want to be linked.
2. Choose **Edit** > **Slurs** > **Unlink**. You can also choose this option from the context menu.

RESULT

All slurs linked to the selected slurs are unlinked.

NOTE

You cannot only unlink a single slur from the group.

RELATED LINKS

Disabling automatic linking of dynamics and slurs when pasting on page 309

# Slur curvature direction

Slurs can curve upwards, downwards, or have a multi-segment S-shape.

The following options for slur curvature direction are available when you activate **Direction** in the **Slurs** group of the Properties panel:

**Up**

Forces slurs to curve upwards, and appear above notes.

**Down**

Forces slurs to curve downwards, and appear below notes.

**Up/Down**

Forces slurs to comprise two segments: the first curves upwards, the second curves downwards to create a mirrored S-shape. It is typically used when phrases start in the lower staff and end in the upper staff, for example, in piano parts.

**Down/Up**

Forces slurs to comprise two segments: the first curves downwards, the second curves upwards to create an S-shape. It is typically used when phrases start in the upper staff and end in the lower staff, for example, in piano parts.

## Changing the curvature direction of slurs

You can change the curvature direction of individual slurs so that they curve upwards, downwards, or have a multi-segment S-shape.

PROCEDURE

1. Select the slurs whose curvature direction you want to change.
2. In the Properties panel, activate **Direction** in the **Slurs** group.
3. Choose one of the following options:
   - **Up**
   - **Down**
   - **Up/Down** (mirrored S-shape)
   - **Down/Up** (S-shape)

RESULT

The curvature direction of the selected slurs is changed.

# Slur styles

There are different styles of slurs available in Dorico Elements, which indicate different meanings and have different use cases.

The following options for slur style are available when you activate **Style** in the **Slurs** group of the Properties panel:

**Solid**

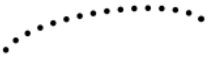
This is the default style for slurs. Slurs appear as tapered solid lines: thinner at the ends and thicker in the middle.

**Dashed**

Slurs appear as tapered dashed lines. Can be used to indicate an optional slur, for example, to recommend breathing/bowing patterns.

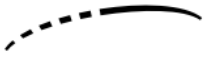
**Dotted**

Slurs appear as dotted lines. The dots are the same size and the same distance apart over the whole length of the slur.



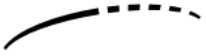
**Half-dashed start**

The first halves of slurs appear as dashed lines, the second halves as solid lines. Used to denote that a slur was written incompletely in the source in critical editions.



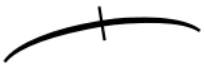
**Half-dashed end**

The first halves of slurs appear as solid lines, the second halves as dashed lines. Used to denote that a slur was written incompletely in the source in critical editions.



**Editorial**

Slurs appear as solid black lines, but with a smaller vertical line intersecting them exactly halfway along their length, perpendicular to the curve of the slur. Used to show that a slur was added by the editor and was not present in the original source.



## Changing the style of slurs

You can change the style of individual slurs after they have been input.

PROCEDURE

1. Select the slurs whose style you want to change.
2. In the Properties panel, activate **Style** in the **Slurs** group.
3. Select one of the following options from the menu:
   - **Solid**
   - **Dashed**
   - **Dotted**
   - **Half-dashed start**
   - **Half-dashed end**
   - **Editorial**

## Changing individual slurs to flat slurs

Although they are not often used as standard, some publishers use flat slurs in order to reduce the vertical space occupied by slurs. You can change individual slurs to flat slurs.

NOTE

Not all slurs look good as flat slurs, but it would also be unusual only to use flat slurs once or twice in a project. Therefore, we recommend that you avoid changing the curvature style for only one or two slurs in a project.

PROCEDURE

1. Select the slurs whose curvature style you want to change.
2. In the Properties panel, activate **Curvature style** in the **Slurs** group.
3. Choose one of the following options:
   - **Normal (curved)**
   - **Flat**

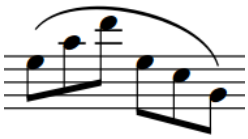
RESULT

The curvature style of the selected slurs is changed.

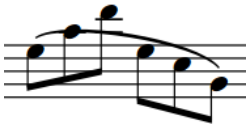
# Slur collision avoidance

By default, Dorico Elements automatically adjusts the shape and position of slurs to avoid collisions with items under their arc.

This means that if a notehead under a slur is either higher than the others under a slur curving upwards, or lower than the others under a slur curving downwards, the curvature of the slur is adjusted to avoid the collision and keep the notehead under the slur.



Slur with collision avoidance activated (default)



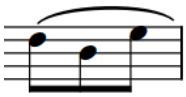
Slur with collision avoidance deactivated

# Slurs over system and frame breaks

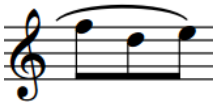
Slurs automatically cross system breaks and frame breaks.

A system or frame break divides slurs into two parts. The end of the first part of the slur, and the start of the second part of the slur, are both positioned 1 space vertically outside the staff by default.

If multiple slurs cross the same system break or frame break, such as if a phrase split by a break contains nested slurs, the ends of the slurs are stacked automatically and spaced a minimum of 1/2 space apart vertically.



The end of a system showing the first slur part; the end on the right indicates a continuation to the next system.



The start of the next system showing the second slur part; the end on the left indicates a continuation from the previous system.

# Slurs in playback

Slurs trigger the legato playing technique in playback. By default, this increases the length of the MIDI notes without affecting the notation of the music.

Slurred notes sound for 105% of the length indicated by their notated rhythm, as opposed to non-slurred notes which sound for 85% of their notated rhythm.

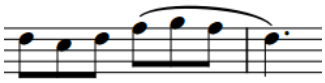
The final note of a slur sounds for 85% of its notated rhythm, as there is no slur after it and the legato technique is no longer required.

TIP

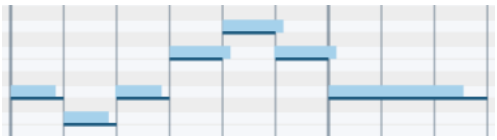
You can enable independent voice playback for individual instruments, for example, if you have slurs in one voice and staccatos in another voice.

The example shows how MIDI note length, indicated by the filled, light-colored rectangles, is increased when slurs are used. The thin, darker rod shows the notated duration of each note. The first three notes are non-slurred, so the MIDI length rectangle is shorter than the line of the

notated rhythm. The last four notes are slurred together, so the MIDI length is longer than the notated length in order to create the legato, slurred sound. However, the last note of the slurred group is not longer, as the last note of a slurred phrase is treated like a normal, non-slurred note.



A phrase in an instrument staff



The same phrase in the piano roll in Play mode

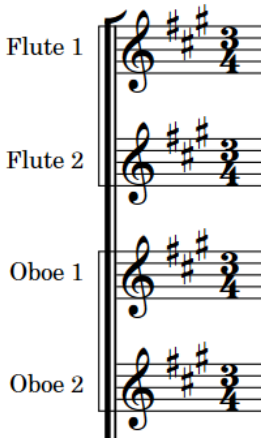
RELATED LINKS

Played vs. notated note durations on page 456
Enabling independent voice playback on page 413

# Staff labels

Staff labels are used to identify staves in music containing multiple players, and are positioned to the left of systems, before the initial barline of each system. Staff labels indicate the instrument or instruments currently playing the music on the staff or staves to which they apply.

It is usual to show instrument names in full in the staff labels for the first systems in each flow, and abbreviated instrument names in the staff labels of subsequent systems. Using abbreviated instrument names saves horizontal space, allowing you to include more music in each system.




Examples of staff labels on the first system in a flow

In Dorico Elements, staff labels use the instrument names set for each instrument in the **Edit Instrument Names** dialog. In the dialog, you can specify singular and plural names for each instrument, and singular and plural abbreviations for each instrument.

TIP

You do not need to number instruments in staff labels manually, as Dorico Elements automatically numbers instruments when there are multiple players of the same type playing instruments of the same type.

Part layouts by default do not show staff labels, as most parts only contain a single staff whose identity is clear from the context and the layout name. The layout name is shown at the top left of the first page in part layouts by default.

NOTE

Layout names are different to the instrument names used for staff labels.

For players holding multiple instruments, the staff label shows the instrument they are currently playing. If the player changes instrument partway through a system, the name of the new instrument is shown above the staff at its first note and the staff label is updated at the start of the next system.

NOTE

Staff labels do not show all instruments held by players, for example, in the staff label for the first system. You should include a comprehensive instrumentation list that shows any doubling at the front of your score.

Dorico Elements includes the instrument transposition, or instrument pitch, in staff labels for transposing instruments by default. Transposing instruments are instruments whose sounding pitch is different to the notated pitch.

You can change when instrument transpositions, or instrument pitches, are shown in staff labels. You can also change whether the instrument transposition is shown before or after the instrument name in staff labels.

### Staff labels imported from MusicXML files

When exporting MusicXML files from Cubase and importing them into Dorico Elements, you can improve the accuracy of the automatic instrument selection by changing the instrument names in the Cubase **Score Editor** to the same English instrument names that Dorico Elements uses before exporting the file.

RELATED LINKS
Player, layout, and instrument names on page 135
Instrument numbering on page 108
Edit Instrument Names dialog on page 136
Changing instrument names on page 139

# Instrument names in staff labels

Staff labels use the instrument names set for each instrument. Staff labels can show full or short instrument names.

On the **Staves and Systems** page in **Setup** > **Layout Options**, you can choose whether you want to show full, short, or no instrument names in staff labels in each layout independently.

- **Full** staff labels use full instrument names.
- **Abbreviated** staff labels use short instrument names.
- **None** shows no staff labels.

Instrument numbers are automatically shown in both full and abbreviated staff labels.

NOTE

- You can change the full and short instrument names for each instrument in the **Edit Instrument Names** dialog in Setup mode.
- Changing instrument names does not change the name shown at the top of each part layout, as that uses the layout name. You can change the layout name in Setup mode.

RELATED LINKS
Player, layout, and instrument names on page 135
Instrument numbering on page 108
Hiding/Showing staff labels on page 795
Edit Instrument Names dialog on page 136
Changing instrument names on page 139

# Hiding/Showing staff labels

You can show full or abbreviated instrument names in staff labels, or hide all staff labels entirely, in each layout independently. The first system in each flow and all subsequent systems can have different staff label lengths.

By default, full staff labels are shown on the first system of each flow and abbreviated staff labels are shown on subsequent systems in full score layouts. In part layouts, staff labels are not shown on any systems.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to hide/show staff labels.

   By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Staves and Systems** in the page list.
4. In the **Staff Labels** section, select one of the following options from the **Staff labels on first system** menu:
   - **Full**
   - **Abbreviated**
   - **None**
5. Select one of the following options from the **Staff labels on subsequent systems** menu:
   - **Full**
   - **Abbreviated**
   - **None**
6. Click **Apply**, then **Close**.

RESULT

Staff labels are hidden/shown on the corresponding staves in the selected layouts.

- **None** hides staff labels.
- **Full** and **Abbreviated** show staff labels using the corresponding instrument name length.

TIP

- These settings apply to each flow in the layout, not the project as a whole. If, for example, you want to show full staff labels on the first system in the first flow in your project, but want to show abbreviated staff labels on the first systems of all subsequent flows, we recommend choosing the setting appropriate for the most flows in the layout, then changing the length of staff labels at other positions as required.
- You can change both full and short instrument names in the **Edit Instrument Names** dialog.

RELATED LINKS

Instrument names in staff labels on page 794
Changing instrument names on page 139
Edit Instrument Names dialog on page 136

## Changing the minimum indent for systems with staff labels

You can change the minimum indent for all systems that show staff labels to optimize horizontal space in each layout independently.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts whose minimum indent for systems with staff labels you want to change.

   By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Staves and Systems** in the page list.
4. In the **Staff Labels** section, change the value for **Minimum indent for systems with staff labels**.
5. Click **Apply**, then **Close**.

RESULT

The minimum indent on all systems that show staff labels is changed in the selected layouts.

RELATED LINKS

System indents on page 806
Changing the first system indent on page 807

# Instrument transpositions in staff labels

Instrument transpositions indicate the interval between the note an instrument plays and the sounding note produced. Transposing instruments, such as Horn in F and Clarinet in B♭, are commonly shown with their transposition, also known as their “instrument pitch”, as part of their instrument name or layout name.

Depending on the options set for **Show transposition** in the **Edit Instrument Names** dialog for each transposing instrument, they might show transpositions in staff labels even if you have hidden transpositions in staff labels in their layout.

Dorico Elements sets common transposing instruments, such as Clarinet in B♭ and Trumpet in B♭, to follow your per-layout settings for hiding/showing instrument transpositions in staff labels.

To reduce the risk of confusion, uncommon transposing instruments, such as Clarinet in A or Trumpet in E, are set to show their transposition in staff labels always, even if you have hidden instrument transpositions in the layout.

RELATED LINKS

Edit Instrument Names dialog on page 136
Transposing instruments on page 111
Changing instrument names on page 139

# Hiding/Showing instrument transpositions in staff labels

You can hide/show instrument transpositions in staff labels in each layout independently. For example, you can hide instrument transpositions in staff labels in full score layouts but show them in part layouts.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to hide/show instrument transpositions in staff labels.

   By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Staves and Systems** in the page list.
4. In the **Staff Labels** section, activate/deactivate the following options for **Instrument pitch or transposition**:
   - **Show in full staff labels**
   - **Show in abbreviated staff labels**
5. Optional: Repeat steps 2 to 4 for other layouts.
6. Click **Apply**, then **Close**.

RESULT

Instrument transpositions are shown in staff labels of the corresponding length in the selected layouts when the corresponding checkbox is activated, and hidden when the corresponding checkbox is deactivated.

NOTE

Depending on the options set for **Show transposition** in the **Edit Instrument Names** dialog for each transposing instrument, they might show transpositions in staff labels even if you have hidden transpositions in staff labels in their layout.

RELATED LINKS

Changing instrument names on page 139

# Changing the position of instrument transpositions in full staff labels

You can show instrument transpositions before/after instrument names in staff labels in each layout independently.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts whose instrument transposition position you want to change.

   By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Staves and Systems** in the page list.
4. In the **Staff Labels** section, choose one of the following options for **Position of instrument pitch in full staff labels**:

- **Start**
- **End**

5. Click **Apply**, then **Close**.

RESULT

The position of instrument transpositions relative to instrument names in staff labels is changed in the selected layouts.

# Hiding/Showing instrument change labels at the start of flows

You can hide/show instrument change labels at the start of each flow in each layout independently. These labels can be useful for players holding multiple instruments as a way of clarifying the instrument required in their part layouts, which do not normally show staff labels.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to hide/show instrument change labels at the start of flows.

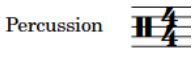
   By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Players** in the page list.
4. In the **Instrument Changes** section, activate/deactivate **Show instrument change label at start of flow**.
5. Click **Apply**, then **Close**.

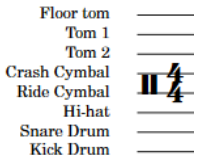
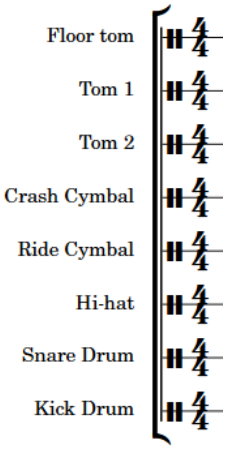
RESULT

Instrument change labels are shown in the first bar of each flow in the selected layouts when **Show instrument change label at start of flow** is activated, and hidden when it is deactivated.

# Staff labels for percussion kits

The staff labels shown for percussion kit staves depend on how kits are presented in your project. Kits can be presented as five-line staves, grids, and as single-line instruments.

| Percussion kit presentation type | Staff label | Example |
|---|---|---|
| 5-line staff | Single instrument name using the instrument name of the percussion kit. |   |

| Percussion kit presentation type | Staff label | Example |
|---|---|---|
| Grid | Multiple instrument names: one for each kit instrument, positioned at the staff position of the corresponding instrument.<br><br>Staff labels for grids use a smaller font and a different paragraph style than used for standard instrument staff labels. |  |
| Single-line instrumentsMultiple instrument names: one for each kit instrument, positioned beside the corresponding single-line staff.<br><br>Staff labels for single-line instruments use the same font and paragraph style as used for standard instrument staff labels. | |  |

You can change the player names, layout names, and instrument names of percussion kits in the same ways as for other players and instruments. However, to change the staff labels for percussion kits, you must change kit instrument names in different ways for percussion kits, depending on your percussion kit presentation type:

- 5-line staff: Open the **Edit Instrument Names** dialog from the **Players** panel in Setup mode, or use the **Name** field in the **Edit Percussion Kit** dialog, to change the name of the kit.
- Grid/Single-line instruments: Open the **Edit Instrument Names** dialog from inside the **Edit Percussion Kit** dialog in Setup mode to change the names of individual instruments.

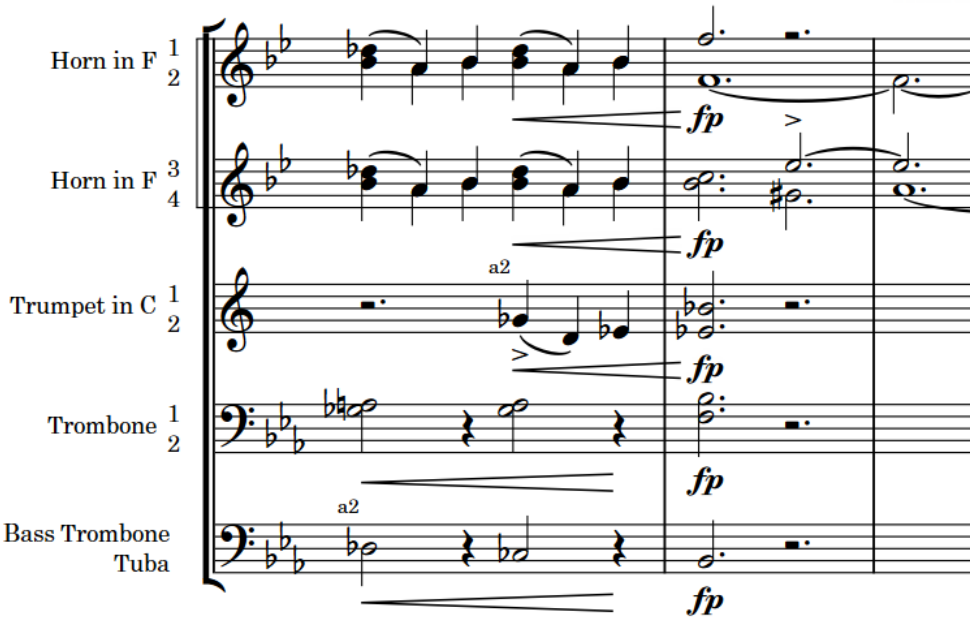
The same instrument name fields and options are available for kit instruments as for standard pitched instruments.

RELATED LINKS
Edit Instrument Names dialog on page 136
Player, layout, and instrument names on page 135
Edit Percussion Kit dialog on page 115
Unpitched percussion on page 868
Changing the presentation type of percussion kits on page 874

# Staff labels on condensed staves

Staff labels on condensed staves must reflect all the players included on the staff. Dorico Elements automatically consolidates similar instrument names in staff labels on condensed staves but always shows all the required player numbers.

On condensed staves containing different types of instruments, all required instrument names are shown.




Staff labels on condensed brass staves

Because condensing can change frequently, staff labels on condensed staves can vary from one system to another.

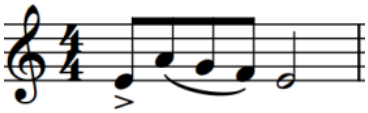
Dorico Elements also shows player labels above/below condensed staves to identify the players to which notes on condensed staves belong, as condensing can change within a single system.

RELATED LINKS
Condensing on page 350

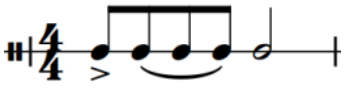
# Staves

A staff is a line or group of lines on which musical notes are notated to indicate the pitch and rhythm of music. Pitched instruments use the traditional five-line staff and unpitched instruments often use a single-line staff.

Notes are positioned on the lines and in the spaces on five-line staves, and can also use ledger lines above/below the staff to represent pitches that cannot fit on the staff.



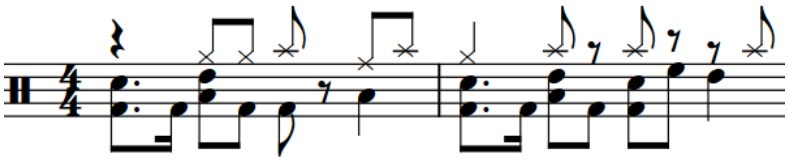
A phrase on a five-line staff



The same phrase on a single-line staff

The pitch and register of notes on five-line staves are determined by clefs, which can also be combined with octave lines to indicate what pitches performers play.

On five-line staves for unpitched percussion instruments, the different staff positions correspond to different percussion instruments.



Because it is often necessary to have different staff sizes in different layouts depending on their type, such as having smaller staves in full score layouts than in part layouts, in Dorico Elements you can change various aspects of staves in **Setup** > **Layout Options**.

RELATED LINKS
Clefs on page 547
Octave lines on page 552
Percussion kit presentation types on page 873
Hiding/Showing empty staves on page 335

## Per-layout options for staves

You can change settings that affect the staves in each layout independently.

You can change the size of staves in each layout in the **Space Size** section of the **Page Setup** page in **Setup** > **Layout Options**.

You can change other aspects of staves on the **Staves and Systems** page in **Layout Options**. For example, you can change which staff labels are shown on systems, indent the first system of each flow, and fix the number of bars included in each system. You can also select above which staves system objects appear, according to their instrument families.

NOTE

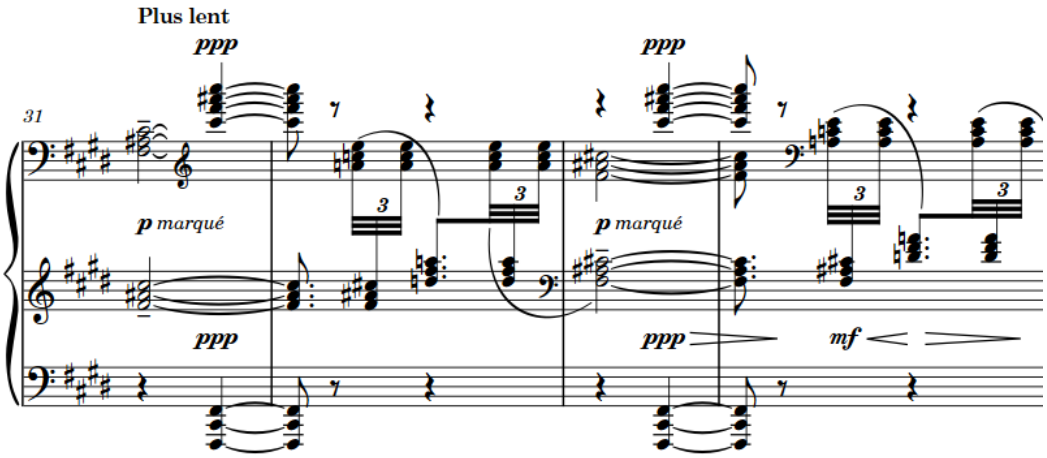
- If the size of system object font styles is set to **Staff-relative**, the staff size of the top staff in each instrument family group affects the size of system objects if they are shown above that bracketed group. Font styles that are set to **Absolute** are unaffected by staff size.
- System objects are only shown above bracketed groups in your project. If you have no brackets, system objects only appear at the top of systems.

You can show system dividers between systems when systems contain a minimum number of players. You can also change the appearance of system dividers.

RELATED LINKS
Page formatting on page 330
Staff size on page 341
Changing the default staff size on page 333
System objects on page 805
Changing the positions of system objects on page 805
Hiding/Showing empty staves on page 335
Brackets and braces on page 526

# Extra staves

It is sometimes necessary to add extra staves to instruments, for example, to make complex contrapuntal music easier to read because it is spread out across more staves than usual for that instrument.



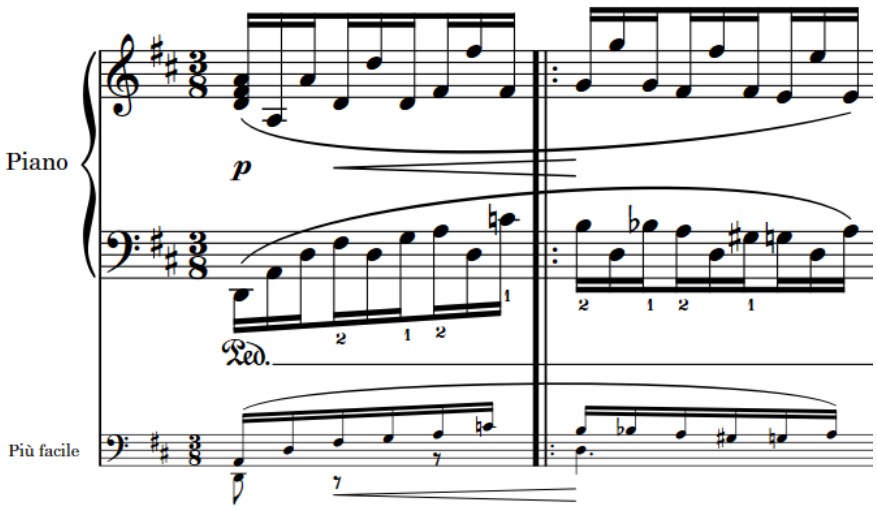

An extract of Debussy's piano prelude "Feuilles mortes" with three staves

In Dorico Elements, you cannot add extra staves. However, extra staves are shown if you import or open a project that contains them.

RELATED LINKS
Ossia staves on page 803

# Ossia staves

Ossia staves are smaller staves shown above/below the main staff of an instrument. They are used to show alternative phrases that can be played instead of the original phrase, such as suggestions for ornaments, alternative notations from other sources, or an easier version.




An ossia staff below the left-hand piano staff shows an easier alternative

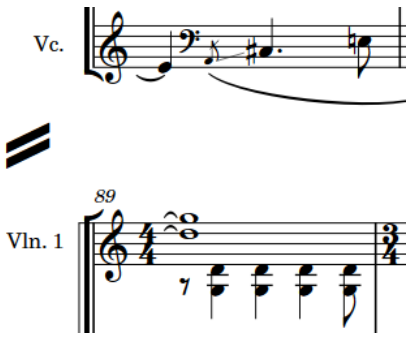
In Dorico Elements, you cannot add ossia staves. However, ossia staves are shown if you import or open a project that contains them.

RELATED LINKS
Extra staves on page 802

# System dividers

System dividers are used to clarify the separation of different systems when they appear on the same page. They are usually shown as two thick, parallel angled lines positioned to the left of initial barlines.

In Dorico Elements, the outer edges of system dividers are aligned with the corresponding edges of music frames.




A system divider between two systems in a string quartet score

You can show system dividers in different circumstances and change their appearance in each layout independently.

# Showing system dividers

You can change the circumstances in which system dividers are shown, including specifying the minimum number of players required to show them, in each layout independently. For example, if you only want to show system dividers between systems that contain different numbers of staves.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to show system dividers.

   By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Staves and Systems** in the page list.
4. In the **System Dividers** section, choose one of the following options for **Show system dividers**:
   - **When number of staves differs**
   - **When minimum number of players present**
5. Optional: If you selected **When minimum number of players present**, change the value for **Minimum number of players**.
6. Click **Apply**, then **Close**.

RESULT

System dividers are shown between systems in all flows in the selected layouts that either contain the minimum number of players you set or contain different numbers of staves.

RELATED LINKS

Hiding/Showing empty staves on page 335

# Changing the length of system dividers

You can change the length of system dividers in each layout independently, for example, if you want to show longer system dividers in layouts that show full staff labels.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to show system dividers.

   By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Staves and Systems** in the page list.
4. In the **System Dividers** section, choose one of the following options for **Appearance**:
   - **Default**
   - **Long**
   - **Extra long**
5. Click **Apply**, then **Close**.

# System objects

System objects are items that apply to all staves in the system and appear in all layouts, but are not necessary to show on every staff in full score layouts. For example, tempo marks and rehearsal marks are important for all players to see in their parts, but would cause an orchestral full score to appear very cluttered if they were shown on every staff.

In Dorico Elements, the following items are considered system objects:

- Rehearsal marks
- Repeat endings
- Repeat markers
- System text
- Tempo marks
- Time signatures shown above the staff
- Horizontal lines that apply to all staves

System objects automatically appear at least once in all layouts. You can show system objects at multiple positions in each system by showing them above multiple instrument families. For example, you might show them above the woodwind, brass, percussion, and string families. In an orchestral full score, this would ensure system objects are spread out evenly across the page, meaning no staff is very far from these important markings.

NOTE

- System objects are only shown above instrument families that are bracketed or braced together. You can change bracket grouping in each layout independently.
- If the size of system object font styles is set to **Staff-relative**, the staff size of the top staff in each instrument family group affects the size of system objects if they are shown above that bracketed group. Font styles that are set to **Absolute** are unaffected by staff size.

RELATED LINKS

Changing bracket grouping according to ensemble type on page 527
Brackets and braces on page 526
Rehearsal marks on page 733
Tempo marks on page 819
Repeat endings on page 747
Large time signatures on page 846
Inputting text on page 298

## Changing the positions of system objects

You can show system objects above different instrument families in each layout independently. Multiple items are categorized as system objects, including system text, rehearsal marks, tempo marks, repeat markers, and repeat endings.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to change the instrument families above which system objects appear.

   By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Staves and Systems** in the page list.

4. In the **System Objects** section, activate the checkboxes for the instrument families above which you want system objects to appear.
5. Optional: Activate **Additionally show repeat endings below bottom staff**.
6. Click **Apply**, then **Close**.

RESULT

System objects appear above the top staff in each bracketed group you select if a bracketed group for that instrument family is included in the selected layouts. If you activate **Additionally show repeat endings below bottom staff**, repeat endings additionally appear below the bottom staff.

NOTE

System objects are only shown above instrument families that are bracketed or braced together. You can change bracket grouping in each layout independently.

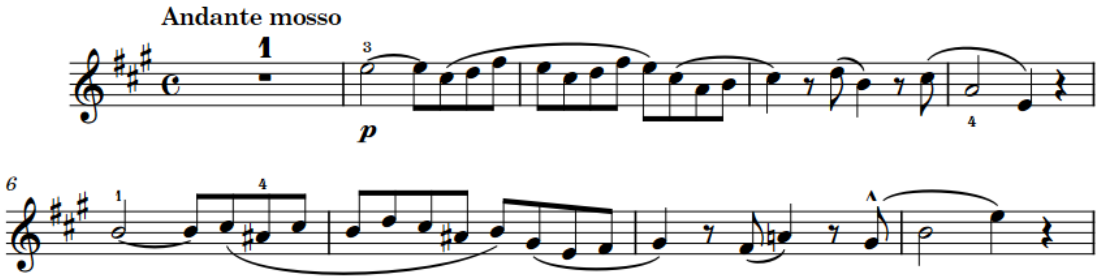
RELATED LINKS

System objects on page 805

# System indents

System indents control the distance between the left page margin and the start of systems of music. According to tradition, the first system in part layouts is indented, but in modern use this is not always necessary.

According to convention, coda sections at the start of new systems are also indented. Dorico Elements uses the same gap size before the start of codas whether they occur partway through systems or at the start of a new system.




A violin part with the first system indented

In Dorico Elements, system indents automatically adjust to accommodate staff labels. For example, if a system contains a staff label that is significantly longer than the minimum system indent, Dorico Elements increases the indent on that system to ensure the staff label remains legible and is not cut off on the left edge or collides with the music.

You can change both the minimum indent on systems with staff labels and the first system indent in each layout independently. You can also adjust the system indent at both the start and end of individual systems, independently of your per-layout settings.

RELATED LINKS

Changing the minimum indent for systems with staff labels on page 796
Changing the horizontal justification of final systems on page 340

# Changing the first system indent

By default in Dorico Elements, the first system of each flow is indented in part layouts. You can change the indent for the first system of each in each layout independently.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts whose first system indent you want to change.

   By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Staves and Systems** in the page list.
4. In the **Staff Labels** section, change the value for **Indent first system of flow by**.
5. Click **Apply**, then **Close**.

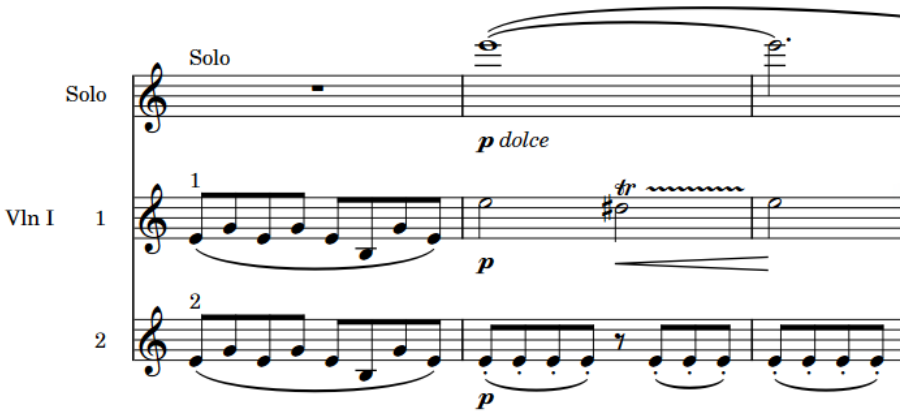
RESULT

The indent of the first system of all flows is changed in the selected layouts.

# Divisi

Divisi is when players split, or “divide”, in order to play multiple lines of music, commonly for a limited passage, before returning to play together, or “tutti”. Divisi passages can be notated with all lines on a single staff or across multiple staves.

Divisi is a technique most commonly used in orchestral string writing, as the string section typically contains a large number of players compared to the number of staves. For example, large orchestras commonly have twelve first violins all playing the same part most of the time. Dividing those players into multiple parts allows composers to write more complex contrapuntal music.




An example divisi change in a Violin I part, splitting it into two sections and a solo line

If the division is relatively simple, it is possible to write all parts on the same staff and label the section, with an indication of how many players are required for each line if necessary. If the parts have different rhythms at times, you can input them into separate voices on the same staff.

However, when a section is divided into multiple parts that are too different to be clearly written on a single staff, it is necessary to divide them onto multiple staves. In Dorico Elements, divisi changes allow you not only to divide sections into any number of parts with any number of staves, but also to include solo lines and group staves as required.

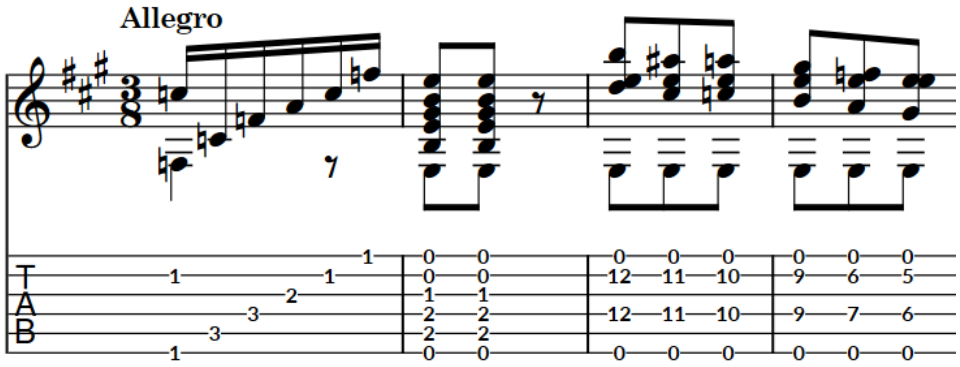
In Dorico Elements, you cannot input divisi changes. However, divisi changes are shown if you import or open a project that contains them.

RELATED LINKS

Extra staves on page 802
Inputting notes into multiple voices on page 171

# Tablature

Tablature is an alternative notation to the five-line staff, and is used for fretted instruments. On tablature, pitches are indicated by fret numbers positioned on lines, each of which represents a string on the instrument. As tablature is commonly used for guitars, it usually shows six lines.

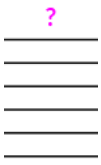



An extract of guitar music shown on both a notation staff and tablature

In Dorico Elements, you can show music for fretted instruments, such as the guitar or bass, on a regular notation staff and tablature together or only show one or the other. Notes and notations are linked between both presentations, meaning any changes you make to one, including inputting notes, automatically updates the other.

On tablature, ties are automatically notated as round brackets around the second note/chord and all subsequent notes/chords in tie chains.

Any notes beyond the range of the instrument or impossible to calculate, such as below the nut on the lowest string or a natural harmonic without a suitable node, are shown on tablature as pink question marks. If two notes are allocated to the same string at the same rhythmic position, both notes appear beside each other and are colored green.




Note on tablature that cannot be calculated

The appropriate tablature is automatically shown for instruments according to their strings and tuning settings. There are default tunings stored for each instrument type in Dorico Elements, which you can customize in the **Edit Strings and Tuning** dialog.

RELATED LINKS

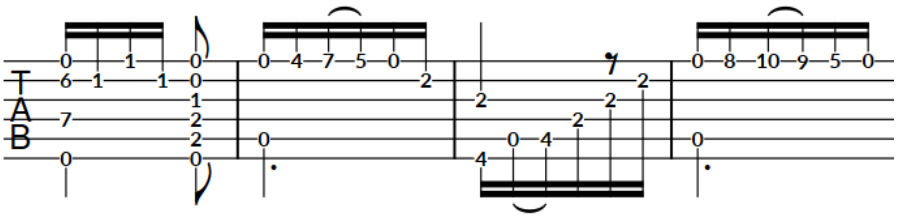
Fretted instrument tuning on page 111
Edit Strings and Tuning dialog on page 123
Inputting notes on tablature on page 179
Harmonics on page 645
Guitar bends on page 676
Ties on page 831
Trills on page 656

# Rhythms on tablature

When notation staves and tablature are both shown, it is customary only to notate rhythms on the notation staff. However, when only tablature is shown, it is necessary to show rhythms on tablature.

The following items are shown to indicate rhythms when tablature is shown without notation staves:

- Time signatures
- Stems, stem flags, and beaming
- Rhythm dots




Rhythms shown on tablature

NOTE

Stems, stem flags, and beaming always appear stem-up on tablature in single-voice contexts, which means they can collide with guitar bends.

RELATED LINKS

Inputting notes on tablature on page 179

# Hiding/Showing notation staves and tablature

You can hide/show notation staves and tablature in different combinations in each layout independently and for each fretted instrument independently of each other. For example, you can show only notation staves in the full score layout but the notation staff and tablature in a guitar part layout.

PROCEDURE

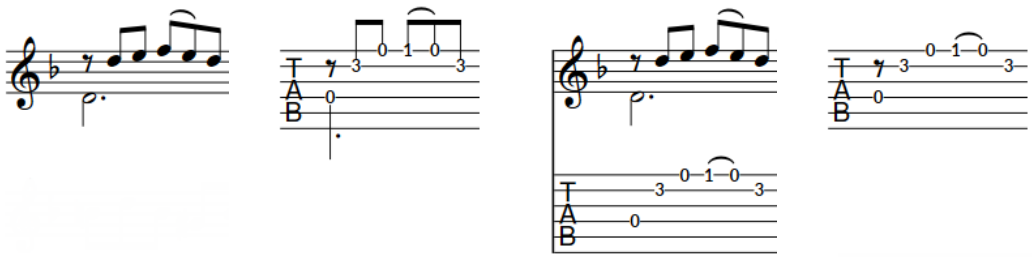
1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to hide/show tablature.

   By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Players** in the page list.
4. In the **Fretted Instruments** section, choose one of the following options for each fretted instrument in your project:
   - **Notation**
   - **Tab**
   - **Notation and Tab**
   - **Tab (no rhythms)**
5. Click **Apply**, then **Close**.

RESULT

- **Notation** shows only notation staves and hides tablature.
- **Tab** shows only tablature with rhythms and hides notation staves.
- **Notation and Tab** shows notation staves and tablature with rhythms.
- **Tab (no rhythms)** shows only tablature with no rhythms.

EXAMPLE



**Notation** **Tab** **Notation and Tab** **Tab (no rhythms)**

# Changing the allocated string for notes on tablature

You can change the string to which individual notes are allocated on tablature manually, for example, if you input the notes on the notation staff and want to change their default string allocation.

NOTE

You cannot allocate notes to a string on which they are impossible, such as if the note is lower than the open pitch of the string.

PROCEDURE

1. On tablature, select the fret numbers of notes whose allocated string you want to change.

   NOTE

   You must select fret numbers on tablature, you cannot select the notes on notation staves.

2. Change their allocated string in any of the following ways:
   - To move them up a string, press **N**.
   - To move them down a string, press **M**.
   - In the Properties panel, select a string from the **String** menu in the **Notes and Rests** group.

RESULT

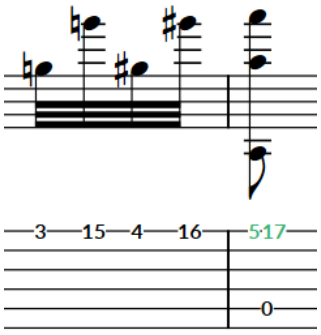
The string to which the selected notes are allocated is changed. Using the key commands changes the string of the selected notes proportionally, whereas selecting a string from the **String** menu allocates all selected notes to the selected string.

NOTE

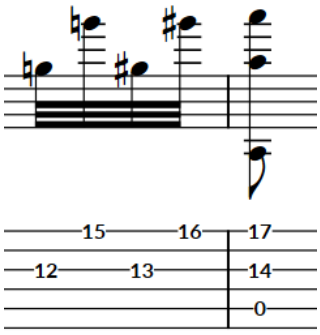
- If they are now allocated to the same string as another note at that rhythmic position, both notes appear beside each other and are colored green.

- Deactivating the property resets the selected notes to their default string.

EXAMPLE




Default string allocation




After changing the strings for some notes to reduce the distance between frets

RELATED LINKS

Inputting notes on tablature on page 179

# Showing notes as dead notes

You can show individual notes belonging to fretted instruments as dead notes. Dead notes are notated with cross noteheads on notation staves and with an X on tablature.

PROCEDURE

1. Select the notes belonging to fretted instruments that you want to show as dead notes.
2. In the Properties panel, activate **Dead note** in the **Notes and Rests** group.

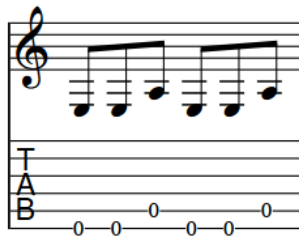
RESULT

The selected notes are shown as dead notes.

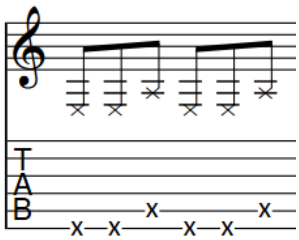
NOTE

This does not currently affect their sound in playback; this is planned for future versions.

EXAMPLE




Normal notes



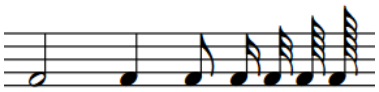

Dead notes

RELATED LINKS
Inputting notes on tablature on page 179
Bracketed noteheads on page 640

# Stems

Stems are vertical lines that extend from noteheads that are a half note or shorter in duration. In combination with notehead design, they allow the duration of each note to be clearly identified.

For example, quarter notes (crotchets) and eighth notes (quavers) both have solid black noteheads and stems, but eighth notes also have flags on their stems. 16th notes have two flags, 32nd notes have three flags, and so on. The length of stems is determined by default in Dorico Elements, so stems automatically adjust their length to accommodate more/fewer flags.



Notes with stems, ranging from a half note (minim) on the left to a 128th note on the right

The stems of notes and chords can point upwards/downwards, depending on the conventions of music engraving and the context of the music. For example, in choral music on two staves, stems in the soprano and tenor lines point up, and stems in the alto and bass lines point down.

RELATED LINKS
Stem length on page 818
Altered unisons on page 482

## Stem direction

In Dorico Elements, the stem direction of notes and chords follows rules that are based on the conventions of music engraving.

Stem direction is determined automatically, but you can manually change the stem direction of individual notes, chords, or of an entire voice. The rules that are applied depend on the following:

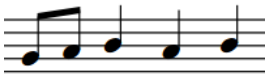
- How many voices are active on the staff.
- Whether notes, chords, or beamed groups of notes are affected.
- Whether notes in the same chord or notes in the same beamed group are split between staves.

### Single notes in single voices

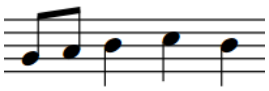
On a five-line staff with only a single voice active, the default stem direction of a single note is determined by its staff position.

- If the note is above the middle line, its stem points downwards.
- If the note is below the middle line, its stem points upwards.
- If the note is on the middle line of the staff, its stem direction is determined by the stem directions of any adjacent notes, beam groups, or chords. If they both have the same stem direction, the note matches them. If the adjacent notes, beam groups, or chords have different stem directions, or if there are no adjacent notes, beam groups, or chords, the note follows the default stem direction.

  The default stem direction depends on the instrument type. By default, the stems of notes on the middle lines of staves point downwards on instrumental staves and upwards on vocal staves, to avoid lyrics.



Notes on the middle line are stem up because the fourth note is stem up



Notes on the middle line are stem down because the fourth note is stem down

By default, notes are first input into an up-stem voice, and Dorico Elements treats notes as the only voice on the staff until you input more voices.

## Single notes in multiple voices

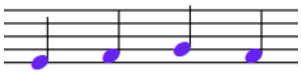
When there are multiple voices on a staff and all voices contain notes, the stem direction of notes is determined by the stem direction of their voice. Notes in up-stem voices have up stems, and notes in down-stem voices have down stems. This applies even when the stems of notes would normally point in the other direction, based on their position on the staff.

NOTE

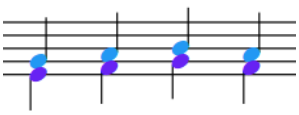
The order in which notes appear between different up-stem voices and different down-stem voices depends on their pitch. You can also change the voice column index of notes individually.

When there are only notes in one voice for at least a whole bar, Dorico Elements automatically changes the directions of stems so they point in the default direction for their pitch. For example, if a staff contains a single up-stem voice and a single down-stem voice but only the down-stem voice contains notes or rests, then the stems of notes in the down-stem voice may point upwards, depending on the position of the notes on the staff. However, showing rests or implicit rests in empty voices forces the stem direction of notes to follow the stem direction of their voice.

Notes in an up-stem voice shown in blue.



Notes in a down-stem voice shown in purple. The stems point upwards despite being in a down-stem voice because there are no other voices.



When notes in up-stem and down-stem voices are in the same bar, the stem direction is automatically changed.

## Chords in single voices

The stem direction for a chord in a single voice is determined by the balance of notes above/below the middle line of the staff.

- If the note furthest from the middle line is above the middle line, the stem of the chord points downwards.
- If the note furthest from the middle line is below the middle line, the stem of the chord points upwards.
- If the chord is equally balanced on either side of the middle line of the staff, the stem direction is determined by the stem directions of any adjacent notes, beam groups, or chords. If they both have the same stem direction, the chord matches them. If the adjacent notes, beam groups, or chords have different stem directions, equally balanced chords follow the default stem direction.

  The default stem direction depends on the instrument type. By default, the stems of notes on the middle lines of staves point downwards on instrumental staves and upwards on vocal staves, to avoid lyrics.

### Beam groups in single voices

The stem direction within beam groups is determined by the balance of notes within the beam group that are above/below the middle line of the staff.

- If the majority of notes in the beam group are above the middle line, stems in the beam group point downwards.
- If the majority of notes in the beam group are below the middle line, stems in the beam group point upwards.
- If the beam group contains an equal number of notes either side of the middle line of the staff, the stem direction is determined by the stem directions of any adjacent notes, beam groups, or chords. If they both have the same stem direction, the beam group matches them. If the adjacent notes, beam groups, or chords have different stem directions, equally balanced beam groups follow the default stem direction.

  The default stem direction depends on the instrument type. By default, the stems of notes on the middle lines of staves point downwards on instrumental staves and upwards on vocal staves, to avoid lyrics.

RELATED LINKS
Voice column index on page 889
Implicit rests in multiple-voice contexts on page 774
Note positions in multiple-voice contexts on page 886
Changing the default stem direction of voices on page 817
Removing stem direction changes on page 817
Altered unisons on page 482

## Changing the stem direction of notes

You can manually change the stem direction of any note.

PROCEDURE

1. Select the notes whose stem direction you want to change.
2. Change the stem direction in one of the following ways:
   - Choose **Edit** > **Stem** > **Force Stem Up**.
   - Choose **Edit** > **Stem** > **Force Stem Down**.

   TIP

   You can also choose these options from the context menu.

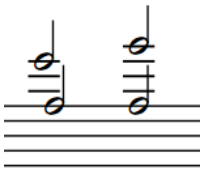
RESULT

The stem direction of the selected notes is changed. The selected notes follow this stem direction, even if you later change their pitch to one that usually requires a different stem direction.

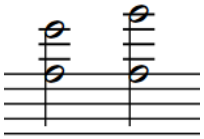
NOTE

This does not change the voice to which notes belong.

EXAMPLE



Stems pointing in the same direction but in different voices



Stems in the same direction and in the same voice

RELATED LINKS
Changing the voice of existing notes on page 319

## Changing the default stem direction of voices

You can change the default stem direction of voices after they have been input, including slash voices.

NOTE

This changes the implicit stem direction of the voice, but may not change the stem direction of all notes in single-voice contexts. Stem directions are automatically changed in Dorico Elements when only one voice contains notes.

PROCEDURE

1. Select a note or chord in the voice whose stem direction you want to change.
2. Change the default stem direction of the selected voice in one of the following ways:
   - Choose **Edit** > **Voices** > **Default Stems Down**.
   - Choose **Edit** > **Voices** > **Default Stems Up**.

   TIP

   You can also choose these options from the context menu.

RELATED LINKS
Stem direction on page 814

## Removing stem direction changes

You can remove changes to the directions of stems and revert stems to their default directions.

PROCEDURE

1. Select the notes whose stem direction changes you want to remove.
2. Choose **Edit** > **Stem** > **Remove Forced Stem**. You can also choose this option from the context menu.

RESULT

All stem direction changes are removed from the selected notes. The stems of the selected notes revert to their default directions.

NOTE

Alternatively, you can change the stem direction to the opposite direction. However, notes with forced stems do not change automatically if, for example, you later change their pitch.

RELATED LINKS
Changing the stem direction of notes on page 816

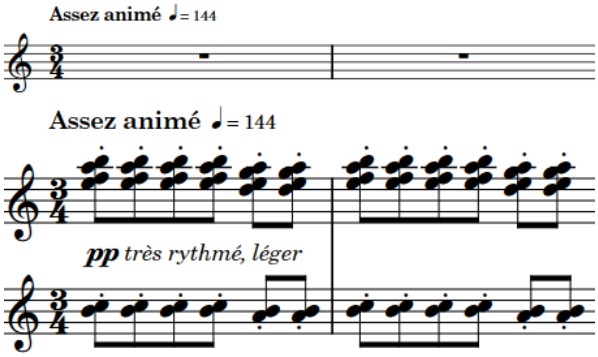
# Stem length

The length of stems is determined by default in Dorico Elements, according to accepted standards for the appearance of stems of notes at different positions on staves.

# Tempo marks

Tempo marks indicate how fast music is played, often with a combination of text instructions and metronome marks. They are also known as “tempo changes”, “tempo indications”, and “tempo markings”.

A tempo mark can show text instructions, a metronome mark, or a combination of the two.




Tempo mark containing text instruction in French and metronome mark

Text instructions are traditionally expressed in Italian, such as *largo* or *allegretto*, but other languages, such as English, French, and German, have become widely accepted. The text instruction can express simply how fast the music is played, but can also suggest its character. For example, *grave* means slow but also solemn and sad, and *vivo* means fast but also lively and sprightly.

Metronome marks show the speed of the music, indicated in beats per minute, or “bpm”. Metronome marks can show a fixed bpm or indicate a range of possible or acceptable values.

Gradual tempo changes indicate a change in tempo over a defined period of time. They can appear differently, for example, with/without a continuation line or with the text split into syllables and spread across their duration.

Tempo marks use a bold font with a large point size, so they are clearly noticeable on the page. They do not usually use an italic font.

In Dorico Elements, tempo marks are categorized as system objects. Therefore, tempo marks follow your per-layout settings for the visibility and positioning of system objects, which you can change on the **Staves and Systems** page in **Setup** > **Layout Options**.

By default, the tempo marks you input set the tempo for playback and MIDI recording, but you can change the tempo mode if, for example, you want to use a single fixed tempo when recording MIDI. Gradual tempo changes also affect the playback tempo, and you can change the final tempo at the end of gradual tempo changes, for example, if you want to reach a specific bpm at the end. If you do not input any tempo marks into your project, the default playback tempo is 120 bpm.

RELATED LINKS

Metronome marks on page 825
Gradual tempo changes on page 828
Tempo mark components on page 823
Time track on page 400
Input methods for tempo marks on page 216

Positions of tempo marks on page 820
System objects on page 805
Changing the positions of system objects on page 805
Changing the tempo mode on page 416

# Types of tempo marks

Dorico Elements groups tempo marks into different types according to their function and effect on the music.

The following tempo changes are available in the Tempo panel in Write mode, but you can also input all types of tempo changes using the tempo popover.

**Absolute Tempo Change**

Indicates a defined change in tempo, and is often shown with a metronome mark.

**Gradual Tempo Change**

Indicates a change in tempo over a defined period of time, such as *rallentando* (slowing down) or *accelerando* (speeding up).

**Relative Tempo Change**

Indicates a change in tempo that is relative to the previous tempo, such as *mosso* (movement).

Relative tempo changes often include modifiers that qualify the change, such as *poco meno mosso* (a little less movement), and are not defined by a metronome mark. You can, however, set a relative metronome mark change as a percentage of the previous metronome mark.

**Reset Tempo**

Returns the tempo to the previous tempo, such as *A tempo*, or a previously defined tempo, such as *Tempo primo* (return to the first tempo of the piece).

**Tempo Equation**

Indicates a change in the beat unit on which metronome marks are based. For example, if the time signature changes from 3/4 to 6/8, a tempo equation of ♩=♩. indicates the same metronome mark value that applied to the quarter note beat unit in 3/4 now applies to the dotted quarter note beat unit in 6/8.

RELATED LINKS

Metronome marks on page 825
Gradual tempo changes on page 828
Input methods for tempo marks on page 216
Tempo panel on page 218
Tempo popover on page 216

# Positions of tempo marks

Tempo marks are placed above the staff and at the same positions as other system objects, because they usually apply to all staves. They are placed above notations such as slurs, ties, and octave lines, and are often aligned with rehearsal marks to ensure clear readability.

Tempo marks should be aligned with either a time signature or the notehead/rest at the rhythmic position to which they apply. For example, if there is a notehead with an accidental at the rhythmic position of a tempo mark, it is convention to align the tempo mark with the accidental.

If a repeat mark occurs mid-system and is not treated as a barline, tempo marks are aligned with the repeat mark.

When a tempo mark includes both text and a metronome mark, the text appears first, followed by the metronome mark. When horizontal space is tight, the metronome mark can be positioned below the tempo mark text.

You can move tempo marks to different rhythmic positions in Write mode. They are automatically positioned to avoid collisions.

Tempo marks are categorized as system objects in Dorico Elements, which you can show above the first bracket of selected instrument families. You can change the instrument families above which system objects appear in each layout independently, for example, if you want tempo marks to appear at multiple vertical positions in each system in the full score only.

RELATED LINKS
System objects on page 805
Changing the positions of system objects on page 805

## Moving tempo marks rhythmically

You can move tempo marks to new rhythmic positions after they have been input.

PROCEDURE

1. In Write mode, select the tempo marks you want to move.

   NOTE

   When using the mouse, you can only move one tempo mark at a time.

2. Move the tempo marks according to the current rhythmic grid resolution in any of the following ways:
   - Press **Alt/Opt-Right Arrow** to move them to the right.
   - Press **Alt/Opt-Left Arrow** to move them to the left.
   - Click and drag the tempo mark to the right/left.

RESULT

The selected tempo marks are moved to new rhythmic positions.

NOTE

Only one tempo mark can exist at each rhythmic position. If a tempo mark in your selection passes over another tempo mark as part of its move, the existing tempo mark is deleted.

You can undo this action, but any tempo marks deleted in the process are only restored if you moved the tempo mark using the keyboard.

RELATED LINKS
Lengthening/Shortening gradual tempo changes on page 828

# Changing tempo text

You can change the text of existing tempo marks individually.

PROCEDURE

1. Select the tempo marks whose tempo text you want to change.
2. In the Properties panel, enter the tempo text you want into the **Text** field in the **Tempo** group.
3. Press **Return**.

RESULT

The tempo text for the selected tempo marks is changed.

TIP

You can also change the tempo text by opening the tempo popover and changing the entry.

RELATED LINKS

Tempo popover on page 216
Changing existing items on page 309
Tempo mark components on page 823

# Showing abbreviated tempo text

You can show individual tempo marks with custom abbreviated text in some layouts, for example, if a long tempo mark extends beyond the page boundary in some part layouts but the abbreviated version fits within the boundary.

PROCEDURE

1. In the music area, open the layout in which you want to show abbreviated tempo text.
2. Select the tempo marks you want to show with abbreviated text.
3. In the Properties panel, activate **Abbreviation** in the **Tempo** group.
4. Enter the text you want into the value field.
5. Activate **Abbreviate** in the **Tempo** group.
6. Activate the corresponding checkbox.

RESULT

The selected tempo marks appear with abbreviated text. This does not affect the appearance of the same tempo mark in layouts that show full tempo text as properties in Dorico Elements are layout-specific.

Abbreviated tempo text is shown when **Abbreviation** is activated and **Abbreviate** is deactivated, or when **Abbreviation** and both **Abbreviate** and its corresponding checkbox are all activated. This allows you to switch between showing abbreviated/full text in different layouts without deleting your abbreviated text from the **Abbreviation** value field.

# Hiding/Showing tempo marks

You can hide/show the different components in individual tempo marks without changing the speed of playback. This affects their appearance in all layouts.

PROCEDURE

1. Select the tempo marks you want to hide, or the signposts of tempo marks you want to show.
2. In the Properties panel, activate/deactivate the following properties in the **Tempo** group:
   - **Text shown**
   - **Metronome mark shown**

RESULT

When at least one of the properties is activated, the selected tempo marks are shown. They display components according to the properties that are activated.

When neither property is activated, the selected tempo marks are hidden. Signposts are shown at the position of each hidden tempo mark as they still affect the speed of playback.

RELATED LINKS

Changing the type and appearance of absolute tempo changes on page 824
Signposts on page 314

# Deleting tempo marks

You can delete tempo marks, which resets the tempo for playback to the previous tempo mark or the default tempo if there is no previous tempo mark.

PROCEDURE

1. In Write mode, select the tempo marks or the signposts of tempo marks you want to delete.
2. Press **Backspace or Delete**.

RESULT

The selected tempo marks are deleted and no longer appear in the music area or in the **Time** track in Play mode. The tempo in playback follows the previous tempo mark, or the default tempo of 120 bpm if there is no previous tempo mark.

If you delete a tempo mark that truncated the line of a gradual tempo change, the line of the gradual tempo change automatically extends to its full length or until the next existing tempo mark.

# Tempo mark components

Tempo mark components include text, metronome marks, parentheses, and approximate indications. Tempo marks can include different components in different combinations, depending on your preference or the requirements for different projects.

You can activate properties that correspond to the different components in the **Tempo** group of the Properties panel. You can activate one or more of the following tempo mark properties in any combination for individual absolute tempo changes:

**Text shown**

Shows text when activated, and no text when deactivated.

**Metronome mark shown**

Shows metronome marks when activated, and no metronome marks when deactivated.

**Parenthesized**

Shows metronome marks in parentheses when activated, and without parentheses when deactivated. This also applies to approximate metronome marks.

**Is approximate**

Shows metronome marks as approximate when activated, and absolute when deactivated.

**Approximate appearance**

Allows you to choose how approximate metronome marks appear, for example, **c.** or **circa**.

NOTE

This property applies specifically to approximate tempo marks, and is only available when **Is approximate** is activated.

**Show equals sign**

An equals sign is shown when the property and its corresponding checkbox are both activated. No equals sign is shown when the checkbox is deactivated.

NOTE

This property applies specifically to approximate tempo marks, and is only available when **Is approximate** is activated.

### Components for gradual tempo changes

The following components only apply to gradual tempo changes, such as *rallentando*:

**Poco a poco**

*Poco a poco* text is shown immediately after gradual tempo change text when the checkbox beside the property is activated.

## Changing the type and appearance of absolute tempo changes

You can change which components are included in individual absolute tempo changes, and how they appear.

PROCEDURE

1. Select the absolute tempo marks whose components you want to change.
2. In the Properties panel, activate any of the following properties in the **Tempo** group:
   - **Text shown**
   - **Metronome mark shown**
   - **Parenthesized**
   - **Is approximate**
   - **Approximate appearance** (only available if **Is approximate** is activated)
   - **Show equals sign** (only available if **Is approximate** is activated)

RESULT

The selected tempo marks are changed to include the corresponding components.

NOTE

If you have activated none of these properties, no tempo mark is shown in the music. Instead, a signpost indicates the position of the tempo mark.

## Adding poco a poco text to gradual tempo changes

You can add *poco a poco* text immediately after individual gradual tempo changes.

NOTE

You can also enter **poco a poco** directly into the tempo popover. However, this means the entry is treated as a tempo mark rather than a gradual tempo change, which changes the properties you can use on it.

PROCEDURE

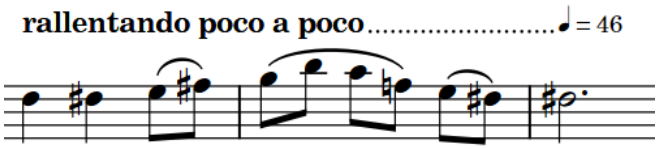
1. Select the gradual tempo changes to which you want to add *poco a poco* text.
2. In the Properties panel, activate **Poco a poco** in the **Tempo** group.

RESULT

*Poco a poco* text is shown immediately after the text in the selected gradual tempo changes.

Deactivating **Poco a poco (little by little)** removes *poco a poco* text from the selected gradual tempo changes.

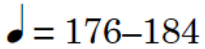
EXAMPLE




Rallentando with poco a poco text

# Metronome marks

Tempo marks often include a metronome mark value. Metronome marks show the speed of the music, indicated in beats per minute, or “bpm”. For example, a bpm of 60 means one beat per second. The more beats per minute, the faster the music.




A metronome mark shown as a range

Metronome marks can be precise, such as ♩ = 176, or can indicate an acceptable range, such as ♩ = 152-176. They can also be shown in parentheses, which is useful if the metronome mark is intended as a guide rather than a fixed value.

By default, metronome marks appear as integers and do not show decimal places. If you input a metronome mark with a decimal place, it is rounded to the nearest integer. Metronome marks that you input in the **Time** track in Play mode appear as signposts by default.

The beat unit used in metronome marks commonly relates to the meter, for example, the metronome mark beat unit is often a quarter note in 4/4 but a dotted quarter note in 6/8.

In Dorico Elements, metronome marks can appear as an individual value or as a range. Depending on the type and appearance of metronome marks, the bpm value can indicate a fixed tempo or an approximate tempo.

RELATED LINKS
Input methods for tempo marks on page 216
Time track on page 400
Changing the type and appearance of absolute tempo changes on page 824

## Changing the metronome mark value

You can change the metronome mark value of individual absolute tempo marks after they have been input, including changing the beat unit.

NOTE

These steps do not apply to gradual tempo changes or reset/relative tempo marks.

PROCEDURE

1. Select the absolute tempo marks whose metronome mark values you want to change.
2. In the Properties panel, change the value for **Tempo (bpm)** in the **Tempo** group.
3. Press **Return**.
4. Choose the appropriate note duration and rhythm dot, if applicable, for **Beat unit**.

RESULT

The metronome mark value and beat unit is changed for the selected absolute tempo marks. This affects the tempo of playback, even if no metronome mark component is shown for those tempo marks.

NOTE

- By default, any decimals you enter are hidden and the displayed metronome mark value appears as the nearest integer. However, metronome marks always reflect their exact values in playback.
- You can also change the metronome mark value by opening the tempo popover and changing the entry.

RELATED LINKS
Tempo popover on page 216
Changing existing items on page 309

## Showing the metronome mark value as a range

You can show the metronome mark value of individual absolute tempo marks as a range. For example, you can use this to indicate that any speed within the given range is musically appropriate for the piece.

NOTE

These steps do not apply to gradual tempo changes or reset/relative tempo marks.

PROCEDURE

1. Select the absolute tempo marks whose metronome mark values you want to show as a range.
2. In the Properties panel, activate **Tempo range (bpm)** in the **Tempo** group.
3. Change the value in the value field.

RESULT

The tempo range, expressed as beats per minute, is changed for the selected tempo marks. By default, metronome mark ranges use a dash separator.

NOTE

Depending on the values set for each property, both **Tempo (bpm)** and **Tempo range (bpm)** can be the minimum/maximum tempo in the range, as Dorico Elements automatically arranges metronome mark ranges with the lower value first. However, the metronome mark used for playback is always **Tempo (bpm)**, regardless of whether that is the higher/lower value in the range.

## Changing the relative tempo mark value

You can change the tempo of individual relative tempo marks, expressed as a percentage of the previous tempo mark.

PROCEDURE

1. Select the relative tempo marks whose value you want to change.
2. In the Properties panel, change the value for **Relative %** in the **Tempo** group.
3. Press **Return**.

RESULT

The tempo at the relative tempo mark is changed. For example, if the previous tempo was 100 bpm, and you change a relative tempo mark to 90, the new tempo is 90% of 100 bpm, which is 90 bpm.

## Changing the final tempo at the end of gradual tempo changes

You can change how significantly gradual tempo changes affect the tempo in playback, expressed as a percentage of the tempo at the start of the gradual tempo change.

PROCEDURE

1. Select the gradual tempo changes whose final tempo you want to change.
2. In the Properties panel, change the value for **Final tempo %** in the **Tempo** group.
3. Press **Return**.

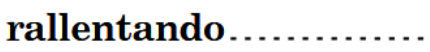
RESULT

The final tempo at the end of the selected gradual tempo changes is changed.

For example, if you change the value to 20 on a gradual tempo change that started at 100 bpm, the final tempo is 20% of 100 bpm, which is 20 bpm. If you change the value to 120 on a gradual tempo change that started at 100 bpm, the final tempo is 120% of 100 bpm, which is 120 bpm.

# Gradual tempo changes

Gradual tempo changes indicate a change in tempo over a defined period of time, such as *rallentando*, which indicates slowing down, and *accelerando*, which indicates speeding up.




Rallentando with dashed line

Gradual tempo changes are considered a type of tempo mark in Dorico Elements, meaning you can input them in the same ways as for tempo marks.

Because gradual tempo changes have a different metronome mark value at the start/end, you can change the final tempo at the end of individual gradual tempo changes.

In Dorico Elements, you can show gradual tempo changes with different styles, such as with a continuation line or with syllables spread across their duration. You can also show gradual tempo changes with different line styles, such as dotted or dashed.

RELATED LINKS
Input methods for tempo marks on page 216
Changing the line style of gradual tempo changes on page 829
Changing the final tempo at the end of gradual tempo changes on page 827

## Lengthening/Shortening gradual tempo changes

You can lengthen/shorten gradual tempo changes rhythmically after they have been input.

PROCEDURE

1. In Write mode, select the gradual tempo changes you want to lengthen/shorten.

   NOTE

   When using the mouse, you can only lengthen/shorten one gradual tempo change at a time.

2. Lengthen/Shorten the gradual tempo changes in any of the following ways:
   - To lengthen them by the current rhythmic grid resolution, press **Shift-Alt/Opt-Right Arrow**.
   - To shorten them by the current rhythmic grid resolution, press **Shift-Alt/Opt-Left Arrow**.

     NOTE

     Key commands lengthen/shorten items by moving their end only.

   - Click and drag the circular handle at the start/end to the right/left.

RESULT

The selected gradual tempo changes are lengthened/shortened according to the current rhythmic grid resolution.

# Changing the style of gradual tempo changes

You can change the style of individual gradual tempo changes. Gradual tempo changes can appear as text only with no continuation line, text with a continuation line, or with the word spread across their duration.

PROCEDURE

1. Select the gradual tempo changes whose style you want to change.
2. In the Properties panel, activate **Gradual style** in the **Tempo** group.
3. Select one of the following options from the menu:
   - **rit.**
   - **rit...**
   - **rit-e-nu-to**

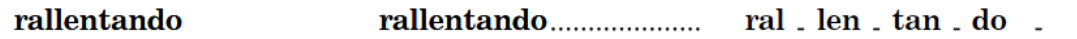
RESULT

The style of the selected gradual tempo changes is changed.

NOTE

Only gradual tempo changes with valid full text appear separated into syllables, for example, *ritenuto* or *accelerando*. Gradual tempo changes automatically have valid full text when you input them using the panel or select a suggested entry from the menu when using the popover. You can also change the text of existing gradual tempo changes.

EXAMPLE




**rit.**: Text only

**rit...**: Text with a continuation line

**rit-e-nu-to**: Syllables in the text spread across the duration of the gradual tempo change

RELATED LINKS

Input methods for tempo marks on page 216
Changing tempo text on page 822

# Changing the line style of gradual tempo changes

You can change the line style of individual gradual tempo changes whose style includes a continuation line.

NOTE

This does not affect the appearance of gradual tempo changes with the text-only style.

PROCEDURE

1. Select the gradual tempo changes whose line style you want to change.
2. In the Properties panel, activate **Line style** in the **Tempo** group.
3. Select one of the following options from the menu:
   - **Solid**

- **Dotted**
- **Dashed**

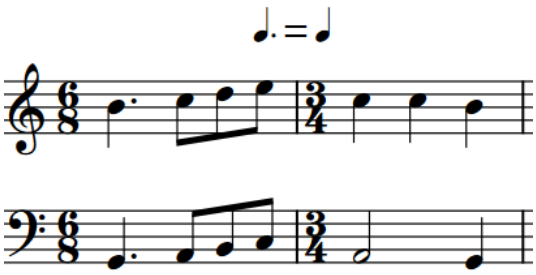
RESULT

The line style of the selected gradual tempo changes is changed.

# Tempo equations

Tempo equations indicate a change in the beat unit on which metronome marks are based. They are often used to maintain a consistent pulse across multiple different meters.

For example, if the time signature changes from 6/8 to 3/4, a tempo equation of ♩.=♩ indicates the same metronome mark value that applied to the dotted quarter note beat unit in 6/8 now applies to the quarter note beat unit in 3/4.



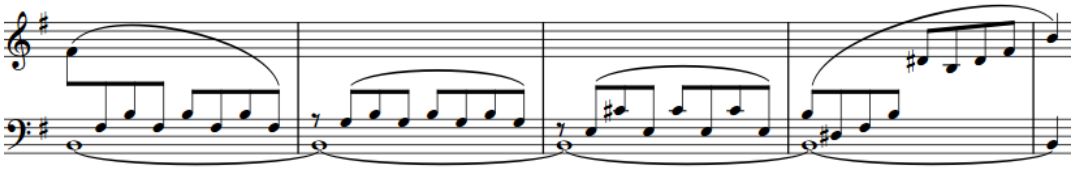
RELATED LINKS

Input methods for tempo marks on page 216

# Ties

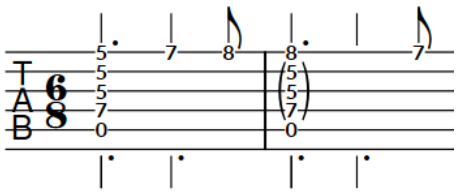
A tie is a curved line that joins two notes of the same pitch. When notes are longer than the maximum duration of a bar in the prevailing time signature, they automatically appear in Dorico Elements as tie chains, that is, a sequence of adjacent notes joined with ties.

Each sequence of ties, whether they join two notes or ten notes together, represents a single note with the duration of all the tied notes combined. A performer plays the notes as one note, without re-striking, re-blowing, or re-bowing the note at any point within the rhythmic duration of the tie chain.

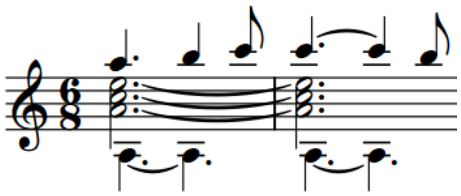


A tie chain across several bars on the bottom piano staff

On tablature, ties are automatically notated as round brackets around notes/chords in subsequent bars. When tablature is shown with rhythms, ties within the same bar are indicated with stems rather than bracketed noteheads.



A phrase on tablature with some ties within bars and a chord tied across two bars



The same phrase on a notation staff

In Dorico Elements, most ties are created automatically. Rhythms are notated according to the prevailing beat grouping, which is normally set by the time signature. Therefore, notes that cannot be notated using a single duration are automatically drawn as tie chains. For example, if you input a dotted whole note at the start of a bar in a 4/4 time signature, it is automatically notated as a whole note tied to a half note in the next bar. If the time signature changes, tie chains are automatically adjusted to remain correct in the new meter.

NOTE

- In Write mode, you can only select whole tie chains because Dorico Elements considers each tie chain to be a single note. Any edits you make to tie chains in Write mode affect all notes in them, such as changing the pitch, but only affect the first tie in the chain, such as changing the tie style to dashed. However, you can still input notations, such as dynamics, in the middle of tie chains by activating the caret and moving it to the required rhythmic position within the tie chain.
- When you tie existing notes together, they might be consolidated into fewer or more notes within a tie chain, depending on the musical context, the time signature, and the position of the start of the note in the bar.
- Articulations can only appear once on each tie chain, either at the start or the end, depending on the type of articulation. For example, staccato marks appear at the end

whereas accents appear at the start. You can change the positions of articulations relative to individual tie chains.

RELATED LINKS
Note and rest grouping on page 524
Beam grouping according to meters on page 510
Inputting notes on page 164
Forcing the duration of notes/rests on page 169
Inputting ties on page 183
Splitting tie chains on page 837
Time signatures on page 841
Input methods for time signatures on page 210
Notes on page 631
Positions of articulations on page 486
Changing the positions of articulations on tie chains on page 488
Bracketed noteheads on page 640
Tablature on page 809
Caret on page 159
Moving the caret manually on page 163

# General placement conventions for ties

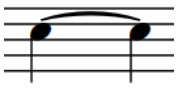
Ties join two noteheads together, meaning the ends of ties are positioned close to the noteheads to which they are attached.

Ties are curved lines, and the direction of the curve usually follows the stem direction of the notes. If notes are stem-up, ties curve downwards, and if notes are stem-down, ties curve upwards.

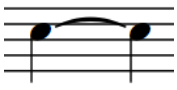
NOTE

If there are multiple voices on the staff, all ties in up-stem voices curve upwards and all ties in down-stem voices curve downwards.

There are two main conventions for the placement of the ends of ties relative to noteheads. One convention is to place the ends of ties outside noteheads, meaning above or below them, ideally positioned at the horizontal center of noteheads. The other convention is to place the ends of ties between noteheads, ideally positioned at the vertical center of noteheads.



A tie outside noteheads

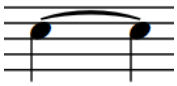


A tie between noteheads

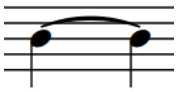
For both conventions, Dorico Elements automatically positions the ends of ties as close as possible to the notes that they join while avoiding collisions with other notations.

The vertical placement of ties is also automatically adjusted in Dorico Elements so that neither of the end points of ties, nor the apex of tie curves, starts or ends on a staff line. If this happens, it can cause the shape of ties to appear distorted, which makes the music harder to read.

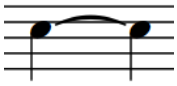
To avoid this, Dorico Elements changes the vertical position of ties slightly, and makes small changes to the curvature of ties. These changes are small, but the placement of ties is subtly different depending on the position of notes relative to staff lines.



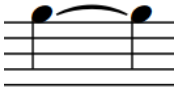
A tie outside noteheads



When transposed one note down, the tie appears with a steeper curve to avoid reaching its apex on the staff line.



A tie between noteheads, with the ends slightly above the vertical center of the noteheads to avoid the tie appearing too close to the staff line at its ends or apex.



When transposed up, the ends of the tie are now positioned at the vertical center of the notehead, as there is no staff line with which it could collide.

Wherever possible, clef changes should not be positioned in the middle of tie chains. Changing the clef changes the position of the tied note on the staff, which could easily cause a performer to misread the tie as a slur and play two different notes.

Ties can look distorted when they are very short, and can be overlooked.

NOTE

Slurs must not be confused with ties, which look superficially similar, but instead join notes of the same pitch to indicate that they are played as a single note. In that sense, ties are part of rhythmic notation, while slurs are considered articulation.

RELATED LINKS

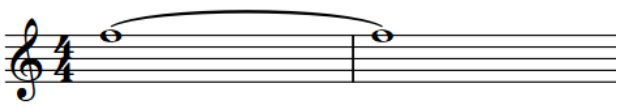
Ties vs. slurs on page 833
Inputting ties on page 183
General placement conventions for clefs on page 547

# Ties vs. slurs

Ties and slurs look superficially similar but differ in meaning.

Ties indicate that a note should not be re-struck. They are used to join notes of the same pitch together. For example, ties can be used to extend notes across multiple bars. Although multiple notes can be included in a single tie chain, each tie in the chain only joins one notehead to the next notehead on the staff.

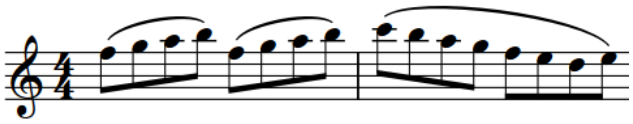
Ties can be used in conjunction with articulation, but articulation on tied notes only affects the attack at the start of the tie chain and the release at the end of the tie chain.



Two long notes tied together

Slurs indicate articulation, such as bowing or breathing, and normally group notes of different pitches together. Slurs can join two noteheads together with any number of pitches in between. They often indicate the shaping of phrases.

Slurs can also be used in conjunction with articulation. Unlike ties, articulation within slurs can affect the sound throughout the phrase. For example, staccato articulations on repeated notes of the same pitch within a slur indicate that notes should be played on a stringed instrument using the same bow direction, but stopping the bow between each note.



A phrase with notes grouped together by slurs

# Non-standard ties

Usually, ties join two notes of the same pitch in the same staff. However, ties can also cross system breaks and frame breaks, clef changes, or time signature changes. These types of ties are all positioned automatically in Dorico Elements.

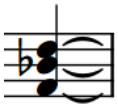
Ties can also join non-adjacent notes, notes in different voices, or notes in different staves together. In Dorico Elements, you must input these types of ties manually.

## Ties across system breaks and page breaks

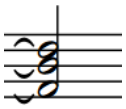
The ends of ties that cross system breaks are automatically positioned in Dorico Elements.

Their vertical position remains the same, as both ends are centered on the noteheads to which they are attached. Their behavior also remains the same, as selecting one note in a tie chain that crosses a system or frame break in Write mode selects all notes in the tie chain.

The horizontal space for the parts of ties shown to the left of notes at the start of new systems/frames may not be sufficient to show an ideal tie curve.



The start of a tie chain before a system break

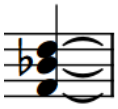


The end of the same tie chain after a system break

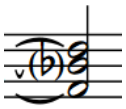
## Tied notes with accidentals across system breaks and page breaks

The ends of ties for tied notes with accidentals across system breaks and page breaks are also automatically positioned.

As tied notes in Dorico Elements are treated as one note notated to fit in time signatures, cautionary accidentals at the start of new systems/frames are not shown by default. If you choose to show accidentals beside notes in tie chains at the start of new systems/frames, the position of the notes is changed to accommodate accidentals. However, this automatic position might not leave sufficient room for the part of the tie to the left of the notes to be shown with an ideal curve.



The start of a tie chain before a system break



The end of the same tie chain, with a cautionary accidental in parentheses

## Ties across time signature changes

Ties are automatically positioned between notes that span a time signature change. If ties crossing a time signature change are joining notes in the middle of a staff, the top or bottom of time signature changes are partially obscured by the ties. However, as ties are curved, the time signature is unlikely to be completely obscured.

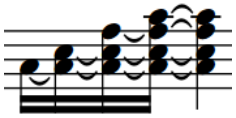
## Ties across clef changes

Ties are automatically positioned between notes that span a change of clef. Ties across clef changes are not horizontal, as the same pitch is positioned differently in each clef.

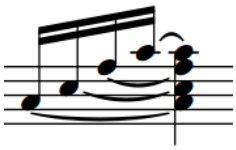
The result of cross-clef ties is likely to be visually and musically confusing, as they can be misread as slurs. In this case, consider moving the change of clef to before/after the tied note.

## Ties between non-adjacent notes

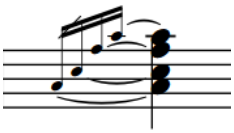
You can input ties between notes of the same pitch that are not directly beside each other. This can be useful when inputting ties between multiple notes before a chord, for example.



Notes leading into a chord notated as a series of tied chords



Notes leading into a chord notated as tied non-adjacent notes



Multiple grace notes before a chord with ties between non-adjacent notes

## Ties between different voices

You can input ties between notes of the same pitch in different voices.

## Ties between notes on different staves

You can input ties between notes of the same pitch in different staves.

## Laissez vibrer ties

*Laissez vibrer* ties are short ties that indicate a note should be left to ring, and should not be stopped. They extend a small amount to the right of the note to which they apply, but do not connect to another note.

You can add *laissez vibrer* ties to any note.

RELATED LINKS
Hiding/Showing laissez vibrer ties on page 836
Hiding/Showing or parenthesizing accidentals on page 480
Note spacing on page 361

# Inputting ties between non-adjacent notes

You can manually input ties between notes of the same pitch that are not rhythmically adjacent. You can also input ties between notes of the same pitch in different voices and different staves.

For example, you might have input a melody across multiple voices in order to accommodate passing notes, but want to tie two notes together even though they are in different voices. Similarly, you might have written multiple notes before a chord that are all held down and want to reduce the number of tied notes.

PROCEDURE

1. In Write mode, select the two notes that you want to tie together.

   NOTE

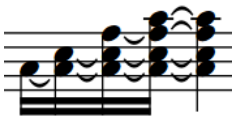
   The second note must be the same pitch as the first note. If the second note is a different pitch to the first note, no tie is input.

2. Press **T**.

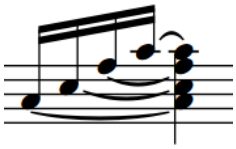
RESULT

A tie is input between the two selected notes.

EXAMPLE



Spread chord with ties between all adjacent notes



Spread chord with ties between non-adjacent notes

RELATED LINKS

Inputting ties on page 183

# Hiding/Showing laissez vibrer ties

You can add *laissez vibrer* ties to any note.

PROCEDURE

1. Select the notes on which you want to add a *laissez vibrer* tie.
2. In the Properties panel, activate/deactivate **Laissez vibrer tie** in the **Notes and Rests** group.

RESULT

*Laissez vibrer* ties are added to the selected notes when the property is activated, and are removed when the property is deactivated. *Laissez vibrer* ties are positioned automatically.

TIP

You can assign a key command for **Toggle Laissez Vibrer Tie** on the **Key Commands** page in **Preferences**.

# Deleting ties

You can delete ties without deleting the notes to which they are attached.

NOTE

Deleting ties from tie chains removes all ties in the tie chain. If you want to remove single ties from longer tie chains, you can split the tie chain.

PROCEDURE

1. In Write mode, select the tie chains from which you want to delete all ties.
2. Press **U**.

RESULT

All ties in the selected tie chains are deleted. Notes previously in the tie chain remain at their rhythmic positions.

RELATED LINKS

Changing the duration of notes on page 168

# Splitting tie chains

You can split tie chains at specified positions, for example, if you want to change the pitch halfway through a tie chain or delete individual ties within tie chains. This does not remove any other ties in the tie chain.

PROCEDURE

1. In Write mode, select the tie chain you want to split.
2. Press **Shift-N** to start note input.
3. Move the caret to where you want to split the tie chain.
   - Press **Right Arrow** / **Left Arrow** to move the caret to the right/left, according to the current rhythmic grid resolution.
   - Press **Space** to advance the caret to the next rhythmic position, according to the note value currently selected.
4. Press **U** to split the tie chain.
5. Optional: If you want to split the same tie chain in multiple places, move the caret to the next rhythmic position where you want to split the tie chain.
6. Press **Esc** or **Return** to stop note input.

RESULT

The tie chain is split at the caret position.

RELATED LINKS

Moving the caret manually on page 163

# Tie styles

There are different styles of ties available in Dorico Elements, which you can use to indicate different meanings.

**Solid**

This is the default style for ties. Ties appear as tapered solid lines: thinner at the ends and thicker in the middle.

**Dashed**

Ties appear as tapered dashed lines. Can be used to denote optional or suggested ties, for example, in vocal music where some verses have more syllables than others and therefore require more notes.

**Dotted**

Ties appear as dotted lines. The dots are the same size and the same distance apart over the whole length of the tie. Can also be used to denote optional or suggested ties.

**Half-dashed start**

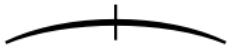
The first halves of ties appear as dashed lines, the second halves as solid lines. Used to denote that a tie was written incompletely in the source in critical editions.

**Half-dashed end**

The first halves of ties appear as solid lines, the second halves as dashed lines. Used to denote that a tie was written incompletely in the source in critical editions.

**Editorial**

Ties appear as solid black lines, but with a smaller vertical line intersecting them exactly halfway along their length. Used to show that ties were added by the editor and were not present in the source.



## Changing the style of ties

You can change the style of individual ties. By default, all ties are solid.

NOTE

You can only select whole tie chains in Write mode. Any changes to tie chains in Write mode only affect the first tie in the tie chain.

PROCEDURE

1. Select the ties whose style you want to change.

NOTE

You can only select whole tie chains, and any changes to tie chains only affect the first tie in the chain.

2. In the Properties panel, activate **Style** in the **Ties** group.
3. Select one of the following options from the menu:
   - **Solid**
   - **Dashed**
   - **Dotted**
   - **Half-dashed start**
   - **Half-dashed end**
   - **Editorial**

RESULT

The style of the selected ties is changed.

## Changing the size of dashes/dots in ties

You can change the size of the dashes/dots in dashed/dotted ties individually.

NOTE

These steps only apply to dashed/dotted ties.

PROCEDURE

1. Select the dashed/dotted ties whose dash/dot size you want to change.

   NOTE

   You can only select whole tie chains, and any changes to tie chains only affect the first tie in the chain.

2. In the Properties panel, activate **Dash/dot** in the **Ties** group.
3. Change the value in the value field.

RESULT

Increasing the value makes dashes/dots bigger, decreasing the value makes dashes/dots smaller.

# Tie curvature direction

The direction of tie curvatures is determined by the stem direction of the notes/chords at each end of the tie, the number of notes in chords at each end, and the number of voices on the staff.

### Tied single notes in single-voice contexts

If a single voice is active and a tie joins two single notes, tie curvature direction is determined by the stem directions of the notes at either end of the tie.

- If the stem directions match, the tie curves away from the notes and is positioned on the notehead side.

- If the stem directions differ, the tie curves upwards by default.

### Tied chords in single-voice contexts

If a tie joins two chords, the direction of the ties is determined by the number of tied notes in the chords.

- For an even number, the ties are equally split between curving towards the notehead end and curving towards the stem end.
- For an uneven number, the majority of ties curve towards the notehead end.

### Tied notes in multiple-voice contexts

Ties are positioned on the stem side and are curved as follows:

- For up-stem voices, ties curve upwards.
- For down-stem voices, ties curve downwards.
- For overlapping/interlocking pitches in multiple voices, the rules for tied chords in single-voice contexts apply. All notes in all voices are treated as if they belong to a single voice.

## Changing the curvature direction of ties

You can change the curvature direction of ties individually, including individual ties within tie chains.

PROCEDURE

1. Select the ties whose curvature direction you want to change.

   NOTE

   You can only select whole tie chains, and any changes to tie chains only affect the first tie in the chain.

2. In the Properties panel, activate **Direction** in the **Ties** group.
3. Choose one of the following options:
   - **Up**

     
   - **Down**

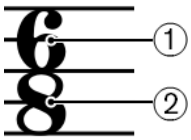
RESULT

The curvature direction of the selected ties is changed.

# Time signatures

Time signatures indicate the meter of music, and apply to all bars from where they first appear until a subsequent change of time signature. Meter describes the rhythmic pulse of music, and its division into beats and bars.

A time signature is made up of two parts: numerator on top, and denominator underneath. These are the same mathematical terms as are used for fractions due to their similar arrangement.




**1 Numerator**

Specifies the number of beats in each bar for the time signature. The duration of beats is specified by the denominator.

**2 Denominator**

Specifies the beat duration for the time signature. The denominator doubles for every halving of the beat duration: 1 is a whole note (breve), 2 is a half note (minim), 4 is a quarter note (crotchet) and so on.

For example, a 4/4 time signature tells you the bar is made up of four beats, and each of those beats is a quarter note in length. A time signature of 4/2 contains four half notes in each bar, and 4/8 contains four eighth notes (quavers) in each bar. Both 3/4 and 6/8 contain six eighth notes, but it is understood that a 3/4 bar contains three quarter note beats, whereas a 6/8 bar contains two dotted quarter note beats.

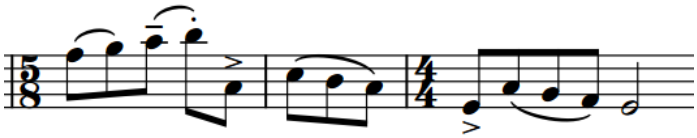
Bars are rhythmic groups, divided according to the time signature, and they make following the music much more practical and easier to read. Notes are beamed differently in different time signatures for the same reasons.

By default, time signatures apply to all staves. However, there are some situations, such as in polymetric music, that require some parts to have their own time signature, independently of the rest of the ensemble. You can input time signatures that apply to all staves or only apply to single staves in Dorico Elements.

Time signatures apply until the next time signature change or the end of the flow, whichever comes first.

NOTE

- Beat lengths are fixed across all staves in your project, regardless of the time signature. For example, if you have a 2/4 time signature on one staff and a 6/8 time signature on another staff, then one quarter note in the 2/4 time signature equals one quarter note in the 6/8 time signature, meaning their barlines do not match.
- Dorico Elements does not automatically add beats to fill bars when you input time signatures unless Insert mode is activated.



A 5/8 time signature input before an existing 4/4 time signature without Insert mode activated, leaving only three eighth note beats in the second 5/8 bar.

RELATED LINKS
Time signature styles on page 848
Input methods for time signatures on page 210
Beam grouping according to meters on page 510
Time Signatures (Meter) panel on page 212
Creating custom beat groupings for meters on page 524
Bars on page 490

# General conventions for time signatures

Over time, the placement and appearance of time signatures has developed conventions to ensure that their notation is always understood. Dorico Elements follows these conventions automatically.

## Appearance conventions

Time signatures should fill the height of the staff. There is a risk they may not be noticed if they are smaller. The size of time signatures on staves with fewer than five lines should be the same as that of a time signature on an equivalent five-line staff.

Time signature on a five-line staff

Time signature on a single-line staff

Time signatures use a unique, heavy font that ensures they stand out against staff lines, and are instantly recognizable.

For some types of music, particularly film music, it is typical to use large time signatures that span several staves.

## Placement conventions

Time signatures should be shown at the start of a piece and at the start of subsequent movements, if applicable, even if the music carries straight on. They should be placed after clefs and key signatures.

If time signature changes occur during a piece or movement, it should be placed immediately after a barline to avoid causing the duration of the previous bar to be different than the previous time signature implies.

RELATED LINKS
Input methods for time signatures on page 210
Inputting notes in Insert mode on page 175
Large time signatures on page 846
Changing the size and position of time signatures on page 847

# Types of time signatures

There are different types of time signatures, which can indicate various and complex meters.

NOTE

Dorico Elements uses the definitions for meters commonly used in American English. These definitions, such as which meters are considered simple and compound, might be different in other languages.

**Simple**

In simple time signatures, each beat is divided by two into equal groups of notes. Simple time signatures can be simple duple, such as 2/4, simple triple, such as 3/4, or simple quadruple, such as 4/4.

**Compound**

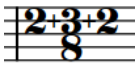
In compound time signatures, each beat is divided by three into equal groups of dotted notes, such as 6/8, which contains two dotted quarter note beats, or 9/4, which contains three dotted half note beats.

**Irregular**

Irregular time signatures, such as 5/4 or 7/8, cannot be subdivided into equal beat groups. Because the numerator is odd, these time signatures must be divided into unequal beat groups. For example, 5/4 usually contains a half note beat and a dotted half note beat.

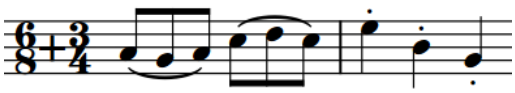
**Additive**

Additive time signatures show how bars are subdivided into beat groups. You can show beat group numerators for any type of time signature. For example, instead of 7/8, you could show an additive time signature of 2+3+2/8.



**Alternating**

An alternating time signature indicates a regular pattern that switches every bar between two or more time signatures, in the indicated order. For example, for a phrase with twelve eighth notes that needs to be emphasized 3+3+2+2+2, an alternating time signature of 6/8+3/4 might allow the two meters to be read more clearly.



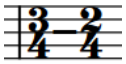
**Interchangeable**

An interchangeable time signature indicates a set of time signatures at the start of the piece that can be used during the piece, such as 3/4–2/4. Unlike alternating time signatures, interchangeable time signatures do not require a fixed pattern; any bar in the piece can follow any of the time signatures in the set without having to restate the time signature.

NOTE

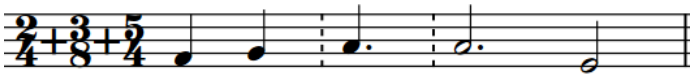
You must manually input the appropriate time signatures where you want them, as unlike alternating time signatures, there is no fixed pattern for them. Any time signatures you input that are specified in the interchangeable time signature are hidden automatically.

They can have different separator styles in Dorico Elements, which you can change for individual time signatures.



**Aggregate**

An aggregate time signature shows two or more meters within the same bar, such as 2/4+3/8+5/4. Dorico Elements automatically shows dashed barlines to indicate the divisions between the different meters, but you can also specify that you do not want to show dashed barlines when you input aggregate time signatures with the popover.



**Open**

An open time signature has no restrictions on meter, beaming, or beats. Any number of notes can be added, with any beaming. In Dorico Elements, an open time signature can be shown with an X or N, or without any signature.

**Non-power of two**

A non-power of two time signature is one such as 5/6, which indicates five sextuplet notes lasting for a whole note (semibreve). Examples of time signatures like this can be found in the music of Adès.

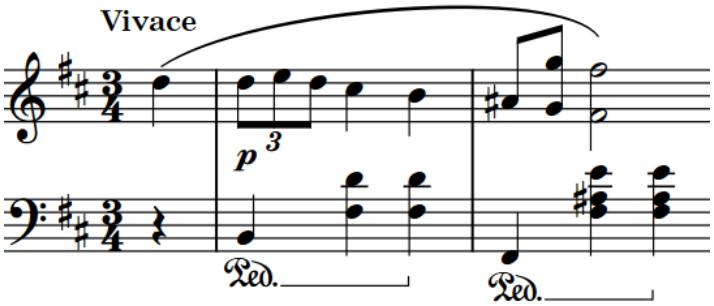
Some composers, such as Boulez, have written fractional time signatures. Dorico Elements does not currently support these.

RELATED LINKS

Time signature styles on page 848
Large time signatures on page 846
Input methods for time signatures on page 210
Time signatures popover on page 211

# Pick-up bars

Pick-up bars allow you to include music before the first full bar. They are also known as “upbeats” or an “anacrusis”. Often, pick-up bars only comprise a few beats whose main purpose is to lead in to the start of the piece.




Pick-up bar of a single quarter note beat at the start of Chopin's Mazurka Op. 30 No. 2

Pieces that start with a pick-up bar have time signatures that are positioned at the start of the system as normal. However, the first full bar of the time signature occurs after the first barline and not before. Therefore, pick-up bars do not contribute to the bar number count. Bar numbers are counted from the first full bar in the flow.

Because pick-up bars are linked to the number of notes/rests in the music, in Dorico Elements they are linked to time signatures and so you must input pick-up bars alongside a time signature. However, you can hide time signatures you do not want to show in the music.

RELATED LINKS
Input methods for time signatures on page 210
Hiding/Showing time signatures on page 852

## Defining partial bars as pick-up bars or irregular bars

You can change whether explicit irregular bars at the start of time signatures are defined as pick-up bars. This affects how notes in the bars are beamed and grouped.

Notes in irregular bars defined as pick-up bars are beamed/grouped backwards from the end of the bar, while notes in irregular bars not defined as pick-up bars are beamed/grouped forwards from the start of the bar.

NOTE

You must input explicit irregular bars and pick-up bars as part of a time signature, such as by entering **4/4,1.5** into the time signatures popover to input a 4/4 time signature with a pick-up bar containing 1.5 quarter note beats, or three eighth notes.

PROCEDURE

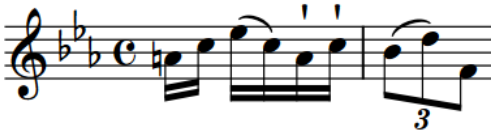
1. Select the time signatures or the signposts of time signatures starting with an explicit irregular bar whose pick-up definition you want to change.
2. In the Properties panel, activate **Group first bar as pick-up** in the **Time Signatures** group.
3. Activate/Deactivate the corresponding checkbox.

RESULT

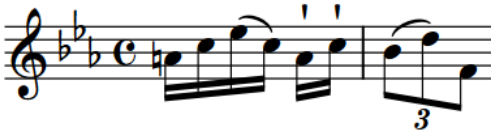
Irregular bars at the start of the selected time signatures are defined as pick-up bars when **Group first bar as pick-up** and its corresponding checkbox are both activated, and defined as normal irregular bars when the corresponding checkbox is deactivated.

When the property is deactivated, Dorico Elements uses internal heuristics to define them as either pick-up bars or normal irregular bars automatically.

EXAMPLE



Irregular bar defined as pick-up into common time



Irregular bar defined as normal irregular bar, not a pick-up

# Large time signatures

Large time signatures are scaled-up time signatures that appear much larger than normal relative to the staff size. They can be helpful in orchestral scores, as the smaller staff size in such scores means standard time signatures are small and harder for conductors to read.

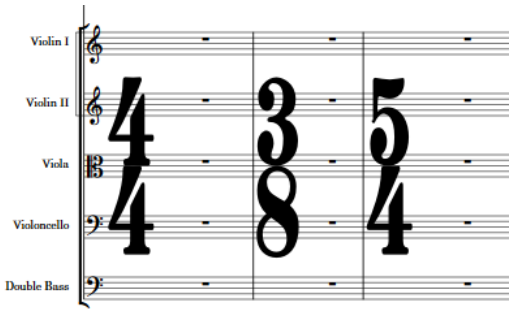
Large time signatures are also very commonly used in film scores, as conductors rarely have much time to prepare the scores before recording sessions. Having large time signatures makes changes in meter more visually clear on the page, especially when music contains multiple changes in meter.

In Dorico Elements, you can show large time signatures at the following positions:

- Once per bracketed group
- Above the staff and at system object positions

## Time signatures shown once per bracketed group

Instead of showing a time signature on every staff that is the same height as the staff, you can instead show a single large time signature on each bracketed group of staves. When shown once per bracketed group, time signatures are scaled up in size according to the number of staves in the bracketed group. The largest time signatures are shown on bracketed groups containing four or more staves. When shown on single staves, they extend a small amount above and below the staff, which is commonly used for parts for film music recording sessions.

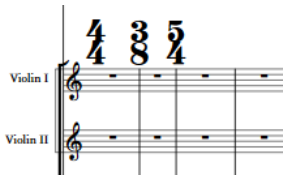



**Narrow, serif** time signatures shown once per bracketed group

Large time signatures shown on bracketed groups occupy horizontal space, which can be a significant amount when they are especially large and use the standard time signature design. Therefore, we recommend that you use one of the narrow designs in layouts that show large time signatures on bracketed groups.

### Time signatures shown at system object positions

Similar to showing large time signatures once per bracketed group, you can also show time signatures only at system object positions and above the staff. Therefore, its positions in each system are controlled by the same options that control the positions of other system objects, such as rehearsal marks and tempo marks.




**Normal** time signatures shown at system object positions

Time signatures shown at system object positions do not occupy horizontal space, meaning it is less important to use a narrow font style. This also reduces the horizontal distance between notes either side of time signatures. Because of this reduced disruption to note spacing, this placement of time signatures has become popular in contemporary art music since the 20th Century.

When using the note denominator style for time signatures shown at system object positions, the note is shown to the right of the numerator rather than below.

By default, time signatures at system object positions are twice the size of normal time signatures and force other items at the same position to appear to the right.

RELATED LINKS
Changing the design of time signatures on page 853
System objects on page 805
Changing the positions of system objects on page 805
Hiding bar numbers at time signatures shown at system object positions on page 505

## Changing the size and position of time signatures

You can change the size of time signatures in each layout independently, including changing their vertical position. For example, you can show large time signatures centered on each bracket in full score layouts but standard-sized time signatures on each staff in part layouts.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to change the size of time signatures.

   By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Time Signatures** in the page list.
4. Choose one of the following options for **Time signature position and size**:
   - **Show on every staff**
   - **Show once per bracket**
   - **Show at system object positions**
5. Click **Apply**, then **Close**.

RESULT

The size and position of time signatures in the selected layouts is changed.

Showing large time signatures above the staff at system object positions means they do not occupy any rhythmic or horizontal space, whereas the other options do cause time signatures to occupy horizontal space.

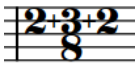
RELATED LINKS
Large time signatures on page 846
Positions of time signatures on page 851
Hiding bar numbers at time signatures shown at system object positions on page 505

# Time signature styles

Dorico Elements allows you to show time signatures in a variety of styles. For example, you can show denominators as a number or as a note value.

The numerator is always one or more numbers, and can either show the total number of beats in the bar, or show how the total duration of the bar is subdivided.

Numerator in a 7/8 time signature shown as a single number



Numerator in a 7/8 time signature showing subdivisions

The denominator can appear as a number, as a note indicating the equivalent duration, or not appear at all.

Denominator shown as number

Denominator shown as notehead (beat length)

No denominator shown

If shown as a notehead, the denominator can either show the length of each beat in the bar, or the note duration for the bar. When showing the beat length, the numerator can also be changed. In the example, the numerator 6 in the 6/8 time signature becomes a 2 to reflect the two dotted quarter note beats that make up a 6/8 bar.

Denominator notehead showing the beat length of a 6/8 time signature

Denominator showing the note duration of a 6/8 time signature

RELATED LINKS
Changing the design of time signatures on page 853
Changing the separator style of interchangeable time signatures on page 850
Changing the open meter style of time signatures on page 849

## Changing the numerator style of time signatures

You can choose whether the numerators of individual time signatures show the total number of beats in each bar, or the subdivision of beats in each bar.

PROCEDURE

1. Select the time signatures whose numerator style you want to change.
2. In the Properties panel, activate **Numerator style** in the **Time Signatures** group.
3. Choose one of the following options:
   - **Number**
   - **Beat group**

RESULT

The numerator style of the selected time signatures is changed.

RELATED LINKS

Time signature styles on page 848

## Changing the denominator style of time signatures

You can change the denominator style of individual time signatures, for example, if you want to show the denominator as a note instead of a number.

PROCEDURE

1. Select the time signatures whose denominator style you want to change.
2. In the Properties panel, activate **Denominator style** in the **Time Signatures** group.
3. Choose one of the following options:
   - **Number**
   - **Note**
   - **None**

RESULT

The denominator style of the selected time signatures is changed.

## Changing the open meter style of time signatures

You can change the open meter style of individual time signatures.

PROCEDURE

1. Select the open meter time signatures whose style you want to change.

   NOTE

   In the Properties panel, **Open style** in the **Time Signatures** group is automatically activated for open meter time signatures.

2. In the Properties panel, choose one of the following options for **Open style** in the **Time Signatures** group:
   - **No symbol**

     
     
   - **X**

     
     
   - **Penderecki's symbol**

RESULT

The open meter style of the selected time signatures is changed.

## Changing the separator style of interchangeable time signatures

You can change the separator shown in interchangeable time signatures individually.

PROCEDURE

1. Select the interchangeable time signatures whose separator you want to change.

   NOTE

   In the Properties panel, **Separator** in the **Time Signatures** group is automatically activated for interchangeable time signatures.

2. Select one of the following options from the **Separator** menu:
   - **Parentheses**
     
   - **Brackets**
     
   - **Equals sign**
     
   - **Slash**
     
   - **Space**
     
   - **Hyphen**
     

RESULT

The separator style of the selected interchangeable time signatures is changed.

NOTE

Although they might look similar to interchangeable time signatures, aggregate time signatures behave differently. Aggregate time signatures are separated by a + sign, whereas interchangeable time signatures can be shown with six different separators but not a + sign.

Therefore, although you can activate **Separator** and choose from the available options for aggregate time signatures, the property only affects the appearance of interchangeable time signature separators.

RELATED LINKS

Time signature styles on page 848

# Positions of time signatures

Standard time signatures are positioned on staves with the middle staff line, or only staff line for single-line staves, passing through their center. Large time signatures can be positioned in the middle or at the top of bracket groups, or above staves at system object positions.

You can move time signatures to different rhythmic positions in Write mode. They move according to the current rhythmic grid resolution and are positioned automatically to avoid collisions.

You can also change the position of time signatures in each layout independently, for example, if you want to show time signatures above the staff and at system object positions in some layouts but only once per bracket in other layouts.

RELATED LINKS

System objects on page 805
Changing the positions of system objects on page 805
Changing the size and position of time signatures on page 847

## Moving time signatures rhythmically

You can move time signatures to new rhythmic positions after they have been input.

NOTE

- You can only move time signatures rhythmically using the keyboard.
- Time signatures can only be moved along staves. If you want to move a time signature across staves, you must delete the time signature and input a new time signature on the other staff.

PROCEDURE

1. In Write mode, select the time signatures you want to move.
2. Move the time signatures according to the current rhythmic grid resolution in any of the following ways:
   - Press **Alt/Opt-Right Arrow** to move them to the right.
   - Press **Alt/Opt-Left Arrow** to move them to the left.

RESULT

The time signature takes effect from its new rhythmic position until the next existing time signature, or the end of the flow. Barlines are automatically updated either side of the time signature up to the previous/next existing time signature, or the start/end of the flow.

NOTE

Only one time signature can exist at each rhythmic position, except for time signatures that only apply to single staves. If a time signature moves to the exact rhythmic position of another time signature as part of its move, the existing time signature is deleted.

You can undo this action which restores any time signatures deleted in the process.

# Hiding/Showing time signatures

You can hide/show time signatures without deleting them from your project. This hides/shows them in all layouts, not just the one currently open in the music area.

PROCEDURE

1. Select the time signatures you want to hide, or the signposts of time signatures you want to show.
2. In the Properties panel, activate/deactivate **Hide time signature** in the **Time Signatures** group.

RESULT

The selected time signatures are hidden in all layouts when **Hide time signature** is activated, and shown when it is deactivated.

Signposts are shown at the position of each hidden time signature. However, signposts are not printed by default.

NOTE

- Hidden time signatures do not take up any horizontal space, so hiding/showing time signatures affects note spacing.
- You can hide/show time signature signposts by choosing **View** > **Signposts** > **Time Signatures**. Time signature signposts are shown when a tick appears beside **Time Signatures** in the menu, and hidden when no tick appears.

  You can choose to print time signature signposts if you activate **View options** in the **Annotations** section of the Print Options panel on the right of the window in Print mode.
- You can assign a key command for **Hide/Show Item** on the **Key Commands** page in **Preferences**, which applies to chord symbols, playing techniques, and time signatures.

RELATED LINKS

Note spacing on page 361
Signposts on page 314

# Deleting time signatures

You can delete time signatures without affecting the relative rhythmic positions of notes.

PROCEDURE

1. In Write mode, select one of the following:
   - The time signatures you want to delete.
   - The signposts of hidden time signatures you want to delete.
2. Press **Backspace or Delete**.

RESULT

The time signatures are deleted from the score. Bars after their previous positions are re-barred according to the previous time signature in the score, up until the next time signature or the end of the flow.

If you delete the only time signature in the flow, your music appears in an open meter, but with all the same rhythmic values.

RELATED LINKS
Types of time signatures on page 843

# Changing the design of time signatures

You can change the design of time signatures in each layout independently, including changing the font style used for them, for example, if you want to use a plain font for time signatures in full score layouts but the standard time signature font in part layouts.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to change the design of time signatures.

   By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Time Signatures** in the page list.
4. Choose one of the following options for **Time signature design**:
   - **Normal**
   - **Narrow, serif**
   - **Narrow, sans serif**
   - **Plain font**
5. Click **Apply**, then **Close**.

RESULT

The design of time signatures in the selected layouts is changed. If you choose **Plain font**, time signatures use a different font style than the one used for the other options.

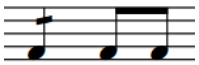
RELATED LINKS
Time signature styles on page 848

# Tremolos

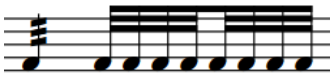
Tremolos are thick, slanted lines that cross individual stems or are positioned between multiple stems. They are used to indicate that notes are repeated, either individually or in sequences of multiple notes.

Using tremolo strokes instead of notating each notehead can save horizontal space and make fast passages easier to read.

The number of tremolo strokes indicates both how many times notes are repeated and how fast they are. In measured tremolos, for example, one tremolo stroke on the stem of a quarter note (crotchet) indicates two eighth notes (quavers) are played, whereas three tremolo strokes on the stem of a quarter note indicates eight 32nd notes are played.



Quarter note with a one-stroke single-note tremolo and its equivalent notation

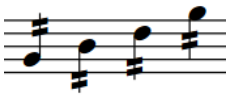


Quarter note with a three-stroke single-note tremolo and its equivalent notation

There are different types of tremolos:

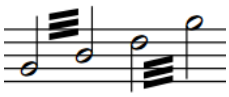
**Single-note tremolos**

Individual notes are repeated.



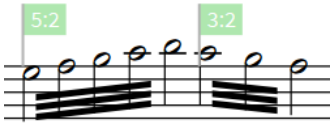
**Multi-note tremolos**

Multiple notes, usually two, are played in sequence, similar to a trill. However, trills usually indicate a fast alternation between two adjacent notes, such as G and A, whereas multi-note tremolos can be between any notes, limited only by the capabilities of the instrument.



**Tuplet tremolos**

Multiple notes in tuplets are repeat in the notated sequence.




Depending on the musical context, tremolos can be either measured or unmeasured. There is no visual difference between measured/unmeasured tremolos, so composers/arrangers often specify how they want tremolos to be played, such as an indication in the front matter of the score or as a text instruction in the score.

**Measured tremolos**

The number of tremolo strokes corresponds to a precise rhythm in the prevailing tempo and meter.

**Unmeasured tremolos**

There is no link between the number of strokes and rhythm. Instead, unmeasured tremolos are played as fast as possible, whatever the tempo.

Unmeasured tremolos often use three or more tremolo strokes, and can also be accompanied by a “trem.” text indication.

RELATED LINKS

Input methods for repeats and tremolos on page 286

# Tremolos in tie chains

By default, all notes in tie chains are shown with tremolo strokes when single-note tremolos are added to tie chains. Deleting tremolo strokes from tied notes removes tremolo strokes from all notes in tie chains.

In Dorico Elements, tremolos are considered measured by default, so the number of tremolo strokes shown is automatically adjusted on subsequent notes in tie chains as required. For example, if an eighth note with two tremolo strokes is tied to a quarter note, the quarter note has three tremolo strokes. This is because tremolo strokes function like beams, so two tremolo strokes and an eighth note stem flag is the equivalent of three tremolo strokes.

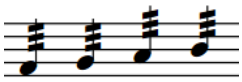
# General placement conventions for tremolos

Single-note tremolos are positioned on note stems, whereas multi-note tremolos are positioned between the stems of two or more notes. When multi-note tremolos cross three or more notes, the tremolo strokes are positioned between all the notes.

Tremolo strokes are slightly thinner than beams, so that the gaps between strokes are large enough and the number of strokes can be instantly recognized.

Tremolo strokes should not collide with ledger lines or stem flags. Dorico Elements automatically positions tremolo strokes to ensure such collisions are avoided.

Tremolo strokes within the staff are positioned so that they are at least one staff space clear of noteheads, and at valid positions relative to staff lines and staff spaces. This means that tremolo strokes might not move every time you change the pitch of notes.



The positions of the tremolo strokes on the first two notes and the last two notes are the same, although the pitches are all different.

In Dorico Elements, the angle of single-note tremolo strokes is always the same, no matter the direction of the phrase. The angles of multi-note tremolo strokes are determined by the height of the stems to which the multi-note tremolos apply.

# Changing the speed of tremolos

You can change the speed of tremolos after they have been input by changing the number of strokes.

PROCEDURE

1. In Write mode, select the notes with tremolos whose speed you want to change.

The buttons with the number of tremolo strokes corresponding to your selection are highlighted in the **Tremolos** section of the Repeat Structures panel.

NOTE

Select single-note tremolos and multi-note tremolos separately.

2. Click the button with the number of tremolo strokes you want in the **Tremolos** section of the Repeat Structures panel.

   For example, click **Two Strokes Single-note Tremolo** to input single-note tremolos with two strokes, or click **Three Strokes Multi-note Tremolo** to input multi-note tremolos with three strokes.

**Two Strokes Single-note Tremolo**

**Three Strokes Multi-note Tremolo**

RESULT

The number of tremolo strokes on the selected notes is changed, which changes the speed of the tremolos.

# Deleting tremolos

You can remove single-note tremolos and multi-note tremolos from notes separately without affecting the notes to which they applied.

PROCEDURE

1. In Write mode, select the notes whose tremolo strokes you want to delete.
2. Click the appropriate buttons in the **Tremolos** section of the Repeat Structures panel for the types of tremolos selected:
   - **Remove Single-note tremolo**

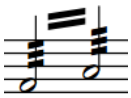
     
   - **Remove Multi-note tremolo**

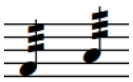
RESULT

The corresponding types of tremolo strokes are deleted.

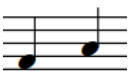
EXAMPLE



Notes with single-note tremolos and multi-note tremolo



Notes with multi-note tremolo deleted but single-note tremolos remain



Notes with both multi-note tremolo and single-note tremolos deleted

# Rhythmic positions of notes with tremolos

You can move notes with single-note tremolos and multi-note tremolos to new rhythmic positions in the same ways as normal notes. However, if you move multi-note tremolos across barlines, the tremolo strokes are deleted automatically.

NOTE

You can undo moving tremolos immediately, which restores any multi-note tremolo strokes deleted in the process.

You can move single-note tremolos to new rhythmic positions and across barlines without affecting their tremolo strokes. The notes are automatically respelled as tie chains if required by their new rhythmic positions and time signature, in the same ways as normal notes.

NOTE

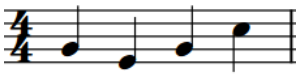
If tie chains with single-note tremolos contain notes of different durations, the number of tremolo strokes on each note in the tie chain is different.

RELATED LINKS

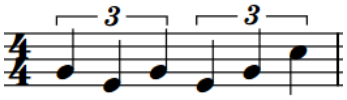
Moving notes rhythmically on page 637

# Tuplets

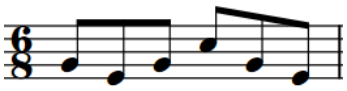
Tuplets indicate where a beat is divided into a different number of subdivisions than is usually expected according to the current meter. They can be used to fit more notes or fewer notes in a beat than usually exist in a beat, according to the usual pattern of subdivision.



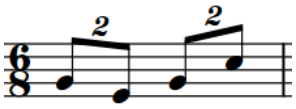
A 4/4 bar with the standard subdivision of four quarter notes




A 4/4 bar with a subdivision of six triplet quarter notes in the space of four regular quarter notes



A 6/8 bar with the standard subdivision of six eighth notes




A 6/8 bar with a subdivision of four duplet eighth notes in the space of six regular eighth notes

Because these subdivisions are not standard but tuplet notes use the same rhythmic notation as normal notes, tuplets must be clearly marked to show that their rhythmic duration is different.

In the examples, the triplet quarter notes are shown under a bracket with the number 3. The duplet eighth notes do not need a bracket as they are joined by a beam, which has a number 2 above it.

Tuplets in Dorico Elements can be shown with just a tuplet bracket, with a tuplet bracket and a tuplet number/ratio, or with a tuplet bracket, a tuplet number/ratio, and a note indicating the note value of the tuplet.

RELATED LINKS
Inputting tuplets on page 186
Tuplet brackets on page 864
Tuplet numbers/ratios on page 866

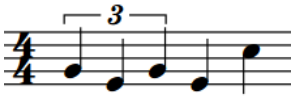
## General placement conventions for tuplets

Tuplet brackets and tuplet numbers/ratios are generally placed on the stem side of notes. When tuplets are shown with a tuplet beam, a tuplet bracket is not always necessary but can be shown in addition to a tuplet number/ratio.

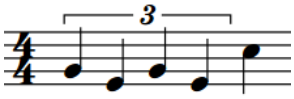
According to convention, tuplet brackets and tuplet numbers/ratios are always placed above the staff for vocal staves, so they do not come between notes and lyrics.

Tuplet brackets should be placed as close to notes as possible without colliding with other notation, such as slurs or articulation. Slurs are usually placed inside tuplet brackets if the slur is shorter than the tuplet bracket. If a slur is longer than a tuplet bracket, the slur can be placed outside the tuplet bracket.

The horizontal position of tuplet brackets should allow it to be immediately obvious which notes are included in the bracket. They should not extend so far that notes following the tuplet appear to be included.




A tuplet clearly showing the three quarter notes included in the triplet.

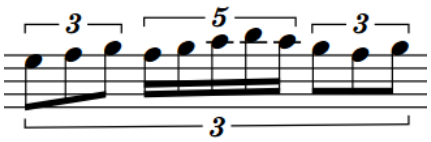



With an extended tuplet bracket, the duration of the triplet is now unclear.

# Nested tuplets

Nested tuplets are tuplets within larger tuplets that are often used to create complex rhythms. In Dorico Elements, there is no limit to the number of levels you can have in nested tuplets.

EXAMPLE




Nested tuplets

## Inputting nested tuplets

You can input nested tuplets in new, empty staves and you can select existing tuplets and input nested tuplets within them.

PROCEDURE

1. In Write mode, start note input.
2. Press **;** to open the tuplets popover.
3. Optional: If inputting nested tuplets in an empty staff, enter the ratio for the outer tuplet into the popover. For example, enter **3:2**.
4. Optional: Press **Return** to close the popover and enter the outer tuplet.

   NOTE

   You can skip steps 3 and 4 if you are inputting nested tuplets into existing tuplets.

5. Press **;** to open the tuplets popover again.
6. Enter the ratio for the inner tuplet into the popover. For example, enter **5:4**.
7. Press **Return** to close the popover and enter the inner tuplet.
8. Enter or play in the pitches you want.
9. Stop inputting nested tuplets in one of the following ways:
   - Press **:** once to stop the inner tuplet and continue inputting the outer tuplet.
   - Press **:** twice to stop both tuplets and return to inputting normal notes.
   - Press **Esc** to stop note input completely.
   - Move the caret with the arrow keys to return to inputting normal notes.

RESULT

The pitches you enter or play in are input as nested tuplets, starting from the caret position.

If multiples of the inner tuplet fit exactly inside the outer tuplet, you can continue inputting notes as the specified nested tuplet until you stop the tuplets manually.

If multiples of the inner tuplet do not fit exactly inside the outer tuplet, the inner tuplet stops automatically at the end of the last tuplet that fits in the outer tuplet. After that, the outer tuplet continues until you stop it manually.

NOTE

You can also input nested triplets by clicking **Tuplets** in the Notes toolbox when the caret is within an existing tuplet. However, you can only input one nested triplet at a time this way.

# Turning existing notes into tuplets

You can turn any existing notes into tuplets, for example, if you need to fit extra notes into an existing duration.

PROCEDURE

1. In Write mode, select the notes you want to turn into tuplets.
2. Press **;** to open the tuplets popover.
   The popover is automatically populated with a suggested ratio based on your selection.
3. Optional: Change the ratio in the popover. For example, enter **3:2** to input triplets.
4. Press **Return** to close the popover.

RESULT

The selected notes are turned into tuplets according to the ratio in the popover. For example, if you select five eighth notes and enter **5:4** into the popover, the selected notes become quintuplet eighth notes.

If the selected notes fit into a single tuplet of the specified ratio, only a single tuplet is created. If the selected notes do not fit into a single tuplet, as many tuplets as required are created automatically.

RELATED LINKS

Tuplets popover on page 187

# Turning tuplets into normal notes

You can turn any existing tuplets notes into normal notes, for example, if you want to turn tuplet eighth notes into standard eighth notes.

PROCEDURE

1. In Write mode, select just the brackets, numbers/ratios, or signposts of the tuplets you want to turn into normal notes.

   NOTE

   You must not select any of the noteheads in the tuplets.

2. Optional: If you want to retain all notes in the selected tuplets, press **I** to activate Insert mode.
3. Press **Backspace or Delete**.

RESULT

All notes in the selected tuplets are unscaled and appear as normal notes with the same notated duration, for example, a tuplet quarter note becomes a standard quarter note.

When Insert mode is activated, all notes in the tuplets are retained and any subsequent existing notes are pushed to later rhythmic positions to accommodate the extra rhythmic durations required. When Insert mode is deactivated, the earliest selected tuplets expand and overwrite subsequent notes and tuplets.

RELATED LINKS
Hiding/Showing signposts on page 315
Tuplet numbers/ratios on page 866
Tuplet brackets on page 864

# Allowing/Disallowing tuplets to span barlines

You can allow tuplets to span barlines, for example, in Renaissance music, you might want tuplets to span tick barlines without affecting their notation. By default, Dorico Elements automatically splits tuplets over barlines so that both the durations of bars and the divisions in tuplets are clear.

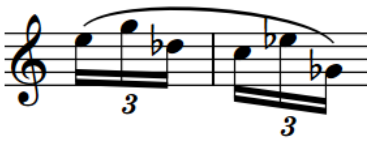
PROCEDURE

1. Select the tuplet brackets or tuplet numbers/ratios of the tuplets you want to allow/disallow to span barlines.
2. In the Properties panel, activate/deactivate **Spans barline** in the **Tuplets** group.

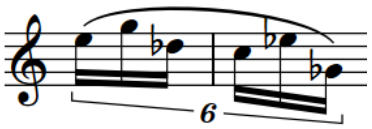
RESULT

The selected tuplets span barlines when **Spans barline** is activated, and are automatically split at barlines when it is deactivated.

EXAMPLE




A 16th note sextuplet across a barline, notated as two triplets




The same sextuplet allowed to span the barline and beamed together

AFTER COMPLETING THIS TASK

You can beam notes in the selected tuplets together.

RELATED LINKS
Barlines on page 495
Beaming notes together manually on page 512
Tuplet brackets on page 864
Tuplet numbers/ratios on page 866

# Moving tuplets rhythmically

You can move tuplets to different rhythmic positions after they have been input, including independently of tuplet brackets and tuplet numbers/ratios. Moving notes beyond the boundaries of a tuplet turns them back into normal notes.

PROCEDURE

1. In Write mode, select the tuplets you want to move.

   NOTE

   You must also select their tuplet numbers/ratios, brackets, or tuplet signposts in the selection if you want the notes to remain tuplets. If a tuplet number/ratio or tuplet bracket is not selected, the notes become normal notes of their rhythmic value when you move them beyond the boundaries of tuplets.

2. Move the selected tuplets according to the current rhythmic grid resolution in any of the following ways:
   - Press **Alt/Opt-Right Arrow** to move them to the right.
   - Press **Alt/Opt-Left Arrow** to move them to the left.

   NOTE

   You cannot move tuplets rhythmically using the mouse.

RESULT

The selected tuplets are moved to new rhythmic positions.

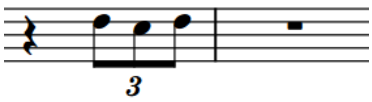
If a tuplet number/ratio or tuplet bracket is included in the selection, the whole tuplet is moved along the staff. If it crosses a barline, the tuplet is automatically adjusted to compensate.

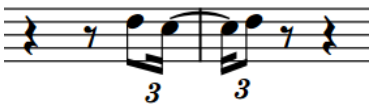
NOTE

- If **Chords** is not activated and any of your selected notes collide with other notes in the same staff and at the same rhythmic position that are in the same voice as your selected notes, the existing notes are deleted and replaced with your selected notes.

  You can undo moving notes immediately, which restores any notes deleted in the process.
- Tuplets are not automatically adjusted at the mid-point of bars, where it is convention to split tuplets to show the beat division. You must enter two tuplets manually to show the beat division at the mid-point of bars.

EXAMPLE



# Deleting tuplets

You can delete tuplets, including all the tuplet notes, but you can also delete tuplet brackets and numbers/ratios without deleting the corresponding notes.

PROCEDURE

1. In Write mode, select the tuplets you want to delete.

   TIP

   To delete an entire tuplet and all the notes within it, select all the noteheads and the corresponding tuplet bracket or tuplet number/ratio.

2. Press **Backspace or Delete**.

RESULT

The selected tuplets are deleted.

- Selecting just the notes deletes the notes, but does not delete the tuplet.
- Selecting just the tuplet bracket or tuplet number/ratio deletes the tuplet, and the notes that were previously within the tuplet are retained with the same notated duration. For example, deleting the bracket from triplet quarter notes leaves the notes previously in the triplet as three quarter notes.

NOTE

This overrides existing notes immediately after the tuplet. However, if Insert mode is activated, any subsequent existing notes are pushed to later rhythmic positions to accommodate the extra rhythmic durations required.

RELATED LINKS

Turning tuplets into normal notes on page 860

# Tuplet beams

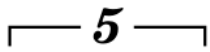
Tuplet beams join notes in tuplets that can be joined with beams just like non-tuplet beams. You can make the same changes to tuplet beams that you can make to any other beam.

RELATED LINKS

Beaming on page 510
Tuplets within beams on page 521
Beaming notes together manually on page 512
Unbeaming notes on page 512
Splitting beam groups on page 511
Changing the direction of partial beams on page 513
Changing beam slants on page 515

# Tuplet brackets

Tuplet brackets show the duration of tuplets that are not joined by beams, such as triplet quarter notes, by showing the notes within the tuplet under a bracket.




Tuplet bracket with tuplet number shown

NOTE

You can use properties in the **Tuplets** group of the Properties panel to edit individual tuplet brackets; however, the **Tuplets** group is only shown if you select tuplet numbers/ratios or brackets. It is not shown if you select notes within the tuplet, or notes within the tuplet and the tuplet number/ratio or bracket.

RELATED LINKS

Lines on page 719

## Hiding/Showing tuplet brackets

You can hide/show tuplet brackets independently of tuplet numbers/ratios.

PROCEDURE

1. Select the tuplet brackets you want to hide, or the signposts of tuplets whose brackets you want to show.
2. In the Properties panel, activate **Bracket** in the **Tuplets** group.
3. Choose one of the following options:
   - **Hidden**

     
     
   - **Shown**

RESULT

Brackets on the selected tuplets are hidden/shown. Signposts are shown at the position of each hidden tuplet, that is, tuplets with no numbers/ratios or brackets shown.

AFTER COMPLETING THIS TASK

If you want to hide indications of tuplets entirely, you might also need to hide the tuplet numbers/ratios.

RELATED LINKS

Signposts on page 314
Hiding/Showing tuplet numbers/ratios on page 866

# Changing the staff-relative placement of tuplet brackets

You can show individual tuplet brackets and tuplet numbers/ratios above or below the staff or between staves.

PROCEDURE

1. Select the tuplet brackets and tuplet numbers/ratios whose staff-relative placement you want to change.
2. In the Properties panel, activate **Placement** in the **Tuplets** group.
3. Choose one of the following options:
   - **Above**

     
   - **Below**

     
   - **Cross-staff above**

     
   - **Cross-staff below**

RESULT

The placement of the selected tuplet brackets is changed.

TIP

- Deactivating **Placement** returns the selected tuplets to their default placement.
- You can also switch selected tuplets between being above/below the staff or cross-staff above/cross-staff below by pressing **F**.

# Changing the rhythmic end position of tuplet brackets

You can change the rhythmic end position of tuplet brackets relative to individual notes individually.

PROCEDURE

1. Select the tuplet brackets whose end position you want to change.
2. In the Properties panel, activate **End position** in the **Tuplets** group.
3. Choose one of the following options:
   - **End at right-hand side of final note**

     
   - **End immediately before following note**

     
   - **End at position of final tuplet division**

RESULT

The end position for the selected tuplet brackets is changed.

Deactivating the property returns the selected tuplets to your default settings.

## Forcing tuplet brackets to be horizontal

You can change the angle of individual tuplet brackets so that they appear horizontal.

PROCEDURE

1. Select the tuplet brackets whose angle you want to change.
2. In the Properties panel, activate **Force horizontal** in the **Tuplets** group.

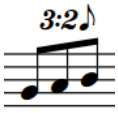
RESULT

The selected tuplet brackets appear horizontal when the property is activated.

# Tuplet numbers/ratios

Tuplet numbers and ratios are very similar: both indicate the number of equal notes included in the tuplet, such as 3 for triplets, but tuplet ratios also include the number of normal notes into whose duration the tuplet fits, such as 3:2 for triplets.

Additionally, tuplet ratios can include a note that indicates the duration of notes in the tuplet.




A triplet with a ratio and note value indication

Tuplet numbers/ratios help performers quickly identify the type of tuplet and how they must fit the number of notes indicated into the prevailing tempo and meter.

NOTE

You can use properties in the **Tuplets** group of the Properties panel to edit individual tuplet numbers/ratios; however, the **Tuplets** group is only shown if you select tuplet numbers/ratios or brackets. It is not shown if you select notes within the tuplet, or notes within the tuplet and the tuplet number/ratio or bracket.

## Hiding/Showing tuplet numbers/ratios

You can hide/show tuplet numbers/ratios individually. When showing tuplet numbers/ratios, you can choose a different type for each tuplet individually.

PROCEDURE

1. Select the tuplet brackets whose numbers/ratios you want to hide/change, or the signposts of tuplets whose numbers/ratios you want to show.
2. In the Properties panel, activate **Number** in the **Tuplets** group.
3. Choose one of the following options:
   - **None**

- **Number**

- **Ratio**

- **Ratio+note**

RESULT

The tuplet number/ratio shown for the selected tuplets is changed. If you selected **None**, the tuplet numbers/ratios for the selected tuplets are hidden. Signposts are shown at the position of each hidden tuplet, that is, tuplets with no numbers/ratios or brackets shown.

Deactivating **Number** returns the selected tuplets to the default setting.

AFTER COMPLETING THIS TASK

If you want to hide indications of tuplets entirely, you might also need to hide the tuplet brackets.

RELATED LINKS

Hiding/Showing tuplet brackets on page 864

## Changing the position of tuplet numbers/ratios

You can change the horizontal positions of tuplet numbers and ratios in individual tuplet brackets.

PROCEDURE

1. Select the tuplet brackets whose tuplet number/ratio positions you want to change.
2. In the Properties panel, activate **Center** in the **Tuplets** group.
3. Choose one of the following options:
   - **Visual**
   - **Rhythmic**

RESULT

- **Visual** positions tuplet numbers/ratios at the visual center of the tuplet beam or tuplet bracket.
- **Rhythmic** positions tuplet numbers/ratios at the rhythmic center of the tuplet beam or tuplet bracket, which might be visually off-center.

RELATED LINKS

Tuplet brackets on page 864

# Unpitched percussion

The term “unpitched percussion” covers all percussion instruments that are not tuned to specific pitches. This includes instruments such as bass drum, guiro, maracas, cymbals, and shakers.

Dorico Elements provides comprehensive support for unpitched percussion notation, with flexible options for combining music for multiple instruments into percussion kits that can then be displayed differently in different layouts. You can also define percussion kits as drum sets, which changes the default stem directions of notes.

The different percussion kit presentation types in Dorico Elements are layout-specific, meaning you can present percussion kits in different ways in different layouts. For example, you could present a percussion kit as a five-line staff in the full score layout but with single-line instruments in the percussion part layout.

You can also customize and create new playing technique-specific noteheads for unpitched percussion. This allows you to indicate how notes are played by using different noteheads for different playing techniques on each instrument in percussion kits.

RELATED LINKS
Percussion kits and drum sets on page 869
Percussion kit presentation types on page 873
Staff labels for percussion kits on page 798
Defining percussion kits as drum sets on page 119
Inputting notes in percussion kits on page 176
Playing techniques for unpitched percussion instruments on page 875
Showing brackets on noteheads on page 641

## Percussion kits vs. individual percussion instruments

Percussion kits allow you to show multiple unpitched percussion instruments held by a single player at the same time in different ways. Multiple percussion instruments not combined into kits are shown on a single line that only shows the instrument currently being played by default.

One common type of percussion kit is a drum set. A drum set consists of a number of separate instruments mounted together on a frame, and is typically written on a regular five-line staff. Each instrument has its own position on the staff, and sometimes its own notehead type. Similarly, a pair of bongos is a percussion kit by default in Dorico Elements, consisting of the two bongo drums, typically written on a grid with two lines: the smaller drum shown on the top line, and the larger drum shown on the bottom line.

Showing individual percussion instruments separately can be appropriate if a player only has one or two percussion instruments. However, combining percussion instruments into a kit gives you more flexibility over the presentation of music, which you can vary in each layout independently. Kits also give you greater control over the labeling of instruments.

If instrument changes are enabled on the **Players** page in **Setup** > **Layout Options**, Dorico Elements changes from one instrument to the next, just as it does for pitched instruments.

NOTE

Kit instruments in player cards in the **Players** panel in Setup mode are colored green, whereas individual percussion instruments not part of percussion kits are colored the same light blue as all other instruments.

# Percussion kits and drum sets

A percussion kit is a collection of unpitched percussion instruments that are played by a single player. Drum sets are a particular type of percussion kit that are often used in pop and rock music.

NOTE

In this documentation, we use “percussion kit” to refer to both percussion kits and drum sets.

In Dorico Elements, you can present percussion kits in different ways, including as a five-line staff and as a grid. If you want percussion kits to behave as drum sets, you can define them as drum sets.

You can create percussion kits in Setup mode. You can combine existing unpitched percussion instruments into kits and add empty kits to players, to which you can then add unpitched percussion instruments. You can also import existing kits you have previously exported and saved.

You can move percussion instruments between players, without affecting any music already added to that instrument.

NOTE

If the instrument you want to move is combined into a percussion kit, you must first remove the instrument from the kit before you can move it to another player.

You can change individual percussion instruments like any other instrument. However, you can only change unpitched percussion instruments to other unpitched percussion instruments, and you can only change the percussion instruments in kits within the **Edit Percussion Kit** dialog.

RELATED LINKS
Note input setup for percussion kits on page 177
Percussion kit presentation types on page 873
Staff labels for percussion kits on page 798
Edit Percussion Kit dialog on page 115
Combining individual percussion instruments into kits on page 113
Defining percussion kits as drum sets on page 119
Adding instruments to percussion kits on page 118
Removing individual instruments from percussion kits on page 122
Moving instruments on page 114
Inputting notes in percussion kits on page 176

## Exporting percussion kits

You can export percussion kits as library files. This allows you to use kits again without having to create them from scratch.

PROCEDURE

1. In the **Players** panel in Setup mode, expand the card of the player whose percussion kit you want to export.
2. Click the arrow that appears in the kit instrument label when you hover over it and choose **Edit Percussion Kit** to open the **Edit Percussion Kit** dialog.
3. Click **Export Kit** at the bottom of the dialog to open the File Explorer/macOS Finder.
4. In the File Explorer/macOS Finder, specify a name and location for the library file.

5. Click **Save**.

RESULT

The kit is exported and saved as a library file.

TIP

You can later import the library file into other projects to reuse the percussion kit.

## Importing percussion kits

You can import library files containing percussion kits, which allows you to use kits again without having to create them from scratch.

PREREQUISITE

You have added a new solo player in the **Players** panel in Setup mode.

PROCEDURE

1. In Setup mode, open the instrument picker for your empty solo player in any of the following ways:
   - Select the empty player and press **Shift-I**.
   - Click the plus symbol in the empty player card.

     
   - Right-click the empty player and choose **Add Instrument to Player** from the context menu.
2. Click **Import Kit** in the instrument picker to open the File Explorer/macOS Finder.
3. In the File Explorer/macOS Finder, locate and select the percussion kit library file you want to import.
4. Click **Open**.

RESULT

The selected library file is imported as a percussion kit. It is assigned to the player from whose card you opened the instrument picker.

# Changing the playing techniques of notes on percussion kit staves

For notes on percussion kit staves that use playing technique-specific noteheads to indicate different playing techniques, you can change their playing techniques after they have been input by cycling through the available playing technique-specific noteheads.

NOTE

These steps only apply to changing playing technique-specific noteheads.

PREREQUISITE

The percussion kit instruments whose playing techniques you want to change have at least two playing technique-specific noteheads defined in the **Percussion Instrument Playing Techniques** dialog.

PROCEDURE

1. In Write mode, select the notes whose playing technique-specific notehead you want to change.

   NOTE

   The current playing technique is shown above the rhythmic grid if you select a single note. It is not shown if you select multiple notes.

2. Cycle through the available playing techniques for the selected instruments in any of the following ways:
   - Press **Shift-Alt/Opt-Up Arrow** to cycle upwards.
   - Press **Shift-Alt/Opt-Down Arrow** to cycle downwards.

RESULT

The playing techniques of the selected notes are changed. Their notehead design and/or position might be changed.

RELATED LINKS

Percussion Instrument Playing Techniques dialog on page 876
Inputting notes in percussion kits on page 176
Defining how combinations of articulations and single-note tremolos sound in playback on page 455
Playing techniques on page 709
Showing brackets on noteheads on page 641

# Moving notes to different instruments in percussion kits

You can move notes to different instruments in the same percussion kit after they have been input, except in layouts using the single-line instruments kit presentation type.

In layouts using the single-line instruments kit presentation type, you can instead cross notes to other staves to create cross-staff beams.

PROCEDURE

1. In Write mode, select the notes you want to move to a different instrument in the percussion kit.
2. Move the notes to another instrument in any of the following ways:
   - Press **Alt/Opt-Up Arrow** to move them to the instrument above.
   - Press **Alt/Opt-Down Arrow** to move them to the instrument below.

RESULT

The notes are moved to another instrument in the kit.

AFTER COMPLETING THIS TASK

You can change the position of each instrument in the kit.

RELATED LINKS

Edit Percussion Kit dialog on page 115
Changing the positions of instruments within percussion kits on page 121
Percussion kit presentation types on page 873
Changing the presentation type of percussion kits on page 874
Creating cross-staff beams on page 517

# Notations on notes in percussion kits

You can add notations to notes and use different rhythms in percussion kits in the same ways as for normal notes; however, they can behave differently.

## Articulations

You can add articulations to percussion instruments in all kit presentation types in the same ways as for other instruments.

However, in grid and five-line staff presentations, any articulations you add apply to all instruments in the same voice that have notes at that rhythmic position. For example, if both a snare drum and tom-tom note are at the same rhythmic position, and you add an accent, the accent is added to both instruments because they are both shown in the same down-stem voice by default.

You can see the accent applied to each note if you switch to the single-line instruments presentation type.

## Tuplets

When working in the grid and five-line staff kit presentation types, tuplets are added to all instruments in the same voice.

You can switch to the single-line instruments presentation type to input cross-rhythms on each instrument separately. When you switch back to the grid or five-line staff kit presentation types, Dorico Elements attempts to resolve the rhythmic conflicts.

- Conflicting tuplets: One tuplet is moved into an extra voice for the duration of the conflict.
- Tuplet notes in one instrument and non-tuplet notes in another instrument starting at the same rhythmic position: The non-tuplet note is displayed as if it were part of the tuplet. This is because the note onset is at the same position as the start of the tuplet, so it sounds the same as the original notation.
- Tuplet notes in one instrument and non-tuplet notes in another instrument that do not start at the same rhythmic position, or other non-tuplet notes that start part-way through the tuplet: Non-tuplet notes are moved into an extra voice for the duration of the conflict.

  NOTE

  Deleting a tuplet from grid and five-line staff kit presentation types deletes the tuplet from all instruments whose notes contribute to the same shared voice.

## Playing techniques

You can input playing techniques, such as **+** for closed and **o** for open hi-hat, during note input and add them later to existing notes in the same ways as for other instruments. You can use the playing techniques popover or click any of the playing techniques in the Playing Techniques panel in Write mode.

Playing techniques are only added to the instrument to which the note you select belongs, even if there are other instruments in the same voice.

## Percussion stickings

Dorico Elements does not yet have a dedicated feature for percussion stickings. However, you can use lyrics to represent percussion stickings in all kit presentation types:

- Grid/Five-line staff presentation types: Select a note in the instrument in which you want to show stickings.

- Single-line instruments presentation type: Input lyrics directly into instruments in which you want to show stickings.

RELATED LINKS
Inputting articulations on page 201
Inputting tuplets on page 186
Changing the pitch of individual notes on page 191
Input methods for playing techniques, pedal lines, string indicators, and harp pedal diagrams on page 263
Inputting lyrics on page 279

## Dynamics in percussion kits

Unlike other items, dynamics are not shared between the grid/five-line staff presentation types and the single-line instruments presentation type. Any dynamics added to instruments in the single-line instruments presentation type do not appear when you switch to grid/five-line presentations.

This is due to the complexity of combining a large number of different dynamics at the same rhythmic position, as allowed in the single-line instruments presentation, into the single position required for both the grid and five-line staff presentations. Therefore, you can add dynamics in the grid and five-line staff presentation types independently of the single-line instruments presentation type.

RELATED LINKS
Input methods for dynamics on page 229

# Percussion kit presentation types

You can show percussion kits in three different presentation types, which can be different in each layout in your project.

NOTE

Dynamics are not shared between the grid/five-line staff presentation types and the single-line instruments presentation type. Any dynamics added to instruments in the single-line instruments presentation type do not appear when you switch to grid/five-line presentations.

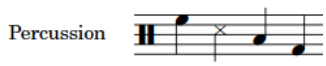
You can edit the appearance/structure of each presentation type independently in the **Edit Percussion Kit** dialog. For example, changing the order of instruments in the five-line staff presentation does not affect the order of instruments in the grid presentation of the same percussion kit.

**5-line staff**

Kit instruments are shown on a five-line staff. You can determine which instruments are shown on each line and in each space of the staff. A single staff label containing the name of the kit is shown.

The numbers down the left-hand side of the editing area in the **Edit Percussion Kit** dialog correspond to staff positions. For example, position 0 is the middle line of the five-line staff, position 1 is the space immediately above the middle staff line, position -2 is the line below the middle staff line, and so on.

Bold black lines show the five staff lines, while gray lines above and below the staff show nominal staff line positions. Each instrument is shown on its staff position.




5-line staff presentation

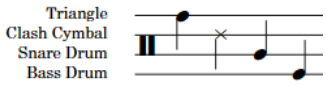
**Grid**

Kit instruments are shown on a grid, with each instrument on its own line. You can customize the size of the gaps between each line. Staff labels are shown for each instrument in a smaller font than normal staff labels.

The numbers down the right-hand side of the editing area in the **Edit Percussion Kit** dialog correspond to the number of staff spaces between each instrument line. By default, all instruments in a grid are two spaces apart.

The order in which the instruments are listed matches the order in which they appear in the score.

Each instrument in a grid shows its own staff label by default, aligned vertically with its own line, but you can group adjacent instruments together and show a single label for each group.

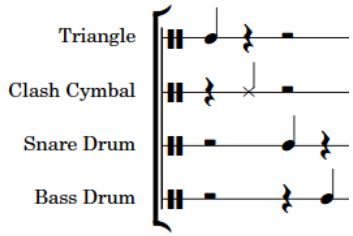



Grid presentation

**Single-line instruments**

Kit instruments are shown as individual instruments with their own lines. Normal-sized staff labels are shown for each instrument.

The editing area in the **Edit Percussion Kit** dialog lists all of the instruments in the order in which they appear in the score.




Single-line instruments presentation

Multiple instruments held by the same player are vertically spaced according to the ideal gaps defined on the **Vertical Spacing** page in **Setup** > **Layout Options**.

RELATED LINKS
Percussion kits and drum sets on page 869
Edit Percussion Kit dialog on page 115
Staff labels for percussion kits on page 798
Overriding the appearance of playing technique-specific noteheads on page 879
Override Percussion Noteheads dialog on page 877

# Changing the presentation type of percussion kits

You can change the presentation type of percussion kits in each layout independently and independently of each other. For example, you can use a five-line staff in the full score layout but

a grid in the percussion part layout, and have two percussion kits with different presentation types in the same full score layout.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to change the percussion kit presentation type.

   By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Players** in the page list.
4. In the **Percussion** section, choose one of the following options for each percussion kit in your project:
   - **5-line Staff**
   - **Grid**
   - **Single-line Instruments**
5. Click **Apply**, then **Close**.

RESULT

The presentation type is changed for the selected percussion kits in the selected layouts.

RELATED LINKS

Percussion kit presentation types on page 873

# Playing techniques for unpitched percussion instruments

As well as using normal playing techniques on notes in percussion kits, you can use the design and position of noteheads to indicate different playing techniques for unpitched percussion instruments and percussion kits.

You can indicate playing techniques for unpitched percussion instruments in any of the following ways:

- Use playing technique-specific noteheads
- Position notes in spaces directly above/below the line on which notes are normally written
- Add articulations or single-note tremolos
- Add playing techniques in the same ways as for pitched instruments

For example, you can add open and closed techniques for hi-hats using the playing techniques popover, or by clicking the playing techniques you want in the Playing Techniques panel.

You can edit the set of playing technique-specific noteheads defined for each percussion instrument in the **Percussion Instrument Playing Techniques** dialog.

RELATED LINKS

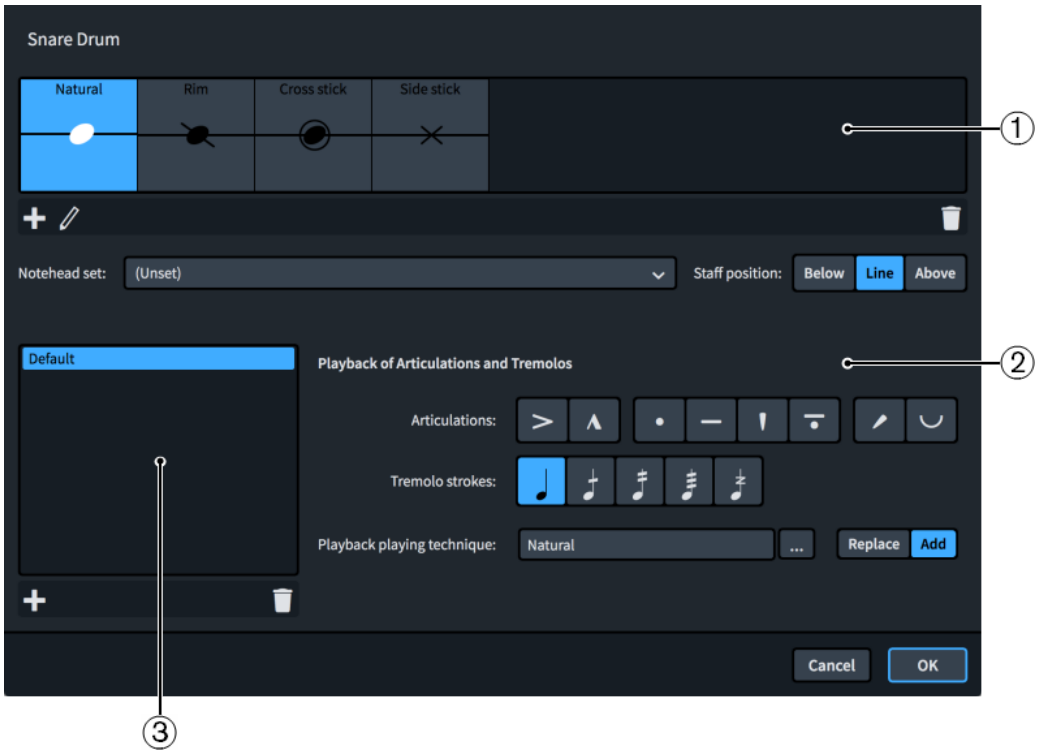
Edit Percussion Kit dialog on page 115
Defining how combinations of articulations and single-note tremolos sound in playback on page 455
Exporting percussion kits on page 869
Importing percussion kits on page 870
Input methods for playing techniques, pedal lines, string indicators, and harp pedal diagrams on page 263

# Percussion Instrument Playing Techniques dialog

The **Percussion Instrument Playing Techniques** dialog allows you to edit the set of playing technique-specific noteheads defined for each percussion instrument.

You can open the **Percussion Instrument Playing Techniques** dialog in Setup mode in the following ways:

- For an individual percussion instrument: In the **Players** panel, expand the card of the player holding the instrument, click the arrow in the instrument label, and choose **Edit Percussion Playing Techniques** from the menu.
- For percussion instruments that are part of percussion kits: In the **Players** panel, click the arrow in the kit instrument label, and choose **Edit Percussion Kit** to open the **Edit Percussion Kit** dialog, select the instrument whose playing techniques you want to edit in the main editing area, and click **Edit Percussion Playing Techniques**.




**Percussion Instrument Playing Techniques** dialog

**1 List of playing technique-specific noteheads**

Contains the main playing technique-specific noteheads currently defined for the selected percussion instrument, showing the notehead set and the staff position corresponding to the playing technique as applicable.

You can add new playing technique-specific noteheads for unpitched percussion instruments. Normally, percussion instruments define at least the **Natural** playing technique, which is usually shown using the default notehead set.

**2 Playback of Articulations and Tremolos**

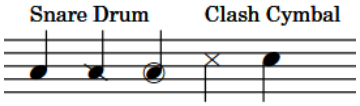
Allows you to define how combinations of articulations and tremolo strokes affect or override the playback of playing techniques.

For example, you can define an entirely different playing technique for a playing technique-specific notehead for when an accent is added to it.

**3 Overrides of articulations and tremolos list**

Displays any overrides of articulations and tremolos you define.

EXAMPLE




Three different snare drum playing technique-specific noteheads followed by two clash cymbal playing technique-specific noteheads

All of these settings are saved in the percussion instrument within your project, and you can export them from one project and import them into others.

NOTE

Overrides for articulations and tremolos are not currently reflected in playback, but this is planned for future versions.

RELATED LINKS

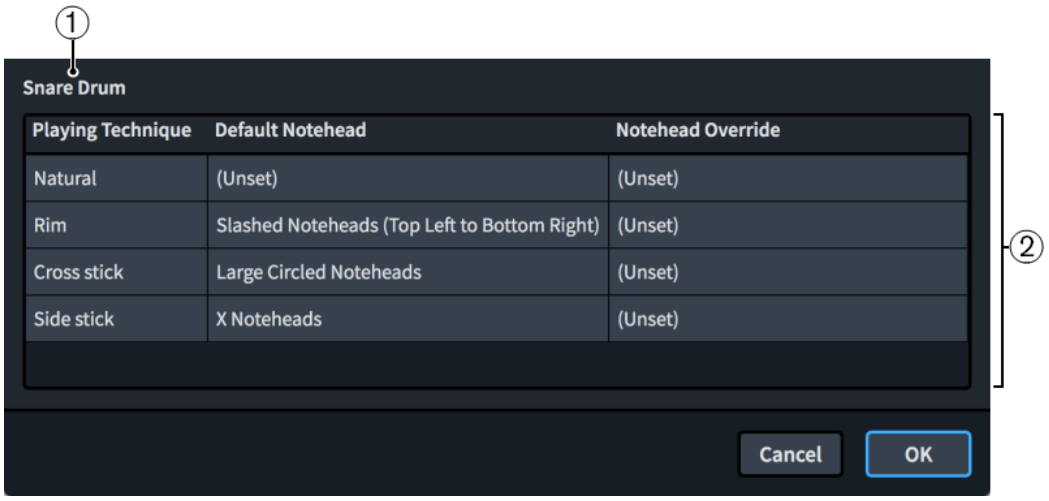
Defining how combinations of articulations and single-note tremolos sound in playback on page 455
Exporting percussion kits on page 869
Importing percussion kits on page 870

## Override Percussion Noteheads dialog

The **Override Percussion Noteheads** dialog lists the playing technique-specific noteheads defined for the selected instrument in the **Percussion Instrument Playing Techniques** dialog, shows the notehead type mapped for each technique, and allows you to override those noteheads for five-line staff kit presentations only.

For example, the same notehead can indicate different playing techniques for different instruments. When those instruments are presented on the same five-line staff, this can cause confusion, so you can use the **Override Percussion Noteheads** dialog to disambiguate the notes for one instrument from another in five-line staff kit presentations only.

- You can open the **Override Percussion Noteheads** dialog by selecting an instrument in the **Edit Percussion Kit** dialog and clicking **Edit Noteheads**.




**Override Percussion Noteheads** dialog for a snare drum

The **Override Percussion Noteheads** dialog comprises the following:

1 **Instrument name**

Displays the name of the percussion instrument whose noteheads are listed in the dialog.

2 **Playing techniques table**

Contains the noteheads for the selected percussion instrument, arranged into the following columns:

- **Playing Technique**: Displays the playing technique associated with the notehead in the corresponding row of the table.
- **Default Notehead**: Displays the notehead used by default for the playing technique in the corresponding row of the table.
- **Notehead Override**: Displays the notehead override used in five-line staff presentations for the playing technique in the corresponding row of the table. You can change the notehead override by clicking it and selecting another notehead from the menu.

RELATED LINKS

Percussion kit presentation types on page 873

# Creating new playing technique-specific noteheads for unpitched percussion instruments

You can define new playing technique-specific noteheads for unpitched percussion instruments individually, which are saved for that type of percussion instrument in your project. You can also export playing technique-specific noteheads from your project and import them into other projects.

PROCEDURE

1. In Setup mode, open the **Percussion Instrument Playing Techniques** dialog in one of the following ways:
   - For an individual percussion instrument: In the **Players** panel, expand the card of the player holding the instrument, click the arrow in the instrument label, and choose **Edit Percussion Playing Techniques** from the menu.
   - For percussion instruments that are part of percussion kits: In the **Players** panel, click the arrow in the kit instrument label, and choose **Edit Percussion Kit** to open the **Edit Percussion Kit** dialog, select the instrument whose playing techniques you want to edit in the main editing area, and click **Edit Percussion Playing Techniques**.
2. Click **Add Playing Technique**.

   
3. Select the playing technique you want to create in the dialog that opens.
4. Click **OK** to add the selected playing technique to the list of playing technique-specific noteheads.
5. Select the notehead you want for the playing technique from the **Notehead set** menu.

   NOTE

   Leave **Notehead set** as **(Unset)** to use the default notehead set.
6. Choose one of the following options for **Staff position**:
   - **Below**
   - **Line**
   - **Above**

RESULT

A new playing technique-specific notehead is added to the selected unpitched percussion instrument.

RELATED LINKS

Input methods for playing techniques, pedal lines, string indicators, and harp pedal diagrams on page 263
Defining how combinations of articulations and single-note tremolos sound in playback on page 455

## Overriding the appearance of playing technique-specific noteheads

It might be necessary to override the appearance of playing technique-specific noteheads in order to disambiguate the notes for one instrument from another if they share a staff position in five-line staff kit presentations.

PROCEDURE

1. In the **Players** panel in Setup mode, expand the card of the player holding the kit whose playing technique-specific noteheads you want to override.
2. Click the arrow that appears in the kit instrument label when you hover over it and choose **Edit Percussion Kit** to open the **Edit Percussion Kit** dialog.
3. Select the instrument whose noteheads you want to override in the main editing area of the dialog.
4. Click **Edit Noteheads** to open the **Override Percussion Noteheads** dialog.
5. Click in the **Notehead Override** column for the appropriate playing technique and select a new notehead type from the menu to override its notehead.
6. Click **OK** to save your changes and close the dialog.

RESULT

The playing technique-specific notehead is overridden for the selected instrument in five-line staff kit presentations.

NOTE

This does not affect the appearance of playing technique-specific noteheads in grid and single-line instrument kit presentation types.

RELATED LINKS

Override Percussion Noteheads dialog on page 877

# Percussion legends

Percussion legends list the percussion instruments in use when using the five-line presentation type. Percussion legends can include all instruments that are represented on the staff, or only show sounding instruments in a set range to remind players which instruments to play at certain points.

By default, percussion legends appear above the staff. You can change the placement and appearance of percussion legends individually using properties in the **Percussion Legends** group of the Properties panel.

Percussion legends appear as signposts if there are no instruments sounding at their position, or in layouts using the grid presentation type. Percussion legends do not appear at all in layouts using the single-line instrument presentation type.

TIP

You can hide/show percussion legend signposts by choosing **View** > **Signposts** > **Percussion Legends**. Percussion legend signposts are shown when a tick is shown beside **Percussion Legends** in the menu, and hidden when no tick is shown.

RELATED LINKS
Staff labels for percussion kits on page 798

## Adding percussion legends to five-line staff kit presentations

You can add percussion legends at specific rhythmic positions to indicate the instruments in the kit. Percussion legends can show all instruments in the kit or only instruments sounding within the specified range.

NOTE

Percussion legends only appear when kits use the five-line staff percussion kit presentation type.

PROCEDURE

1. In Write mode, select one of the following:
   - An item on the staff at the rhythmic position where you want to add a percussion legend for all instruments.
   - The range of notes/items for which you want to show a percussion legend for sounding instruments.
2. Add a percussion legend in one of the following ways:
   - Choose **Edit** > **Percussion** > **Legend for All Instruments**.
   - Choose **Edit** > **Percussion** > **Legend for Sounding Instruments**.

   TIP

   You can also choose these options from the context menu.

RESULT

A percussion legend is added to the kit. It appears above the staff in layouts where the kit uses the five-line staff presentation. It lists instruments, either all instruments or just instruments with notes within the selected range, in the order in which they appear in the five-line staff, from highest down to lowest.

## Changing the sounding instrument percussion legend range

You can change the rhythmic range of sounding instrument percussion legends to include more/fewer instruments in the legend, as they only show the instruments playing at the rhythmic positions included in the range.

PROCEDURE

1. In Write mode, select the sounding instrument percussion legend whose range you want to change.
2. Change the range in any of the following ways, according to the current rhythmic grid resolution:
   - To move the whole range to the right, press **Alt/Opt-Right Arrow**.

- To move the whole range to the left, press **Alt/Opt-Left Arrow**.
- To lengthen the range, press **Shift-Alt/Opt-Right Arrow**.
- To shorten the range, press **Shift-Alt/Opt-Left Arrow**.

  NOTE

  Key commands lengthen/shorten items by moving their end only.

- Click and drag the circular handle at the start/end to the right/left.

RESULT

The rhythmic range covered by the selected sounding instrument percussion legend is changed according to the current rhythmic grid resolution.

The instruments included in the percussion legend are automatically updated to reflect the instruments playing within the range.

## Changing the percussion legend type

You can change the type of percussion legends so they show all instruments or only sounding instruments in five-line staff presentations.

PROCEDURE

1. Select the percussion legends whose type you want to change.
2. In the Properties panel, activate **Legend type** in the **Percussion Legends** group.

   NOTE

   The property is already activated for sounding instrument percussion legends.

3. Choose one of the following options:
   - **Legend**
   - **Sounding instruments**

RESULT

The legend type of the selected legends is changed.

## Showing short instrument names in percussion legends

Percussion legends use full instrument names by default, but you can choose to use short names to save space.

PROCEDURE

1. Select the percussion legends whose instrument name lengths you want to change.
2. In the Properties panel, activate **Use short names** in the **Percussion Legends** group.

RESULT

Short instrument names are shown in the selected percussion legends.

Deactivating **Use short names** returns the selected percussion legends to showing full instrument names.

RELATED LINKS

Staff labels for percussion kits on page 798

# Voices in percussion kits

Dorico Elements automatically combines music into a smaller number of voices when multiple percussion instruments are presented in a five-line staff or as a grid, even if they contain different rhythms. By default, music is combined into one up-stem voice and one down-stem voice.

You can override this option for individual percussion kits, and for individual notes in percussion kits.

Notes in the same voice cannot be notated using different durations and are notated using ties by default instead.

If one of the instruments in a percussion kit has a tuplet rhythm, other instruments can share the voice if their notation is compatible, such as if the tuplet structure is the same, or if they have a single note that coincides with the start of the tuplet. In this case, the single non-tuplet note is notated as the same duration of the first note of the tuplet.

If the music of the different instruments in the same voice is incompatible, Dorico Elements dynamically creates another voice and notates the remaining music in that voice until the music is compatible again.

RELATED LINKS

Notations on notes in percussion kits on page 872
Defining percussion kits as drum sets on page 119
Adding slash voices to percussion kits on page 891

## Changing the voice of individual notes in percussion kits

You can override the default voice for individual notes in percussion kits, including drum sets.

PROCEDURE

1. Select the notes whose voice you want to override.
2. Choose **Edit** > **Percussion** > **Change Voice** > **[Voice]**.

   For example, to change notes to the second down-stem voice, choose **Edit** > **Percussion** > **Change Voice** > **Down-stem Voice 2**. You can also choose this option from the context menu.

RESULT

The voice of the selected notes is changed, independently of the default voice for their instrument and independently of your setting for voices in drum sets.

TIP

You can reset the voice of individual notes by selecting them and choosing **Edit** > **Percussion** > **Change Voice** > **Reset Note Destination Voice**. You can also choose this option from the context menu.

## Specifying the stem direction/voice of instruments in percussion kits

You can specify the stem direction for each instrument in individual percussion kits. You can also set which voice they are in, allowing you to control which instruments share voices in percussion kits.

PROCEDURE

1. In the **Players** panel in Setup mode, expand the card of the player holding the kit whose instrument stem directions and voices you want to specify.
2. Click the arrow that appears in the kit instrument label when you hover over it and choose **Edit Percussion Kit** to open the **Edit Percussion Kit** dialog.
3. In the dialog, select an instrument whose stem direction and voice you want to specify.
4. Choose one of the following stem directions for **Stem direction and voice**:
   - **Up-stem**

     
   - **Down-stem**

     
5. Specify a voice by changing the value for **Stem direction and voice**.

   NOTE

   You do not have to change the voice number if you are switching between up- and down-stem voices as the number corresponds to the voice number for each stem direction.
6. Click **Apply**, then **Close**.

RESULT

The default stem direction and voice of the selected instrument is changed.

# Unpitched percussion in Play mode

Unpitched percussion instruments are handled differently in Play mode than pitched instruments. Instead of showing the usual piano roll view, the onset of each note on each percussion instrument is shown in the drum editor.

You can expand each instrument in a kit at the left end of the track header in order to assign that particular instrument to another playback endpoint. For example, you can assign instruments to another channel on the same VST instrument or MIDI output device, or to a different device.

NOTE

The endpoint must have an appropriate selected percussion map.

Notes can be moved in Play mode by dragging them to the rhythmic position you want. However, like other instruments, you cannot move notes between percussion instruments, even if they are in the same percussion kit.

NOTE

You cannot change the duration of unpitched percussion notes within Play mode. This is planned for future versions.

RELATED LINKS
Percussion maps on page 449
Drum editor on page 374
Inputting notes in the event display on page 375
Moving notes in the event display on page 376

## Unpitched percussion imported from MIDI files

When importing MIDI files, Dorico Elements optionally interprets music for tracks set to use channel 10 as drum sets if **Interpret channel 10 as General MIDI percussion** is activated in the **MIDI Import Options** dialog.

NOTE

The **MIDI Import Options** dialog opens automatically when you open MIDI files in Dorico Elements.

This is the only condition under which Dorico Elements interprets any music in MIDI files as percussion.

## Unpitched percussion imported from MusicXML files

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

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

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

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

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

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

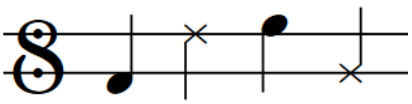
RELATED LINKS
Edit Percussion Kit dialog on page 115
Changing instruments in percussion kits on page 118
Adding instruments to percussion kits on page 118

# Universal Indian Drum Notation

Dorico Elements supports the Universal Indian Drum Notation system developed by Keda Music Ltd.

Universal Indian Drum Notation has been designed primarily for tabla, but can also be applied to other Indian drums with two heads, such as nagara, dhol, dholak, mridangam, and pakhawaj.

An Indian drum clef is automatically added to the staff when you add tabla instruments to players.



You can input Indian drum clefs by clicking **Indian drum clef** in the **Uncommon Clefs** section of the Clefs panel.

RELATED LINKS

Adding instruments to players on page 112
Input methods for clefs and octave lines on page 241

# Voices

For many instruments, such as flute or trombone, each staff usually contains a single musical line in a single voice that is read from left to right along the staff. When multiple, independent lines must be shown in a single staff, each line can be a separate voice.

The most common use for showing multiple voices in a single staff is in vocal music, when the soprano and alto lines share a single staff and the tenor and bass lines share another staff. Showing each vocal line in its own voice helps to separate the lines, making the music easier to read and making the shape of each melodic line clear.

In Dorico Elements, you can create as many voices as you like on each staff. Each voice has its own color, which you can see if you show voice colors. This can help you to keep track of which notes are in which voices if there are multiple overlapping musical lines in your project.

Voices in Dorico Elements are divided into up-stem voices and down-stem voices. Stems of notes in up-stem voices point upwards, while stems of notes in down-stem voices point downwards. However, in bars where only one voice contains notes, stem directions are automatically changed to the directions they would have if there were only one voice on the staff. By default, the first voice on the staff is up-stem.

Following most notation conventions, rests are shown in bars for all voices that have notes in the bar. If two or more voices have a rest of the same rhythmic duration at the same rhythmic position, that rest is consolidated: instead of showing two identical rests, only one is shown.

RELATED LINKS
Inputting notes into multiple voices on page 171
Hiding/Showing voice colors on page 887
Adding notes above/below existing notes on page 189
Stem direction on page 814
Implicit rests in multiple-voice contexts on page 774
Moving rests vertically on page 778

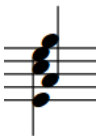
## Note positions in multiple-voice contexts

Notes are usually placed directly above each other and at the same horizontal position, so that it is immediately clear which notes are played together. However, the horizontal alignment of notes can be different in multiple-voice contexts.

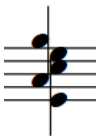
When there are three or more voices in a single staff, some notes must be positioned slightly to one side in a different voice column to ensure the division of notes across the voices is clear.

Interlocking notes in different voices can be positioned in two ways:

1. Notehead to notehead, which allows noteheads to overlap partially. This voice order often takes up less horizontal space than positioning notes stem to stem, as notes can overlap.

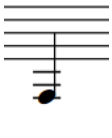


2. Stem to stem, which does not allow noteheads to overlap. This voice order keeps notes in different voices separate.

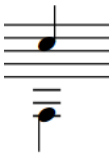


Dorico Elements positions notes by default with the noteheads partially overlapping, in order to minimize the horizontal space they occupy and to maintain the clarity of the rhythm.

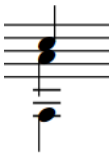
The order and position of notes in different voices is also automatically adjusted so that each rhythmic position uses as little horizontal space as possible, while remaining clear and legible. The voice column for some voices automatically changes as more voices are added, as Dorico Elements prefers showing voices with the widest pitch range between them on the left of the rhythmic position and voices with narrower pitch ranges to the right, as this produces the most balanced result, especially when there are multiple accidentals.



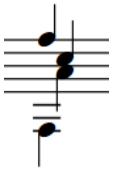
One voice



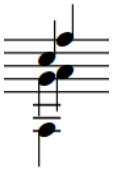
Two voices vertically aligned



Three voices all still vertically aligned



Four voices with two voice columns



Five voices with two voice columns

RELATED LINKS

Slashes in multiple-voice contexts on page 765
Stem direction on page 814
Implicit rests in multiple-voice contexts on page 774

# Hiding/Showing voice colors

You can show notes in different colors according to their voice, for example, to check which notes are in which voice. When voice colors are hidden, all notes appear black by default.

Voice colors are randomly assigned, meaning colors do not refer to specific voices. Voice colors are considered annotations and are not printed by default.

PROCEDURE

- Choose **View** > **Note And Rest Colors** > **Voice Colors**.

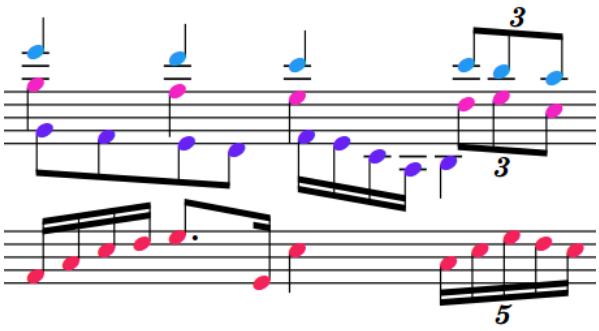
RESULT

Voice colors are shown when a tick appears beside **Voice Colors** in the menu, and hidden when no tick appears.

TIP

You can also identify voices by selecting individual notes and looking at the display in the status bar.

EXAMPLE




Voice colors shown

AFTER COMPLETING THIS TASK

If showing voice colors reveals some notes are not in the voice you want, you can change their voice.

RELATED LINKS

Changing the voice of existing notes on page 319
Swapping the contents of voices on page 320
Stem direction on page 814
Annotations on page 476
Status bar on page 48

# Unused voices

An unused voice is one that contains no notes anywhere in the project. Any unused voices are automatically deleted when you close a project, but you cannot manually delete voices once they have been created. You can create as many voices as you want in each staff.

NOTE

Deleting all notes in a voice does not delete the voice immediately.

If you later want to input notes in a voice that was automatically deleted when you last closed the project, you can create a new voice at any rhythmic position.

RELATED LINKS

Inputting notes into multiple voices on page 171

# Swapping the order of voices

Dorico Elements automatically positions notes with the noteheads partially overlapping, in order to minimize the horizontal space they occupy and maintain the clarity of the rhythm. You can manually swap the order in which opposing voices are positioned horizontally.

PROCEDURE

1. Select the notes whose order you want to change.
2. Choose **Edit** > **Voices** > **Swap Voice Order**. You can also choose this option from the context menu.

RESULT

The voice order of the selected notes is changed.

NOTE

If you swap the contents of these notes again, their positions might not appear as expected as this does not revert their voice order.

EXAMPLE

Interlocking notes in opposing voices positioned notehead to notehead.

Interlocking notes in opposing voices positioned stem to stem.

RELATED LINKS

Stem direction on page 814
Implicit rests in multiple-voice contexts on page 774

## Voice column index

The voice column index is used to determine the positions of notes when multiple columns are needed, for example, when notes are in multiple voices and cannot be placed directly above each other vertically, and instead must partially overlap.

The **Voice column index** property in the **Notes and Rests** group of the Properties panel is automatically activated when you swap the order of voices manually.

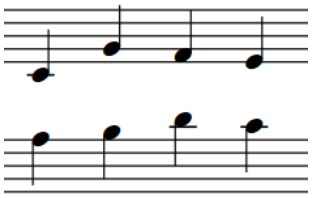
NOTE

This property is available in Engrave mode in Dorico Pro only.

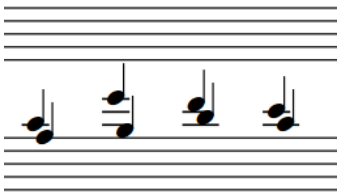
# Notes crossed to staves with existing notes in other voices

When you create cross-staff beams by crossing notes to staves that already contain notes, the stem direction of the existing notes may change. This is due to how multiple voices at the same rhythmic position are handled in Dorico Elements.

For example, if a piano part contains notes in up-stem voices on both staves, the stem direction of notes in both voices can change if notes from the upper staff are crossed to the lower staff. In this situation, the notes from the two staves are not combined, but are instead treated as two up-stem voices in a multiple-voice context.



Two piano staves, each with notes in a single up-stem voice.



When the notes in the upper staff are crossed to the lower staff, the stem direction of the notes already in the lower staff changes so they point upwards.

You can change the stem direction of the notes originally in the lower staff in any of the following ways:

- Select the notes originally in the lower staff and change their voice to another voice, such as a down-stem voice.
- Select the notes originally in the lower staff and change their stem direction.

Alternatively, you can move the notes in the upper staff permanently to the lower staff.

RELATED LINKS
Moving notes to other staves on page 318
Changing the voice of existing notes on page 319
Creating cross-staff beams on page 517
Changing the stem direction of notes on page 816
Stem direction on page 814

# Slash voices

Slash voices allow you to notate specific rhythms for rhythm slashes. They behave similarly to normal voices as you must input notes and rhythms manually, but all notes in slash voices are positioned by default on the middle line of the staff, regardless of the pitches you input.

If you later change the time signature, such as from 3/4 to 6/8, Dorico Elements only changes the note grouping to fit the meter just like for other notes; it does not change the presentation of rhythm in slash voices like it does for slash regions.

NOTE

- Because you can change notes in slash voices to normal voices and vice versa, the pitches you input are retained.
- Notes in slash voices are not played back.

You can have multiple slash voices active at the same time. To accommodate all slash voices in multiple-voice contexts, Dorico Elements changes their staff position automatically. However, you can also change the staff position of rhythm slashes manually.

You can use slash regions and slash voices in the same project and at the same rhythmic positions, for example, you can input a slash region where you do not want to be specific about the rhythm, then input notes in a slash voice for a single bar where you want to specify an exact rhythm.

RELATED LINKS
Rhythm slashes on page 763
Slash regions on page 763
Slashes in multiple-voice contexts on page 765

Changing the voice of existing notes on page 319
Changing the staff position of rhythm slashes on page 766

## Changing the slash voice type

You can change the voice type of slash voices, for example, if you want to change a slash voice from having stems to being stemless. You can also change the type to normal notes, which restores the original pitches you input, and change normal notes to rhythm slashes.

NOTE

This affects all notes in the same voice. If you only want to change the slash voice type of some notes, you must change the voice of those notes instead.

PROCEDURE

1. Select a note in the voice whose slash type you want to change.
2. Choose **Edit** > **Voices** > **Rhythmic Slashes** > **[Voice type]**.
   For example, to change a whole normal voice to a stemless slash voice, choose **Edit** > **Voices** > **Rhythmic Slashes** > **Slashes without Stems**.

   TIP

   You can also choose these options from the context menu.

RESULT

The slash voice type of all notes in the same voice and flow as the selected note is changed.

If you change normal notes to a slash voice, they are all automatically positioned on a single staff line. By default in single-voice contexts, this is the middle line of the staff.

If you change rhythm slashes to normal notes, their original pitches are restored, meaning their staff positions reflect their pitches.

RELATED LINKS

Changing the voice of existing notes on page 319

## Adding slash voices to percussion kits

You can add slash voices to percussion kits, for example, to show the desired rhythm for a passage without specifying the instruments to be played. You can add multiple slash voices to the same kit, including slash voices with and without stems.

NOTE

Rhythm slashes in percussion kits only appear when the five-line staff presentation is used. They do not appear in grid or single-line instrument presentations.

PROCEDURE

1. In the **Players** panel in Setup mode, expand the card of the player holding the percussion kit to which you want to add slash voices.
2. Click the arrow that appears in the kit instrument label when you hover over it and choose **Edit Percussion Kit** to open the **Edit Percussion Kit** dialog.
3. In the action bar below the five-line staff editor, click the button that corresponds to the type of slash voice you want to add.

- Slashes with stems

- Slashes without stems

4. Optional: Repeat step 3 as many times as required for the number of slash voices you want to add.

RESULT

The slash voices are added to the kit. They are positioned on the middle line of the staff by default.

In note input, you can move the caret to slash voices just like moving it to other instruments in the kit, and input notes into slash voices just like inputting notes in percussion kit instruments.

AFTER COMPLETING THIS TASK

You can change the staff position of the slash voices you added to the kit.

RELATED LINKS

Percussion kit presentation types on page 873
Voices in percussion kits on page 882
Edit Percussion Kit dialog on page 115
Inputting notes in percussion kits on page 176
Changing the positions of instruments within percussion kits on page 121

# Glossary

## A

**action**

The mechanism inside pianos that allows the hammers to strike the strings with different forces, depending on the strength with which the player depresses the corresponding key. It allows pianos to use a greater dynamic range, hence their full name “pianoforte”.

**anacrusis**

See pick-up bar.

**articulation**

(1) In music notation, symbols that indicate how a note should be played, typically affecting their onset (attack), release, or duration. (2) In sound libraries, a term that refers to playing techniques generally.

**attachment**

The rhythmic position at which an item occurs, or to which an item applies, in the music.

## B

**bar**

A span of music comprising a specific number of beats, as defined by the prevailing time signature, whose boundaries are indicated by bar lines. Also known as a “measure”, but this documentation uses “bar”.

## C

**cancellation natural**

A natural accidental positioned on the staff immediately before a change in key signature or a single note. It indicates that the previous accidental no longer applies and can be followed immediately by a new accidental if applicable. Showing cancellation naturals before single accidentals that follow double accidentals is also known as “archaic cancellation”. Cancellation naturals before a change in key signature are known as “traditional” when positioned after the barline and “Russian” when positioned before the barline.

**caret**

Shown during note input, the caret is the vertical line that extends above and below the staff and indicates the rhythmic position at which items are input. Also known as an “insertion point”. In Dorico Elements, the caret, cursor, and pointer are related but serve different purposes. See also rhythmic grid, note input.

**casting off**

The act of fixing the layout of pages of music, such as defining a set number of systems per page or the number of bars per system.

**cautionary accidental**

A restatement of an earlier accidental to eliminate ambiguities, such as when a tied note with an accidental continues onto another page. Also known as “courtesy accidentals”.

**channel**

In MIDI, a channel determines which note, controller, or other data is played by which sound on which device. In Dorico Elements, notes on a single staff may be played by different channels, depending on which playing techniques are provided by the patch assigned to each channel. See also MIDI, patch.

**chord**

Two or more notes of the same duration that start at the same rhythmic position and share a stem.

**chord input**

A variation of note input where notes are stacked on top of each other to create chords rather than being input after the previous note in sequence. Notes are input at the caret position, which does not advance automatically. See also caret, note input.

**collision avoidance**

Automatic adjustments made by Dorico Elements to ensure multiple items at the same position do not overlap and that all remain clearly legible. Includes changing the shape of items, such as slurs, and changing the vertical and/or horizontal position of items, such as accidentals in chords.

**column**

A vertical line representing the same horizontal position across all staves in the system. Used to determine the position of notes and chords for the purposes of spacing music accurately. Multiple columns can be used for the same rhythmic position to accommodate multiple voices, with notes or chords in some voices being offset horizontally from notes or chords in other voices.

**concert pitch**

All notes are written as they sound. Full scores are often notated in concert pitch, so that harmonies and themes are easier to identify. Also known as “sounding pitch”. See also transposed pitch, instrument transposition.

**condensing**

The process of showing the music for multiple players on fewer staves than is normal, usually by allowing multiple instruments of the same type to share a staff, such as Flutes 1-2 or Horns 1-4. Most commonly used for large orchestral scores, as when there are fewer staves on a page it is possible to use a larger staff size, which is easier for conductors to read. See also divisi, pitch crossing.

**constant point**

A change in value in a track or lane in Play mode that sets a fixed value until the next point in the track or lane. See also linear point, value line.

**context menu**

A menu that you can access by right-clicking on a mouse or double-tapping on a touchpad. Its options vary by the location of the mouse pointer when you access it, but it most commonly contains options also found on the **Edit** menu.

**cursor**

The vertical blinking line that appears when entering or editing text. See also caret.

## D

**dead note**

A note played on a fretted instrument whose sound is muted to produce a sound that is more percussive than pitched. Usually produced by gently resting one hand on the string. Also known as a “muted”, “muffled”, “ghost”, or “silenced” note. In Dorico Elements, only notes belonging to fretted instruments, such as the guitar or banjo, can be dead notes.

**disclosure arrow**

A small arrow that is shown on all edges of the main window in Dorico Elements. It allows you to hide/show the toolbar and panels individually.

**divisi**

Italian for “divide” or “divided”, divisi is when players split in order to play multiple lines of music. This commonly involves a section, such as Violin I, dividing and using two staves rather than one for a limited passage. Divisi passages can be notated all on the same staff, using multiple voices if required, or across multiple staves. See also tutti, condensing.

**drum set**

A particular type of percussion kit that is often used in pop and rock music. Drum sets often use a different arrangement of voices than percussion kits. In this documentation, references to “percussion kits” also apply to drum sets, as drum sets are a type of percussion kit.

## E

**EDO**

An abbreviation for Equal Division of the Octave, it is a unit used to describe how an octave can be divided into equal parts, often for the purpose of defining a microtonal scale or tonality system. Traditional Western European music uses 12-EDO, that is, each octave is divided into 12 equal semitones or half-steps. Music that uses equal quarter tones uses 24-EDO.

**endpoint**

The unique combination of inputs and outputs that together allow the correct sounds to be played for each instrument.

**Engrave mode**

A mode in Dorico Pro where you can manipulate and modify every item in your project, but without deleting them, moving them rhythmically, or changing the pitch of notes. You can also determine how the pages in each layout of your project are formatted for printing or exporting. See also modes.

**enharmonic equivalent**

An alternative spelling of a note that uses a different scale degree and accidental but produces the same sounding pitch, such as G♯ and A♭.

**ensemble**

A predefined collection of players, each holding instruments that are often used together, such as string quartet, wind quintet, brass quintet, string ensemble, and double woodwinds.

**envelope**

A change in sound over time that comprises multiple stages, such as attack, sustain, and decay. In dynamics lanes in Play mode, envelopes are represented by multiple separate points, each controlling a different parameter of the overall envelope. See also constant point, linear point, value line.

**explicit rest**

A rest that was deliberately input during rest input or imported from a MusicXML file. Explicit rests cannot be suppressed between notes in a particular voice. See also implicit rest.

**exploding**

The process of assigning music to more instruments than it was written for originally. Exploding music is often a key step in arranging and orchestrating music, such as when a piano piece is arranged for string quartet. See also reducing.

## F

**family**

Instruments of a similar kind that are typically bracketed together in a score, such as woodwind, brass, percussion, and strings.

**fermata**

A notation that indicates all notes at that position are held for longer than their notated length. It is most commonly shown as a curved line with a dot under the curve, but it can also be shown with a pointed arch or square shape. Also known as a “pause” or a “birds’ eye”.

**flow**

A self-contained span of music of any scope, such as a movement in a symphony, a song in an album, a number in a musical, or a short exercise in a music theory worksheet. A flow can

contain the same players as other flows in the project or separate players just for that flow. See also player.

**formatting**

The act of determining the number of bars in a system, the number of systems on a page, and the distances between staves and systems.

**fps**

A unit of measurement, short for “frames per second”, that refers to the number of video frames occurring each second.

**fragment**

Part of a notation item. For example, fragments of a note include its notehead, rhythm dots, accidentals, the tip of its stem, and beam. In Write mode, selecting any part of an item also selects all of its fragments, so any changes you make affect the whole item. See also item, segment.

**frame**

A rectangular container for music, text, or graphics on a page.

**fretted instrument**

A type of instrument that in most cases has multiple strings, a neck with marked frets, and is played by stopping the strings at fret positions on the neck with one hand, usually the left, and plucking the corresponding strings with the other hand, usually the right. Common fretted instruments include the guitar, ukulele, and banjo.

**full score**

A score comprising all of the music for all of the players and their instruments, typically laid out in a specific order. The order used varies according to the ensemble for which the music is written. In full scores for orchestra, the players are typically ordered from the highest wind instrument at the top of the page, for example, piccolo, to the lowest string instrument at the bottom of the page, for example, contrabass, with brass, keyboards, voices, and percussion in between.

## G

**galley view**

A viewing option that shows music laid out as a single, infinitely wide system.

**grace note**

A small note, often used to show an ornament or embellishment, that is not counted towards the number of beats in the bar; instead, it steals from the duration of either the preceding or the following rhythmic notes. Also known as an “arhythmic note”. In common practice, a grace note with a slashed stem is an acciaccatura, which is to be played as quickly as possible, either immediately before or at the rhythmic position of the note or chord that follows it. A grace note with an unslashed stem is an appoggiatura, which is played as half of the written duration of the note or chord that follows it.

**group**

A collection of players that comprises either a subset of the main ensemble, for example, a choir within an orchestra, or a separate group, for example, an off-stage brass group or second orchestra. Each group of players is labeled separately in the full score and is grouped and numbered together in the instrument order. See also player.

## H

**hairpin**

A notation for dynamics that uses a pair of angled lines, diverging from or converging on a single point, to show a gradual increase or reduction in the dynamic level, that is, a crescendo or diminuendo.

**half-bar**

The rhythmic position that divides bars into two equal sections when the prevailing time signatures can be divided into four equal beats. In Dorico Elements, specific beam grouping and note grouping settings apply to bars with a half-bar. Time signatures that have a half-bar include 4/4 and 12/8.

**handle**

A selectable item that marks the ends of lines, the corners of frames, and other moveable positions, such as pedal line retakes and slur control points. In Write mode, handles are circular and mark rhythmic positions.

**harmonic series**

A naturally-occurring set of frequencies that are all related to a single pitch, known as the "fundamental". When a fundamental pitch is played, the note produced contains many different notes within the harmonic series. These additional notes are known as "partials" or "overtones". It is also possible to bring out the sound of individual partials by playing them as harmonics. There is a consistent pattern of intervals between partials within the harmonic series, and these intervals become increasingly smaller the further up the harmonic series they occur. For example, the interval between the first and second partials is an octave whereas the interval between the seventh and eighth partials is only approximately a major second. At the top end of the harmonic series, most partials are microtones. See also partial.

**hook**

A short line that extends from other lines, most commonly at a right angle, that helps to clarify the end position of lines. In Dorico Elements, hooks can be used at the end of pedal lines, octave lines, repeat endings, and tuplet brackets.

**horizontal justification**

The alignment of musical content to the left and right edges of the frame. To ensure that all staves in a system occupy the same width, any remaining space that is left over after the music is spaced is distributed evenly between all of the columns in the system. Sometimes the final system of a flow is not fully justified and is allowed to end partway across the width of the frame. See also frame, justification.

## I

**implicit rest**

A rest that is automatically shown around the notes you input. Its notated duration automatically adjusts according to the time signature and its position in the bar. Implicit rests can be suppressed between notes in a particular voice, which hides them. See also explicit rest.

**Insert mode**

A way of changing how notes are input. When Insert mode is activated, new notes push all the music that follows after the caret along by the input duration instead of overwriting existing notes. Similarly, reducing the duration of notes with Insert mode activated pulls them closer together without leaving rests between the notes. This affects not just note input, but also when you copy and paste notes and inputting time signatures.

**instrument**

Anything that requires at least one staff to represent the sounds or music it produces. Common instruments include the violin, flute, tuba, and bass drum. However, human voices, computer triggering samples, and tape recordings can also be instruments.

**instrument transposition**

The interval difference between the pitch the instrument plays and the resulting sounding pitch, often included as part of the instrument name. For example, when a Clarinet in B♭ plays a C, the pitch produced is a concert B♭. Instrument transposition is also known as "instrument pitch". See also concert pitch, transposed pitch.

**item**

Generic term for any note, rest, chord, notation, or other selectable object that appears in the score in Dorico Elements. See also fragment, segment.

## J

**justification**

The alignment of musical content to the edges of the frame, both horizontally and vertically. See also frame, horizontal justification, vertical justification.

## K

**key command**

A set of keys that perform a defined task when pressed together. Also known as a “keyboard shortcut”.

## L

**layout**

A page-based presentation of the music for one or more players in one or more flows, for example, a full score that contains all players or an instrumental part that contains only a single player. See also flow, player.

**layout options**

Options that affect the setup of an individual layout, such as page and staff size. These options can be set in each layout independently in the **Layout Options** dialog. See also layout.

**linear point**

A change in value in a track or lane in Play mode that acts as a point on a curve, setting a value for its position only and allowing for a smooth change in value from that position until the next point in the track or lane. See also constant point, value line.

**lock duration**

Functionality that allows you to change the pitches of existing music while retaining existing rhythms.

**lyric**

Any text that is intended to be sung or spoken by an individual singer or group of singers. A lyric can be a whole word or an individual syllable in a multi-syllabic word. Lyrics are shown at each rhythmic position where a new word or syllable begins. Typically, lyrics are found below the staff, but are sometimes placed above the staff, for example, in the case of a short score.

## M

**measure**

See bar.

**MIDI**

An abbreviation for Musical Instrument Digital Interface, a standard for how electronic musical instruments, computers, and virtual instruments can connect to and communicate with each other. In Dorico Elements, MIDI data can be sent to one of 16 channels, which allow either a specific instrument, or a specific patch on a specific instrument, to receive and respond to the data. See also channel, patch.

**minor key**

A key signatures based on a minor scale, which have a different pattern of intervals to major scales. See also minor scale.

**minor scale**

A sequence of notes containing the pitches of a minor key. There are three types of minor scales: natural, harmonic, and melodic. Natural minor scales follow the interval pattern of the Aeolian mode, which on a keyboard is all the white notes from A-A. Harmonic minor scales also follow the Aeolian mode interval pattern but the seventh degree of the scale is sharpened, for example, G♯ in A harmonic minor. Melodic minor scales follow different interval patterns when they are

rising/falling: when rising, melodic minor scales have sharpened sixth and seventh degrees, but when falling, the sixth and seventh degrees are both natural. See also minor key.

**modes**

Selectable workspaces in the project window that represent different phases in the workflow of preparing a score.

**multi-bar rest**

A consolidation of multiple adjacent empty bars into a smaller unit, typically shown as a single bar with the total number of bars' rest written above the staff. A multi-bar rest normally shows an H-bar symbol, which is a thick horizontal line with vertical lines at each end. In some older published scores, a multi-bar rest of up to nine bars in length is shown using a combination of double whole and whole rests. Also known as a “multirest”.

**music area**

The main part of the window in Setup mode and Write mode where you input and edit your music.

**MusicXML**

A file format designed to allow the interchange and archiving of music notation data in an open and non-proprietary way. It is useful for exchanging scores between different music applications.

## N

**node**

A position along the length of a string that marks an equal division of the string, such as a quarter of the way along a string. Touching, but not fully stopping, a string at a node produces a harmonic partial. See also partial, harmonic series.

**note input**

The standard method of adding notes to staves in sequence that is possible when the caret is active. The caret automatically advances to the next rhythmic position after each note is input. During note input, it is also possible to input other items at the caret position. Also known as “step input” because notes are input step-by-step. See also caret, chord input, Insert mode.

## O

**overtone**

See partial. See also harmonic series, node.

## P

**padding**

The minimum distance/gap between two items, such as text and its enclosure. Padding values can be independent of other set values, such as minimum height or width.

**padding rest**

A rest that fills the extra rhythmic space before or after cues that start or end partway through bars. This shows clearly how the rhythm of the cue fits within the current time signature and how it relates to the player’s existing material.

**page break**

The forced termination of a page of music at a particular rhythmic position, typically at a barline. Often used to ensure a convenient page turn in a part. In Dorico Elements, page breaks can be achieved using frame breaks, which are indicated using signposts.

**page view**

A viewing option that shows music laid out on a page with a fixed width and height, as it appears when printed. See also galley view.

**panel**

Wide palettes of tools on the left, right, and bottom edges of the program window that are available in all modes, but their content varies in each mode.

**part**

The music belonging to the instruments played by one or more players, shown on its own rather than in a full score. Performers who do not need to see the music belonging to the whole ensemble play from parts so they only have to read the music they play themselves. See also full score.

**partial**

A single pitch or frequency in the harmonic series, which varies in pitch according to the pitch of the fundamental but is always a consistent interval above the fundamental according to its number in the harmonic series. For example, the second partial is an octave above the fundamental, the third partial is an octave and a fifth above the fundamental, and the fourth partial is two octaves above the fundamental. Also known as simply a “harmonic” or “overtone”, although when described as an overtone it has a different number, as the first overtone is the same as the second partial. See also harmonic series.

**patch**

An older term for a discrete sound on a MIDI device or virtual instrument. See also channel, MIDI.

**pedal level change**

A change to how far a piano sustain pedal is depressed, between 1 (fully depressed) and 0 (not depressed). It is notated as a change to the height of a pedal line. Also known as a “pedal lift”.

**pick-up bar**

A note or notes played before the first full bar of a piece. Also known as an “upbeat” or “anacrusis”. Pick-up bars often only comprise one or two beats whose main purpose is to lead in to the start of the piece.

**pitch crossing**

A possible situation on staves containing multiple voices or parts, such as condensed staves, where notes in down-stem voices have higher pitches than notes in up-stem voices. See also condensing.

**player**

A musician who plays one or more instruments. Players are defined as either solo players or section players and are assigned to flows and layouts. See also solo player, section player, flow, layout.

**playhead**

A vertical line that moves alongside music during playback and when recording, showing the current rhythmic position. Also known as a “playback line”.

**Play mode**

A mode in Dorico Elements where you can change how your music sounds in playback, including by changing the playback template and assigning VST instruments, inputting automation, adjusting the mix, and changing the sounding duration of notes in playback without affecting their notated duration. See also modes.

**playthrough**

A single time playing from the beginning of the piece to the end. Music that contains multiple possible endings, such as music with repeat endings or codas, requires multiple playthroughs.

**plug-in**

A software program that can operate within another software program. Dorico Elements supports VST instruments and effects and script plug-ins written in Lua.

**pointer**

The symbol on the computer screen that follows movements made by the user with a mouse or on a touchpad. It is most commonly an arrow pointing towards the top left corner of the screen.

**polymeter**

Music containing multiple simultaneous meters, for example, one instrument in the ensemble plays in 6/8 and another plays in 7/4.

**popover**

A temporary value field that is evoked using a key command and allows you to input items using text entries. You can open popovers in Write mode during note input or when items are selected in the music area. There are dedicated popovers for different types of items.

**preamble**

The notations typically drawn before the first note or rest on each system of music. The preamble usually includes clefs, key signatures, and time signatures. In Dorico Elements, the preamble is drawn automatically and so you cannot select any items included in it.

**Print mode**

A mode in Dorico Elements that allows you to print and export the layouts in your project. See also modes.

**print preview area**

The main part of the window in Print mode where you can see a preview of what is going to be printed or exported as a graphic. See also Print mode.

**project**

A Dorico Elements file that can contain multiple flows and layouts. See also flow and layout.

**properties**

The characteristics of individual items and fragments of items in your project that can be edited via the Properties panel. Many properties are layout-specific, meaning changing the properties of an item in one layout does not affect the same item in other layouts.

## Q

**quantization**

In music, the act of adjusting the positions and durations of notes so they align with the nearest defined beat. This process eliminates small variations in rhythm and duration produced naturally by live performers, and can be useful when importing/exporting MIDI data as quantized music produces neater notation.

## R

**rastral size**

The size of a full five-line staff, measured from the bottom line to the top line. The term comes from the rastra engravers historically used to draw five-line staves on blank paper. Because the rastrum is a fixed object, people became used to their set sizes and Dorico Elements continues this tradition by offering users a selection of rastral staff sizes.

**reducing**

The process of taking music for more than one instrument and assigning it to fewer instruments, such as a keyboard reduction of a choral piece. A piece of music that has been reduced is known as a “reduction”. See also exploding.

**rhythmic grid**

A unit of rhythmic duration whose value affects certain aspects of inputting and editing, such as the amount by which items move. Its current value is shown by the note value in the status bar, and by ruler markings indicating beat divisions and subdivisions above the staff on which the caret is active. See also caret.

## S

**score**

See full score, part, project.

**section player**

Multiple musicians who all play the same instrument and read from the same part layout, for example, Violin I. Section players may not play multiple different instruments, but can divide. See also player.

**segment**

Part of a notation item that functions autonomously in Engrave mode. Segments can exist regardless of their position, such as individual ending brackets within a repeat ending, or only when a single item is split across a system or frame break, such as glissando lines. See also item, fragment.

**Setup mode**

A mode in Dorico Elements where you can set up the fundamental elements of the project: instruments and the players that hold them, flows, layouts, and videos. You can also determine how they interact with each other, for example, by changing the players assigned to layouts. See also modes.

**SMuFL**

Short for “Standard Music Font Layout”, it is a font specification that maps all the different symbols required for music notation onto a standard layout. Dorico Elements requires SMuFL-compliant fonts for certain areas of the program, such as clefs and dynamic glyphs, to ensure it can locate the correct symbol. SMuFL-compliant fonts include Bravura, Petaluma, and November 2.0.

**solo player**

An individual musician who can play one or more instruments, for example, a flute doubling piccolo. See also player.

**space**

A unit of measurement in music engraving based on the distance between the center of two adjacent staff lines. Practically all notation items are scaled in proportion to the size of a space, for example, a notehead is normally one space tall.

**spacing**

The act of determining the horizontal distance between successive columns in order to format the music. Horizontal spacing in Dorico Elements considers the graphical shape and size of notes and other items, such as rhythm dots and accidentals, and the note spacing values set. Full systems are automatically horizontally justified.

**spelling**

The way in which a note of a given pitch is specified by a letter name plus an accidental. For example, assuming the conventional 12-EDO pitch system, MIDI note 61 can be spelled as C♯, D♭, and B𝄪. The same pitch is normally spelled a certain way in a given key, for example, MIDI note 61 is normally spelled as C♯ in D major, but is spelled as D♭ in A♭ major. See also EDO, MIDI.

**split stem**

A way of presenting altered unisons that keeps each accidental directly beside the notehead to which it applies. Also known as a “cherry stalk” or “tree”.

**staff-relative placement**

The vertical position of items relative to musical staves, that is, either above or below.

**string shift indicator**

An angled line that indicates the direction of movement when string players have to shift position on the fingerboard to play a higher/lower note with the same finger as the previous note.

**stroke**

The short line that bisects editorial slurs and ties. Also known as a “notch”.

**SVG**

SVG stands for Scalable Vector Graphics, which is an XML-based way of displaying and modifying graphics. Due to the way it is coded, it allows you to modify graphics very flexibly compared to other formats.

**system break**

The forced termination of a system of music at a particular rhythmic position, typically at a barline. Indicated in Dorico Elements with signposts.

**system formatting**

The distribution of bars into systems and systems into frames. When copying part formatting between layouts, Dorico Elements considers the positions of system breaks, frame breaks, and note spacing changes to be aspects of system formatting.

**system object**

An item that applies to all staves in the system, but is not necessary to show on every staff, such as tempo marks and rehearsal marks. In Dorico Elements, you can show system objects at multiple positions in each system by showing them above multiple instrument families.

## T

**tempo track**

The timing-related information included in MIDI data that affects tempo, SMPTE offsets, time signatures, timecodes, and markers, which can be imported independently of the rest of the data in MIDI files.

**token**

A code used in a text string that is automatically replaced by a piece of information from elsewhere in the project, such as the title of the current flow, the name of the player, or the page number. Also known as a “wildcard” or “text code”.

**touchpad**

Any flat device with a tactile sensor that functions as an alternative to the traditional computer mouse. Commonly built into laptop computers but can also be separate appliances connected wirelessly or via a cable.

**transport**

Encompasses all options related to playback and recording.

**transposed pitch**

In transposed pitch, the pitches notated are the pitches that the instrument plays, rather than the desired sounding pitch. Instrumental parts are always in transposed pitch so that players can simply play the written notes, which is especially important for transposing instruments. See also concert pitch, instrument transposition.

**tuplet**

A rhythm that is performed at a fraction of its normal written duration. For example, a triplet is three notes of a given note value played in the time it would normally take to play two notes of that note value. Also known as an “irrational rhythm” or a “countermetric rhythm”.

**tutti**

Italian for “everyone”, tutti indicates that a passage of music is to be played by all players reading from that part or staff. It is most commonly used to indicate the end of a divisi passage, or for clarification when a staff can indicate both solos and tutti passages at different times. See also divisi.

## U

**upbeat**

See pick-up bar.

## V

**value line**

A visual representation of value over time in tracks or lanes in Play mode. Fully horizontal value lines indicate a constant value, while angled value lines indicate a smooth change in value within a given duration, usually between two points. See also constant point, linear point.

**vertical justification**

The spreading out of staves and systems across the full height of frames with as even a distribution of space as possible. If the music in the frame requires less vertical space than is available, the remaining space is distributed evenly between the systems, and between the staves of the systems. See also frame, justification.

**vibrato bar**

A device on electric fretted instruments, typically guitars, that allows the performer to add vibrato to notes and to adjust the pitch of notes, similar to a guitar bend. Also known as a “whammy bar”, “tremolo bar”, or “vibrato arm”.

**voice**

In Dorico Elements, a series of notes, chords, rests, and other notations that make up a single musical line and are normally played by the same instrument. Assigning notes and items to different voices allows multiple lines of music to be presented on the same staff as clearly as possible, such as in vocal music where the soprano line uses an up-stem voice and the alto line uses a down-stem voice. Dorico Elements allows as many voices as are needed to be input onto a single staff, and lays them out and spaces them automatically.

**VST instrument**

Short for “Virtual Studio Technology instrument”, it is a digital plug-in that converts MIDI data into audio output. It can emulate an existing piece of studio hardware or can be an entirely new creation.

## W

**Write mode**

A mode in Dorico Elements where you can input and edit your music, including changing the rhythmic positions of items, changing the pitch of notes, and deleting notes and items. See also modes.

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