DORICO

Advanced Music Notation System

steinberg

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This PDF provides improved access for vision-impaired users. Please note that due to the complexity and number of images in this document, it is not possible to include text descriptions of images.

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Introduction

Thank you very much for purchasing Dorico.

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

The documentation applies to the operating systems Windows and macOS.

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

Some points to consider:

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

Usage of musical terms

This documentation uses American terminology for musical items throughout the documentation.

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
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.

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 **Notation Options** in Write mode, choose **Write** > **Notation Options**.

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

EXAMPLE

Choose **Engrave** > **Engraving Options**.

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

EXAMPLE

`example_file.txt`

Key Commands

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

When key commands with modifier keys are described in this manual, they are shown with the
Windows modifier key first followed by the macOS and the key:

●	Windows modifier key/macOS modifier key-Z

EXAMPLE

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

Key commands in Dorico

The default key commands in Dorico 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.

Accessing the interactive Dorico key commands map

The **Dorico Key Commands** map shows a virtual computer keyboard. Depending on the selected keyboard layout that you have selected in the **Preferences** dialog, it highlights the keys that have been assigned key commands. Below the virtual computer keyboard, all key commands are listed, 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 **Dorico Key Commands** map opens in a web browser. You have the following options:

- 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**. 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.

  NOTE

  You can also use the mouse to select a modifier key on the virtual computer keyboard.

- To search for a specific key command, enter one or multiple words in the search input 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.

Searching for the key commands of functions

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

NOTE

You can also search for functions in the **Dorico Key Commands** window.

PROCEDURE

1. Open **Preferences** in any of the following ways:
   - Press **Ctrl/Cmd-,** (comma).
   - Choose **Edit** > **Preferences** (Windows).
   - Choose **Dorico** > **Preferences** (macOS).
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.

RESULT

If the function has a key command, it is shown in the **Assigned key commands** display.

RELATED LINKS
Accessing the interactive Dorico key commands map on page 11
Preferences on page 53

Changing the keyboard layout

You can change the keyboard layout in Dorico. This allows you to use the predefined key commands for your language.

PROCEDURE

1. Open **Preferences** in any of the following ways:
   - Press **Ctrl/Cmd-,** (comma).
   - Choose **Edit** > **Preferences** (Windows).
   - Choose **Dorico** > **Preferences** (macOS).
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 your language.

RELATED LINKS
Preferences on page 53

Assigning key commands

You can assign key commands to Dorico functions that have no key commands assigned. You can also change existing key commands.

PROCEDURE

1. Open **Preferences** in any of the following ways:
   - Press **Ctrl/Cmd-,** (comma).
   - Choose **Edit** > **Preferences** (Windows).
   - Choose **Dorico** > **Preferences** (macOS).
2. Click **Key Commands** in the page list.
3. Search for the name of a function and select it.
4. Optional: Press **Remove Key Command** if the function already has an assigned key command.

   NOTE

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

5. Click the **New key command** 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 shown in the **Assigned key commands** display.

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

RESULT

You can immediately use the assigned key command.

RELATED LINKS

Removing key commands

You can remove assigned key commands from a function.

PROCEDURE

1. Open **Preferences** in any of the following ways:

- Press **Ctrl/Cmd-,** (comma).

- Choose **Edit** > **Preferences** (Windows).

- Choose **Dorico** > **Preferences** (macOS).

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

Resetting key commands

You can reset all key commands to their defaults.

PROCEDURE

1. Open **Preferences** in any of the following ways:

- Press **Ctrl/Cmd-,** (comma).

- Choose **Edit** > **Preferences** (Windows).

- Choose **Dorico** > **Preferences** (macOS).

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.

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.

When you start Dorico 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 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 is structured.

Opening a template

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

PREREQUISITE

You have started Dorico. 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.

Barbershop quartet

Choir SATB, unaccompanied

Choir SATB with organ

Choir SATB with piano

Choir SSA, unaccompanied

Choir SSA with organ
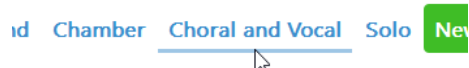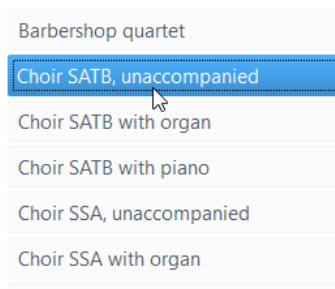
3. Click **New from Template**.

RESULT

The template opens.

AFTER COMPLETING THIS TASK

Proceed to the following sections that provide a quick overview of the user interface and that introduce you to the main functions of the program.

RELATED LINKS
Hub on page 35

Quick tour of the user interface

The user interface of Dorico 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:
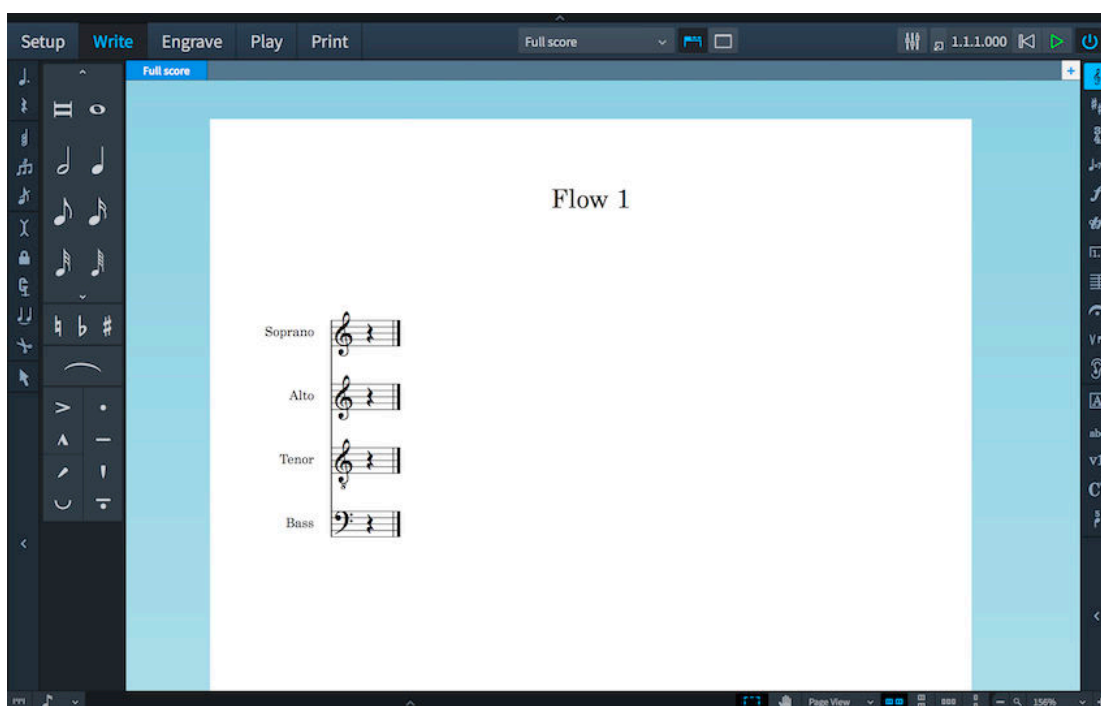
The project window contains the following areas:

Toolbar

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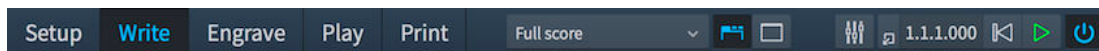
On the left side of the toolbar, the modes are displayed. By activating a mode, you change the workspace and the available panels. The active mode is highlighted in a different color. In the middle of the toolbar, layout options allow you to switch between the different layouts in your project and to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

On the right side of the toolbar, you can open a **Mixer** and activate 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, Write, and Engrave modes 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.
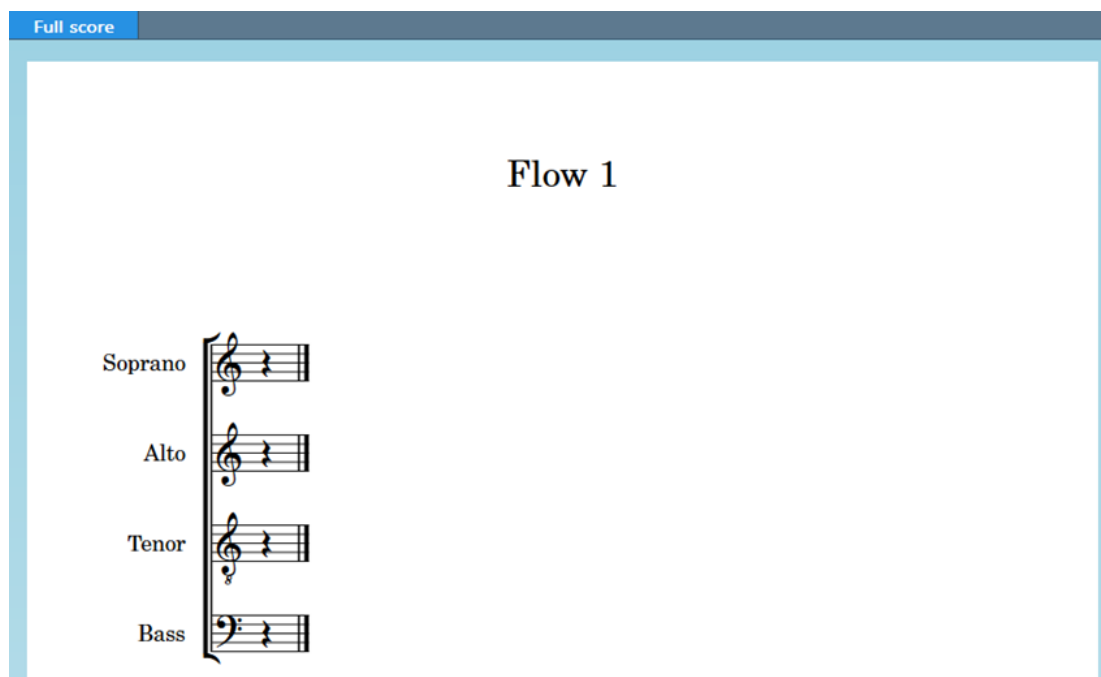
The music area displays the scores or the instrumental parts that you create. Above the music area you can activate several layouts in tabs and switch between them. Layouts in Dorico allow you to show different presentations of your music. If you have a full score with different instrumental parts, such 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

In Write mode, there are additional columns at the left and right edges of the project window. These are called toolboxes.
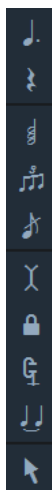
Notes toolbox in Write mode

Notations toolbox in Write mode

The Notes toolbox on the left allows you to activate or deactivate various note input tools.

The Notations toolbox on the right provides tools that allow you to create and edit other notations, such as clefs, key signatures, time signatures, and so on.

Panels

Dorico 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.
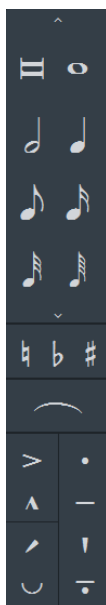
Notes panel in Write mode

The Notes panel contains all the durations, accidentals, slurs, and articulations that are most commonly used when inputting notes.

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.
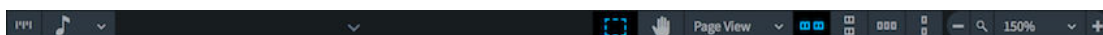
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Functions of the modes

Modes represent different phases in the workflow of preparing a score.

By switching to another mode, you change the workspace and the available panels.

Setup Mode

In Setup mode, you can create players and groups of players, and assign instruments to them. You can define different layouts for your project that you can print or export independently. For example, you can print or export a layout for the full score and separate layouts for each instrumental part.

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 your music. The available toolboxes and panels allow you to input all the notes and notation items that are most commonly used.

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

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

Engrave Mode

In Engrave mode, you can make fine adjustments to the music that you input in Write mode and determine how the pages of your project are laid out.

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

- Press **Ctrl/Cmd-3**.
- Click **Engrave** in the toolbar.
- Choose **Window** > **Engrave**.

Play Mode

In Play mode, you can assign virtual instruments and effects for playback to instruments and playing techniques. You can make adjustments to how individual notes are played back in order to produce a more realistic performance.

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 graphic files.

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

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

      Choose **Window** > **Hide/Restore Panels**.

  You can hide/show the panel whose icon is currently selected in the Notations toolbox in any of the following ways:

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 button changes its look and displays which panels are hidden. For example, the **Hide/Restore Panels** button in the toolbar indicates that all panels were active and are now hidden.

Working with tabs and windows

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

Dorico 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
Setting up your workspace on page 48

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 an additional view of a layout that is 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 the tabs at the top of the music area, below the toolbar. If you do not see the tabs, click **Show Tabs** in the toolbar.

PROCEDURE

- To open a new tab, do one of the following:
    - Press **Ctrl/Cmd-T**.
    - To the right of the tabs, click **New Tab**.

RESULT

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

AFTER COMPLETING THIS TASK

You can click one of the icons or select a layout from the list at the bottom. Alternatively, you can click **Select Layout** in the toolbar and choose one of the layouts from the menu. The layout that you choose opens in the active tab.

Opening a new window

You can open another window for the same project.

This can be useful if you want to see and work on multiple layouts at the same time. You can also open multiple project windows to show different modes of the same project.

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 51

Starting a new project

After getting a first impression of the Dorico 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 exact same entries in order to get the depicted results.

Close the template without saving. The **Hub** reopens.

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.
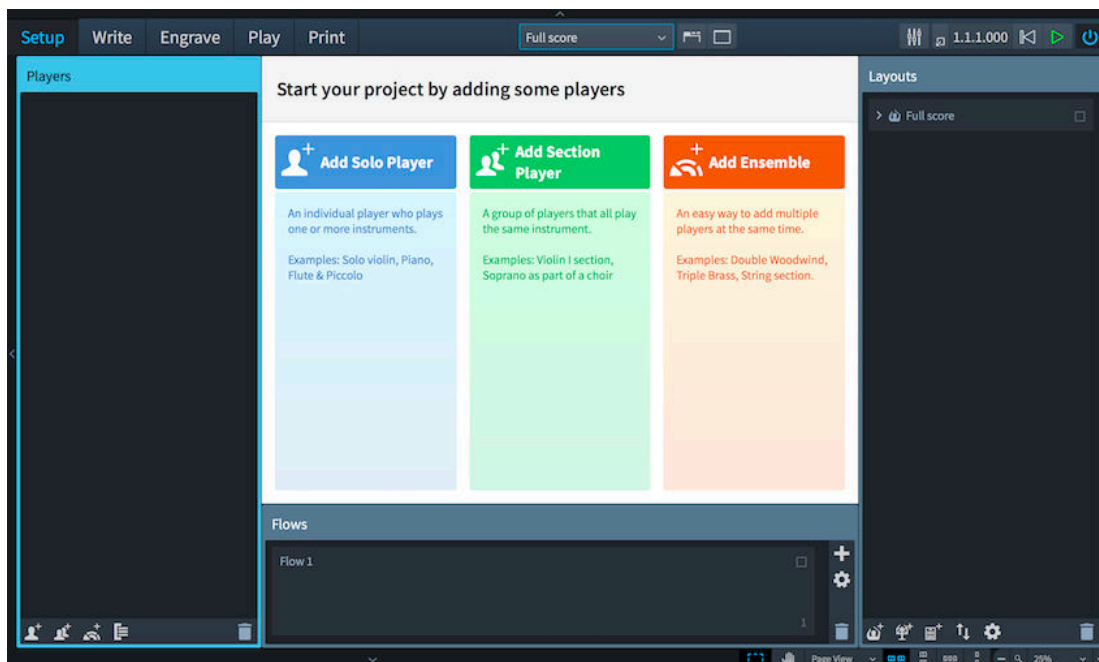
Whenever you start a new project without selecting a specific project template, Setup mode is activated. This allows you to specify players and assign instruments right from the start. The area in the middle, the project start area, which becomes the music area once you have added a player, allows you to start your project with different types of players. On the right, the **Layouts** panel shows a **Full score** entry. This entry is available 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 an individual player or by adding a section player and assign an instrument. You are free to assign any kind of instrument. In this chapter, only one piano player is added as an example.

RELATED LINKS

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**.
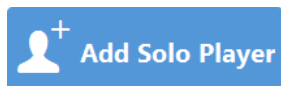
The instrument picker opens.

TIP

You can also open the instrument picker at any time by clicking the plus symbol to the right of the added empty-handed player.

Alternatively, you can right-click the player and choose **Add Instrument to Player** from the context menu.

2. Select a piano in the instrument picker in any of the following ways:

- Enter **piano** into the search box.

- Start entering the instrument name you want, then select it from the filtered list.

- Click an instrument family and then an instrument.

- Press **Up Arrow**/**Down Arrow** to select an instrument family, then press **Tab** to switch to the instrument column. Press **Up Arrow**/**Down Arrow** to select an instrument.

TIP

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

- Press **Shift-Tab** to switch back to the previous column in the instrument picker.

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.

NOTE

You can save your project 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 25
Adding solo/section players on page 65

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 added to all existing full score and part layouts.

AFTER COMPLETING THIS TASK

Rename the flow if required.

Optionally, deactivate the checkboxes of the players that you want to exclude from the flow in the **Players** panel.

Optionally, deactivate the checkboxes of the layouts from which you want to exclude the flow in the **Layouts** panel.

RELATED LINKS

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 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

Double-click the empty part to give it a name. Optionally, select the flows that you want to assign to the layout in the **Flows** panel. Activate the checkboxes of the players that you want to assign to the layout in the **Players** panel.

RELATED LINKS

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.

Throughout Dorico, 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 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:

- Select the staff where you want to input notes and press **Shift-N** or **Return**.
- Select the staff where you want to input notes and choose **Write** > **Note Input**.
- Double-click the staff where you want to input notes.

The caret is displayed.
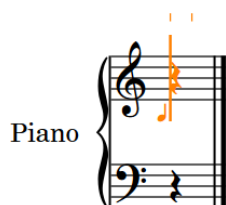
3. In the Notes panel, click a duration.

  NOTE

  By default, Dorico selects a quarter note (crotchet) for you.
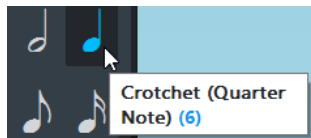
4. Start playing notes on the MIDI keyboard, or press **A**, **B**, **C**, **D**, **E**, **F**, **G** on the computer keyboard to input the corresponding pitches.

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

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

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

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

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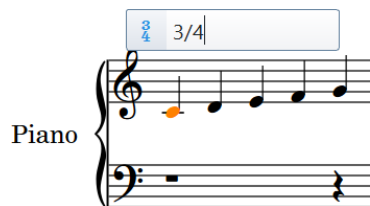
4.   Press **Return** to close the popover.

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.

RELATED LINKS

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**.
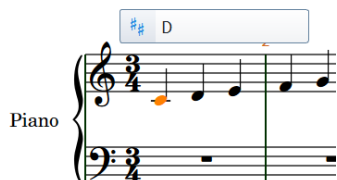
4.   Press **Return**.

RESULT

The key signature is inserted between the clef and the time signature. Dorico 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 automatically inputs the correct notes.

PREREQUISITE

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

PROCEDURE

1. Activate **Chords** 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 adds each new note above the previous note. You can select the register of notes manually.

    The example shows a possible result.
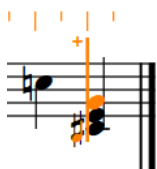
4. Press **Space** to advance the caret to the next note position and continue with the next chord.

    Dorico expects further chord input until you deactivate it.

5. Optional: To deactivate chord input, press **Q** or deactivate **Chords**.

RELATED LINKS
Key commands in Dorico on page 10
Register selection during step input on page 117

Dorico concepts

The following sections give you an overview of the design philosophy as well as concepts on which Dorico is based.

We recommend that you familiarize yourself with these concepts as these are often returned to throughout the documentation.

Design philosophy

If you are experienced with other scoring applications and are interested in learning more about deep design considerations for scoring programs, you may find the following discussion illuminating, but everybody can safely skip it.

Dorico has a forward-thinking design that is led by musical concepts rather than computational convenience, and this provides many benefits.

Higher-level concepts

In most 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, 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.

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 can play more than one instrument, for example, an oboist doubling cor anglais, or groups in which everyone plays only one instrument, for example, eight desks of violinists.

The actual music that is 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 do in

some cues in a movie score. This is no problem as you can combine players in flows in any combination.

Dorico 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 full score with each player's music on separate staves, a custom score layout containing just the piano and vocal staves, and an instrumental part for each player that only contains the music belonging to them.

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.

Key musical concepts

In order to work efficiently with Dorico, it is important to understand the conceptual model of the program.

The model is closely based on the practical considerations of how music is written and performed by real humans.

RELATED LINKS
Projects in Dorico on page 32
Modes in Dorico on page 32
Instruments in Dorico on page 33
Players in Dorico on page 33
Groups in Dorico on page 33
Flows in Dorico on page 33
Layouts in Dorico on page 34

Projects in Dorico

A project is an individual document that you create within Dorico. It can contain multiple separate pieces of music, from very short to very long, written for any combination of instruments and using different layouts.

Modes in Dorico

Modes represent different phases in the workflow of preparing a score.

Dorico contains the following modes:

Setup

> In this mode, you can set up the players and instruments that are played in the project. You can create and manage flows and set up layouts.

Write

> In this mode, you can write your music. You can insert notes and rests, key signatures, time signatures, and idiomatic notations.

Engrave

> In this mode, you have access to fine-grain controls that allow you to manipulate and modify every item in the project. You can also manage pages, master pages, layouts, and formats.

Play

> In this mode, you can set up your project for playback. You can assign VST instruments, adjust the mix, and change the sounding duration of notes in playback without affecting their notated duration.

Print

In this mode, you can define different print jobs, such as printing full conductors scores, study scores, individual parts, and so on. For every print job, you can specify options for page size and duplex printing. You can also manage other output, such as exports to various file types, such as PNG.

Instruments in Dorico

In Dorico, an instrument is an individual musical instrument, such as a piano, a flute, or a violin.

Dorico has a database of information about 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.

RELATED LINKS

Players in Dorico

In Dorico, a player can represent an individual musician or several musicians.

- Solo players are individual musicians 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.
- Section players represent multiple musicians who all play the same instrument, for example, a violin section player can represent eight desks of musicians, or a soprano section player can 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.

Groups in Dorico

A group represents a collection of musicians that are considered together, such as a choir, orchestra, or a chamber ensemble.

In a typical project, there might be only one group that contains all of the defined players, but you can define as many groups as required to allow easy separation of forces in larger-scale works. It might also be necessary to assign players to these groups for the purposes of, among other things, properly bracketing and labelling their staves in the conductor's score.

EXAMPLE

A work for double choir and organ can define the two choirs as separate groups. This allows each choir to have its own label in addition to the labels for each sectional player (soprano, alto, tenor, bass) within the choir.

In a complex work, such as Elliott Carter's "A Symphony of Three Orchestras", each of the orchestras can be defined as a separate group.

Flows in Dorico

Flows are separate spans of music that are completely independent in musical content, for example, a song, 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 one or more flows.

Each flow can contain music for any combination of players. For example, in a Classical-period symphony, it is not uncommon for the brass players to be tacet in the second, slow movement, so the flow for the second movement can simply not contain any brass players. In a set of cues for a movie, for example, specific players may not be required in particular cues, so each flow can contain only those players who have anything to play.

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

Layouts in Dorico

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.

Layouts combine musical content, as represented by flows, with rules for page layout and music engraving. As well as part layouts for individual players, you can have layouts for multiple players drawn from multiple different flows. You can use the layouts to produce paginated music notation that can be printed or exported in various formats.

A typical project for an ensemble of multiple players 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 have independent page layout properties, such as page size, margins, running headers, and footers. These can be defined as master pages and then be applied freely to left- or right-hand pages or to specific pages in a layout, for example, the first or last page.

Flow frames define where music appears on each page. One or more flows are assigned to each flow frame, in a manner analogous to how flows of text are assigned to text frames in desktop publishing applications. Dorico also provides for text frames, which allow the presentation of blocks of text, such as prefatory material, critical commentary, and block lyrics.

NOTE

The page layout features of Dorico allow you to have multiple flow frames and text frames on the same page. This enables you to combine music from multiple flows on the same page.

User interface

The user interface of Dorico 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.

Hub

When you start Dorico, the Hub opens. The Hub keeps you up-to-date with the latest information and assists you with organizing your projects. It consists of the **News** section and the **Projects** section.
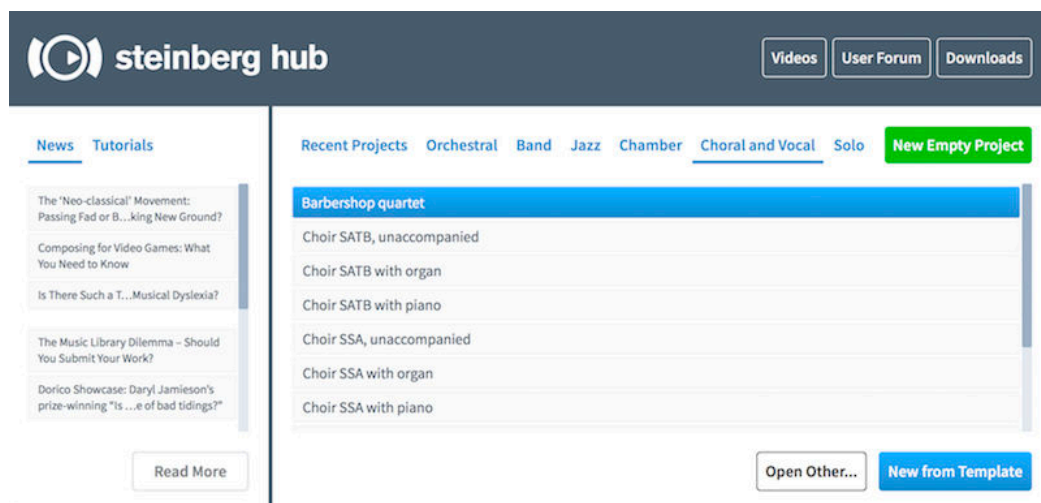
News

Displays recent Steinberg news.

Tutorials

Displays recent Dorico tutorials.

Read More

When **News** is selected, **Read More** links you to a page on the Steinberg website with more detailed information about the news and tutorials topic that you selected.

Watch

When **Tutorials** is selected, **Watch** links you to the relevant tutorial video on the Dorico YouTube channel.

Videos

Directs you to the Dorico YouTube channel.

User Forum

Links you to the user forum on the Steinberg website.

Downloads

Links you to the download page on the Steinberg website.

Recent Projects

Shows a list of the projects that you worked on last. You can scroll through the list with the **Up Arrow**/**Down Arrow** keys or with the mouse.

Orchestral, Band, Chamber, Choral and Vocal, Solo

Allow you to choose between different categories of project templates.

New Empty Project

Starts a new project.

Open Other

Allows you to open any other project file in your file system.

Open Selected Project

Opens the file that you selected in the **Recent Projects** list. Alternatively, you can double-click the file name or select the file and press **Return**.

Project Templates only: New from Template

Creates a new project from the project **template** that you selected in the list of a project template category.

Starting new projects

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

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 from the available templates in the category.

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
Adding solo/section players on page 65
Deleting players on page 71
Adding instruments to players on page 73
Deleting instruments on page 77

Selecting recent projects

You can open a project on which you recently worked.

PROCEDURE

- In the Hub, select a recent project in any the following ways:
  - In the **Recent Projects** list, select a file name and press **Up Arrow**/**Down Arrow** to scroll through the list of file names. To open a file, press **Return**.
  - In the **Recent Projects** list, double-click a project file name.
  - In the **Recent Projects** list, select a project file name and click **Open Selected Project**.
  - Choose **File** > **Open Recent** > **[Project file name]** at any time.

Opening other files

You can open other Dorico projects that are not listed in the **Recent Projects** list, or you can import MusicXML or MIDI files.

PROCEDURE

1. Open the File Explorer/macOS Finder dialog in any of the following ways:

- In the Hub, click **Open Other**.
- Choose **File** > **Open** at any time.

2. In the File Explorer/macOS Finder dialog, locate and select the file you want to open.

TIP

You can select multiple files to open them at the same time.

3. Click **Open**.

RESULT

The selected file is opened.

If you imported a MusicXML or a MIDI file, Dorico creates a new project file from the MusicXML or MIDI content, which you can save as a default Dorico project.

Windows

Dorico 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.
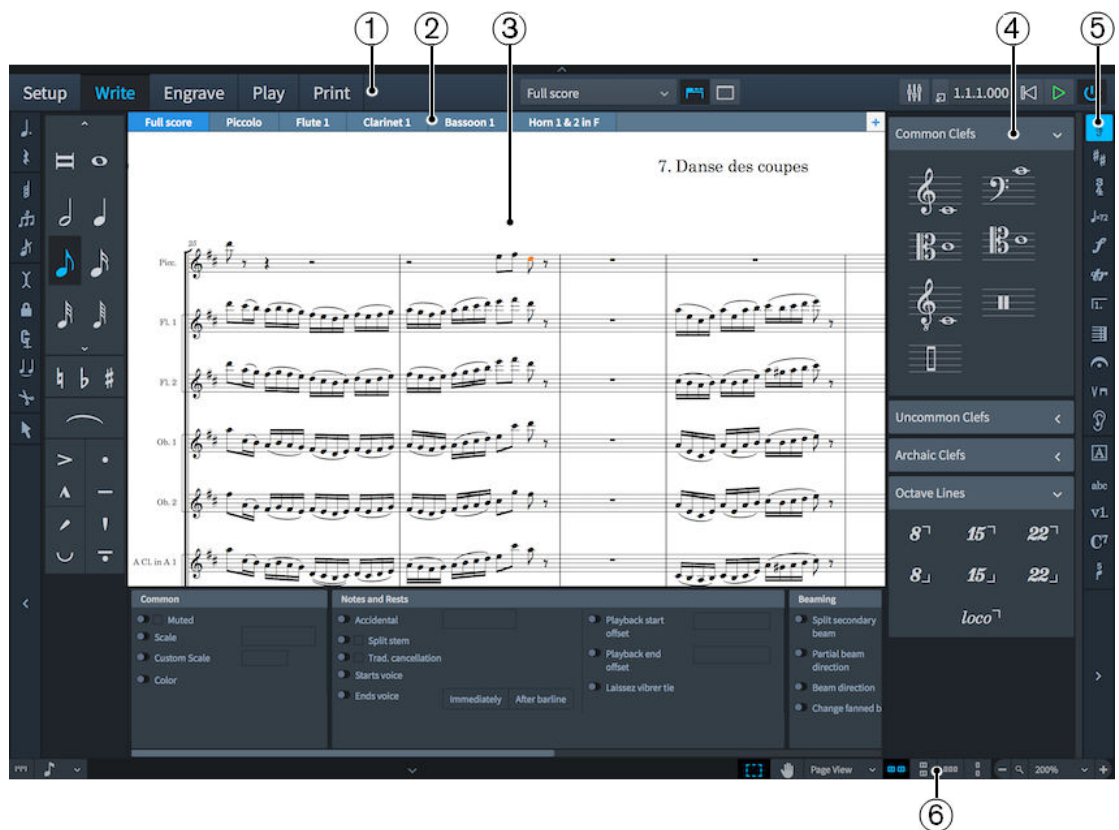
Project window

1 Toolbar

Allows you to access the modes, the workspace options, the **Mixer**, and the basic transport options.

2 Tab bar

Shows the tabs that are open in Setup, Write, and Engrave mode. 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, Write, and Engrave 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 graphic file format.

4 Panel

The panels provide notes and notations that you need to create and edit your music.

5 Toolbox

Write mode only: Provides access to various notation items that you can use for your music.

6 Status bar

Allows you to choose a different view and page arrangement of the music area.

Floating windows

Dorico 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 open floating windows:

Show Mixer

Opens the **Mixer** window.

Show Transport Bar

Opens the **Transport** window.

RELATED LINKS
Opening multiple project windows on page 51

Toolbar

The toolbar allows you to access the modes and workspace options as well as the **Mixer** and the transport options.

The toolbar is always available independent of the mode or tool that you are using. If you must hide the toolbar for a specific reason, click the disclosure arrow on top of the toolbar.

The toolbar consists of the following items:
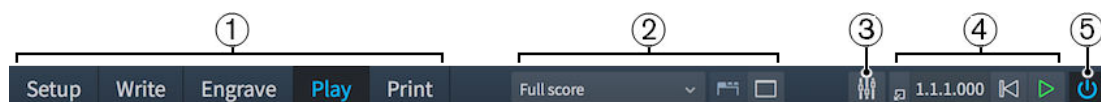
1 Modes

Selectable workspaces in the project window that represent different phases in the workflow of preparing a score.

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 Mixer** button

Hides/Shows the **Mixer** window.

4 Basic transport options

Allow to you quickly access the main transport functions.

5 **Activate Project** button

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.

Select Layout

Full score

Allows you to switch back and forth between layouts.

Show Tabs

Shows/Hides the tab bar above the music area.

Hide/Restore Panels

Shows/Hides all open panels.

Basic transport options

The transport options to the right of the toolbar provide the main transport functions of Dorico.

Show Transport Bar

Opens the **Transport** window.

Time display

1.1.1.000
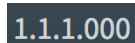
Shows the position of the playhead in the score relative to bars and beats. The time display shows the units in the following order: bars, beats, 16th notes, 120ths of a 16th note.

Rewind to Beginning

Sets the playhead to the beginning of your score.

Play

Starts/Stops playback.

Activate Project

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

TIP

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

Tab bar

The tab bar in Dorico allows you to display different layouts within the same project window.

Each tab may contain a separate layout, or an additional view of a layout that is already open in another tab or window. Each tab is labeled with the name of the selected layout.

You find the tabs aligned on the tab bar at the top of the music area, directly below the toolbar. If the tabs are not visible, click **Show Tabs** on the toolbar. If **Show Tabs** is activated, the tabs are always displayed, even if only a single tab is open.

Project start area

In Setup, Write, and Engrave modes, the project start area is displayed in the middle of the project window when you set up a new empty project.
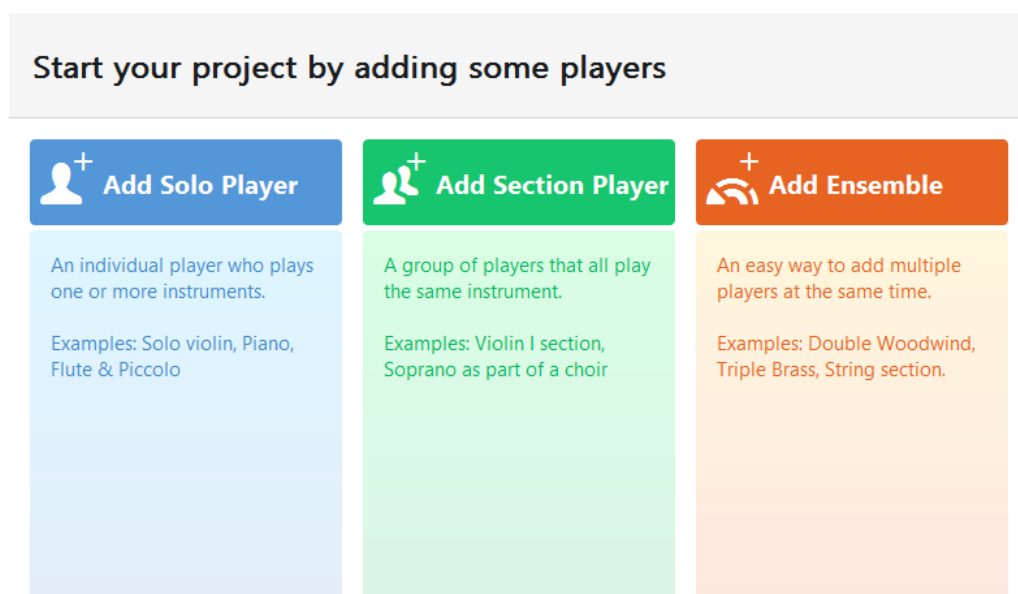
The project start area shows cards that allow you to add your first players. To add players, click one of the cards:

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, Write, and Engrave modes, the music area shows the editable score.
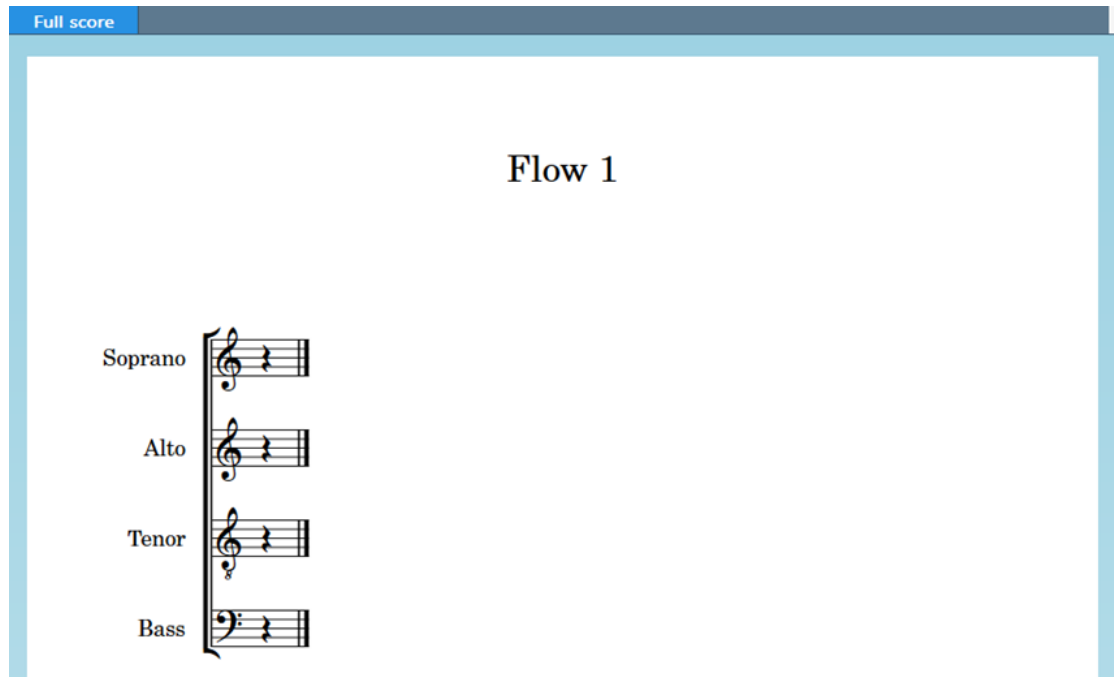
Music area showing a sample of a score

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 music area can be reduced. You can hide/show panels when necessary.

RELATED LINKS
Hiding/Showing panels on page 20

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 as a booklet

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, Write, or Engrave mode.

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

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.
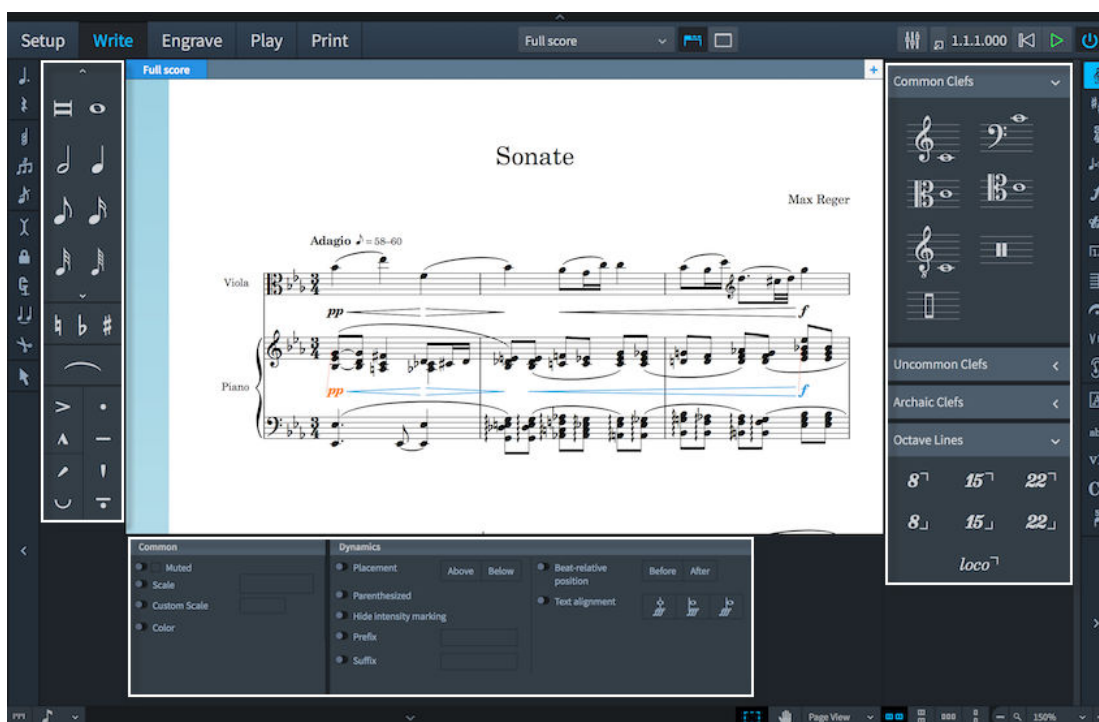
Notes panel (left), Notations panel (right), and Properties panel (bottom) in Write mode.

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

Modes and their panels

Mode	Left Panel	Right Panel	Bottom Panel
Setup	Players	Layouts	Flows
Write	Notes	Notations	Properties
Engrave	Formatting	Pages	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. For a full description of each panel, refer to the documentation of the project window in each mode.

RELATED LINKS

Toolboxes

Toolboxes are available in Write mode. They provide the tools that allow you to input and modify notes and notation items and to determine what notation items are shown in the Notations panel.

RELATED LINKS

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

The status bar is only available in Setup, Write, and Engrave modes. Not all options are available in all modes.

Status bar in Write and Setup mode

1   **Rhythmic Grid** selector

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

2   Disclosure arrow

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

3   Selection tools

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

4   View type selector

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

5   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.

6   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.

RELATED LINKS

Selection tools

Dorico allows you to choose a selection tool on the status bar that you can use to select or move items within the music area.

Pressing **Shift** in combination with the chosen selection tool allows you to instantly use the other tool.

You can use the following tools:

Marquee Tool

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

Hand Tool

Allows you to click and move the view within the music area.

RELATED LINKS

Making marquee selections

You can use a marquee selection to select multiple notes and notations at the same time within a specific area.

PREREQUISITE

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 indicated by 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

Moving the view

You can move the view within the music area in Write and Engrave modes.

PROCEDURE

1. In the status bar, click **Hand Tool**.

⟨hand icon⟩

2. Click and drag in any empty space in the music area.

   The mouse pointer changes into a hand symbol during the move.

RELATED LINKS
Status bar on page 45

View types

Dorico provides different ways to view your layouts.

Dorico saves your chosen view type for each layout, so you only need to set it once. You can change the default view types for new projects in the preferences.

The following view types are available:

Galley View

Lays out your music on a single continuous system. It also shows all of the instruments that are included in the active layout and flow.

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.

NOTE

Note spacing in galley view is unjustified, which means that it is neither expanded nor contracted 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.

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.

RELATED LINKS
Preferences on page 53
Page arrangements for page view on page 47
Changing the view type of the music area on page 52

Page arrangements for page view

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

Spreads Horizontally

⟨icon⟩

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

Spreads Vertically

⟨icon⟩

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
Changing the view type of the music area on page 52

Zoom options

You can change the size of notes and notations in the music area.

Zoom Out

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

Custom Zoom

Allows you to set a custom zoom percentage.

Set Zoom

Allows you to select one of the available zoom scaling factors. You can set a
permanent zoom factor in **Preferences**.

Zoom In

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

RELATED LINKS
Preferences on page 53

Setting up your workspace

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

Dorico 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 20

Opening multiple views/layouts at the same time

You can use tabs to display multiple layouts or different views of the same layout within the same
project window. 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 an additional view of a layout that is 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 the tabs at the top of the music area, below the toolbar. If you do not see the tabs,
click **Show Tabs** in the toolbar.

PROCEDURE

1. Open a new tab in any of the following ways:

   - Press **Ctrl/Cmd-T**.
   - To the right of the tabs, click **New Tab**.

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

   A new tab opens that shows several icons at the top and a list of layouts at the bottom.
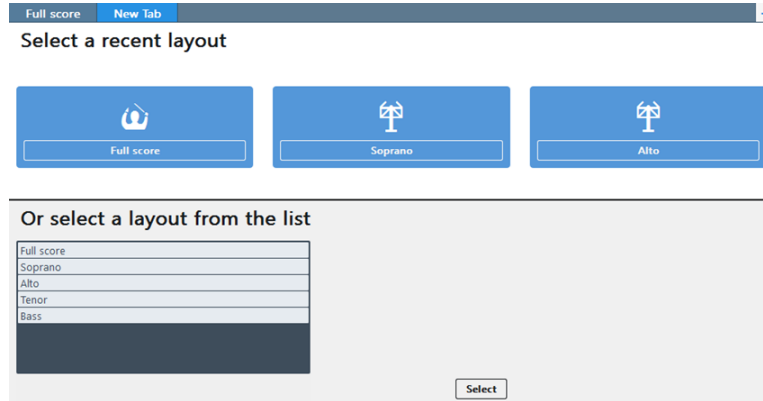
2. Select a layout to open in the new tab in any of the following ways:

   - Click one of the icons.
   - Select a layout from the list at the bottom.
   - Click **Select Layout** on the toolbar and choose one of the layouts from the pop-up menu.

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
Switching between layouts on page 94

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 together 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.

RELATED LINKS

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 close 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/Cmd-Tab** to cycle through all open tabs in turn.

  - Press **Ctrl/Cmd-Shift-Tab** to cycle through all open tabs in reverse order.

  - Click the tab to which you want to switch.

  - Choose **Window** > **Next Tab/Previous Tab**.

Changing the order of tabs

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

PROCEDURE

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

2. Release the mouse button.

Moving tabs to another tab group

You can move tabs to other tab groups.

NOTE

You can only move tabs to other tab groups if you have opened at least two tabs.

PROCEDURE

1. Click and drag the tab to a blank space next to the target tab group.

2. Release the mouse button.

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 and right-click a tab and choose **Move Tab to New Window** from the context menu.

  ● Select a tab and click **Window** > **Move Tab to New Window**.

Opening multiple project windows

You can open multiple project windows for the same project.

This can be useful if you want to see and work on multiple layouts at the same time. You can also open multiple project windows to show different modes of the same project.

Each window in a project is completely independent, so you can, for example, have one window in Write mode and another in Engrave 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 313

Changing to full screen mode

You can maximize the amount of screen estate 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 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 20

Changing the view type of the music area

You can switch between several view types of the music area.

PROCEDURE

1. In the status bar, click the view selector.
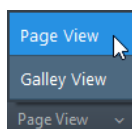
2. Choose one of the view types from the list.
   - **Galley View**
   - **Page View**

3. Optional: If you selected **Page View**, choose one of the following page arrangement options:
   - **Spreads Horizontally**

- **Spreads Vertically**

- **Single Pages Horizontally**

- **Single Pages Vertically**

RELATED LINKS

Preferences

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).

RELATED LINKS

General Preferences

General

Language

Allows you to select the language that is used for text in the user interface.

Preferred unit of measurement

Helps you to convert between the internal units and points that are used in Dorico and your own preferred units. For example, the information box to the right of **Space size** in the **Page Setup** section of the **Layout Options** dialog uses your selected unit to help you determine the staff size.

Window

Theme

Allows you to switch to different program colors.

Open new windows maximized

If you activate this option and open a new window, the window is maximized to fit the screen. This does not affect windows that are already open.

When the last window is closed

Allows you to specify what happens when you close the last project window.

View

Default zoom

Allows you to determine the zoom scaling factor that is used when you create a new project.

Default view type

Allows you to select the view type for new projects.

Files

Show complete path for recent files

If you activate this option, the paths for recently used files are displayed in the Hub and on the **File** menu together with the file names.

Editing

Default click-drag behavior

Allows you to select the selection tool that you want to use by default in your projects.

Double-click in Setup or Engrave mode switches to Write mode

If you activate this option, you can switch to Write mode from either Setup mode or Engrave mode by double-clicking.

Allow multiple items to be created with the mouse

If you activate this option, you can select items in panels and input them on multiple notes without having to reselect items each time for each note.

Creating items with the mouse

Allows you to set your preference for mouse input. You can either input items at the position of the note or item currently selected in the music area, or you can load items onto the cursor and then click where you want to input them.

Play

Audio Device Setup

Opens the **Device Setup** dialog.

Open VST plug-in windows when opening projects

If you activate this option, the VST plug-in that you selected for your project opens in a separate window when you open your project.

Suspend audio device in background

Allows other applications to play back via your audio hardware even though Dorico is running. If you activate this option, the audio device that you use is suspended when Dorico loses focus so that other applications may use it.

NOTE

Make sure that other audio applications accessing the audio hardware are set to release the audio driver.

Enable MIDI input

If you activate this option, you can input notes using any MIDI input device, such as a MIDI keyboard that is connected to your computer.

Play notes during note input and selection

If you activate this option, notes are played back in the following circumstances:

- Selecting notes
- Inputting notes
- Navigating through selections using the arrow keys
- Clicking the noteheads of individual notes or a stem in a chord

Follow playhead during playback

If you activate this option, the event display in Play mode advances when the playhead reaches the right-hand side of the display. This keeps the music being played in view.

Show playhead when stopped

If you activate this option, the playhead is displayed during playback and when stopped. If you deactivate this option, the playhead is only displayed during playback.

Key Commands

Most of the main menus in Dorico have key commands for certain menu items. In addition, there are numerous other Dorico functions that can be performed by pressings.

In the **Key Commands** section of the **Preferences** dialog, you can customize existing key commands according to your needs and also add commands for many menu items and functions that have no key command assigned.

Search

Allows you to search for menu items and functions to view, change, or add key commands.

Assigned key commands

Shows if the selected menu item or function has a key command.

Keyboard language

Allows you to select the language of your keyboard.

New key command

Allows you to input a new key command by pressing the respective keys on your computer keyboard.

Remove Key Command

Removes a key command from the selected menu item or function.

Add Key Command

Activates a key command that you have input for a function.

Reset Key Commands

Returns to the default key commands provided by Dorico.

Print Summary

Opens the **Dorico Key Commands** tool which shows the available key commands for your keyboard layout.

Setup mode

In Setup mode, you can determine the players and instruments for your project. You can also create and manage flows and set up layouts.

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 create players and assign instruments as well as to specify the layouts and flows for your score.

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

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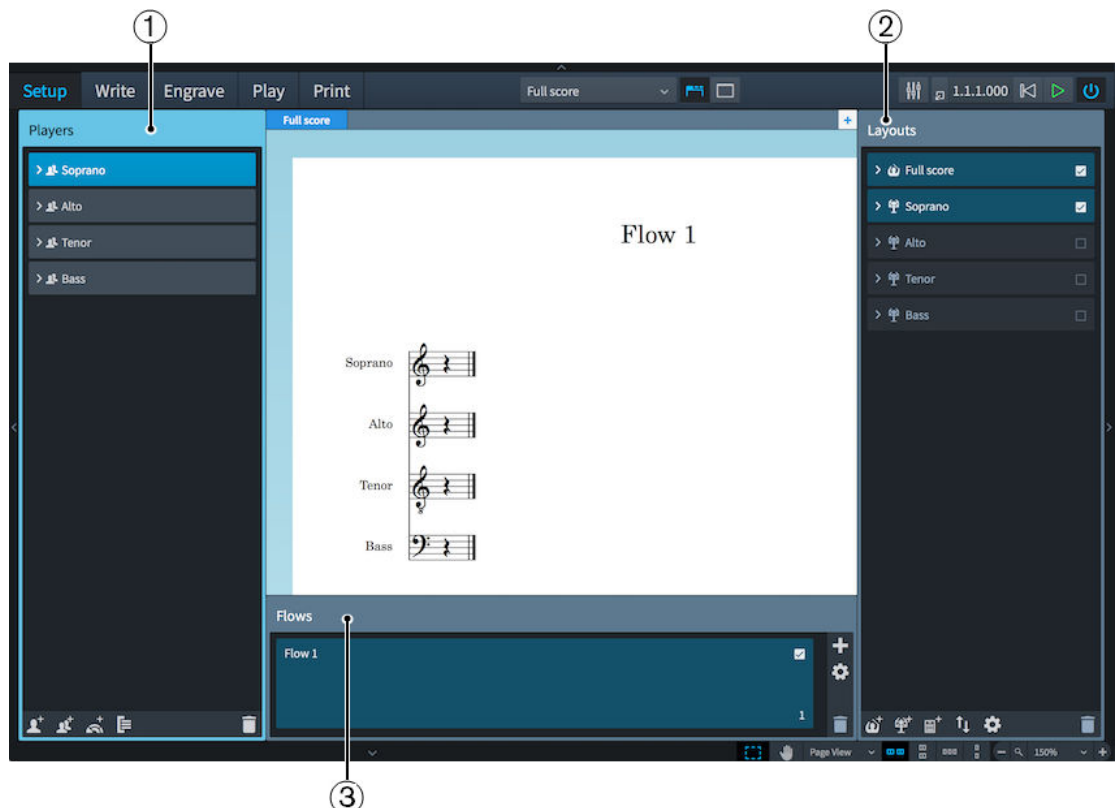
Panels in Setup mode

The following panels are available:

1   Players

Lists the players, instruments, and groups in your project.

2   Layouts

Lists the layouts that are created for players.

3   Flows

Shows the flows that are created for your project.

If you select or edit items on a panel, the panel and the selected item are highlighted in a different color. In each of the panels, you can activate/deactivate players, layouts, and flows independently to determine the following:

- The players included in each flow

  > IMPORTANT
  >
  > If you exclude a player from a flow, any notes you have already input for that player in that flow are deleted.

- The players that you want to show/print in an instrumental part/full score layout
- The flows that you want to show/print in instrumental parts/full score layouts

To verify that all the players and flows that you selected are shown in a layout, select the layout in the layout selector.

Players panel

The **Players** panel lists the players, instruments, and groups in your project.

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 of the window.
- Choose **Window** > **Show Left Panel**.
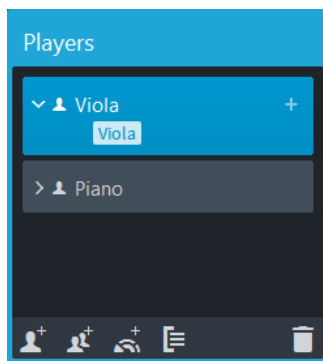
Players panel in Setup mode

The **Players** panel lists all the groups, players, and ensembles in your project as cards. Each player card shows the following:
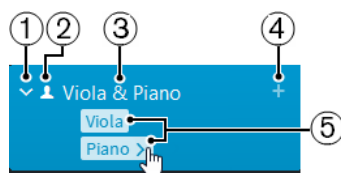
1   Disclosure arrow

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

4   Add instruments icon

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

5   Instrument list

If the player card is expanded, this shows all instruments that are assigned to the player. If you move the mouse over an instrument name, an arrow appears that allows you to open a context menu with further options.

At the bottom of the **Players** panel, the following options are available:

Add Solo Player

Adds an individual player to your project.

NOTE

For each solo player that you add, Dorico automatically adds an instrumental part layout to the **Layouts** panel.

Add Section Player

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

NOTE

For each section player that you add, Dorico automatically adds an instrumental part layout to the **Layouts** panel.

Add Ensemble

Adds multiple players to your project that represent standard combinations of musical instruments.

NOTE

If you add an ensemble, Dorico automatically adds instrumental 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 **Players** panel.

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 65
Layouts panel (Setup mode) on page 59
Layout Options dialog on page 62

Layouts panel (Setup mode)

In Setup mode, the **Layouts** panel lists all the full score and instrumental part layouts.

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**.
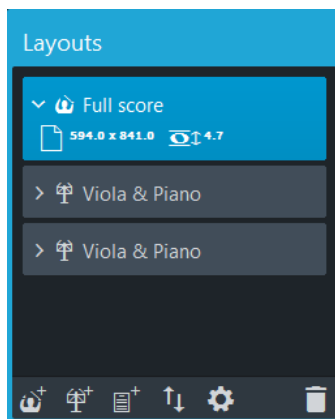
The **Layouts** panel lists the default full score layout and all the layouts that you created for your project as cards. Each layout card shows the following:
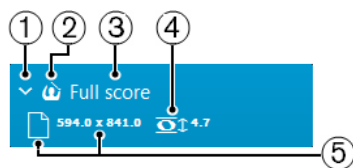
1 Disclosure arrow

Expands/Collapses the layout card.

2 Layout type

Shows the type of layout from the following options:

● Full score layout

● Instrumental part layout

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- Custom score layout

3 Layout name

Shows the name of the layout. Dorico 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 several empty part layouts.

4 Space size

Shows the space size between two staff lines in points. This indicates the size of staves in the layout.

NOTE

You can change the space size in each layout independently in **Layout Options**.

5 Page size and orientation

Shows the width and height of the pages of a layout and their orientation (portrait or landscape).

At the bottom of the **Layouts** panel, the following options are available:

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.

Layout Options

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

Delete Layout

Deletes selected layouts from the **Layouts** panel.

RELATED LINKS

Flows panel

The **Flows** panel shows all the flows that are created for your project.

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**.
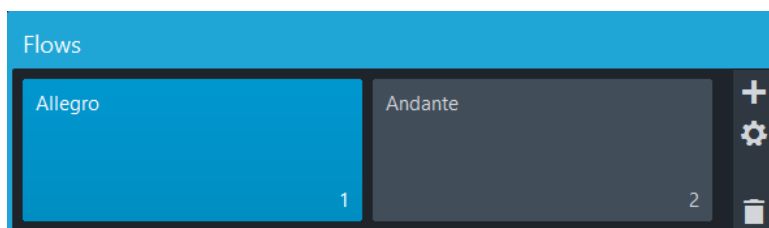
The **Flows** panel shows the default flow and all the flows that you created for your project as cards. Each flow card shows the following:

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 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.

Notation Options

Opens the **Notation Options** dialog that provides multiple options that allow you to make changes that affect the way music is notated for each flow.

Delete Flow

Deletes one or multiple selected flows.

RELATED LINKS
Flows on page 88

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Project Info dialog

For every project and every flow that you create in Dorico, you can specify project information in the **Project Info** dialog.

● You can open the **Project Info** dialog by choosing **File** > **Project Info**.

In the **Project Info** dialog, you can enter information for the whole project and for each flow. For example, each flow in your project might have a different composer and lyricist.

You can use tokens in text frames to refer to the information you enter into the different fields on the different pages in the **Project Info** dialog.

RELATED LINKS

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.

NOTE

● You can make project-wide changes to the appearance and position of different items in **Engrave** > **Engraving Options**.

● You can save all options that you set in **Layout Options** as default values 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** at the bottom of the **Layouts** panel in Setup mode.

● Right-click an instrumental part or a full score in the **Layouts** panel and choose **Layout Options** from the context menu.
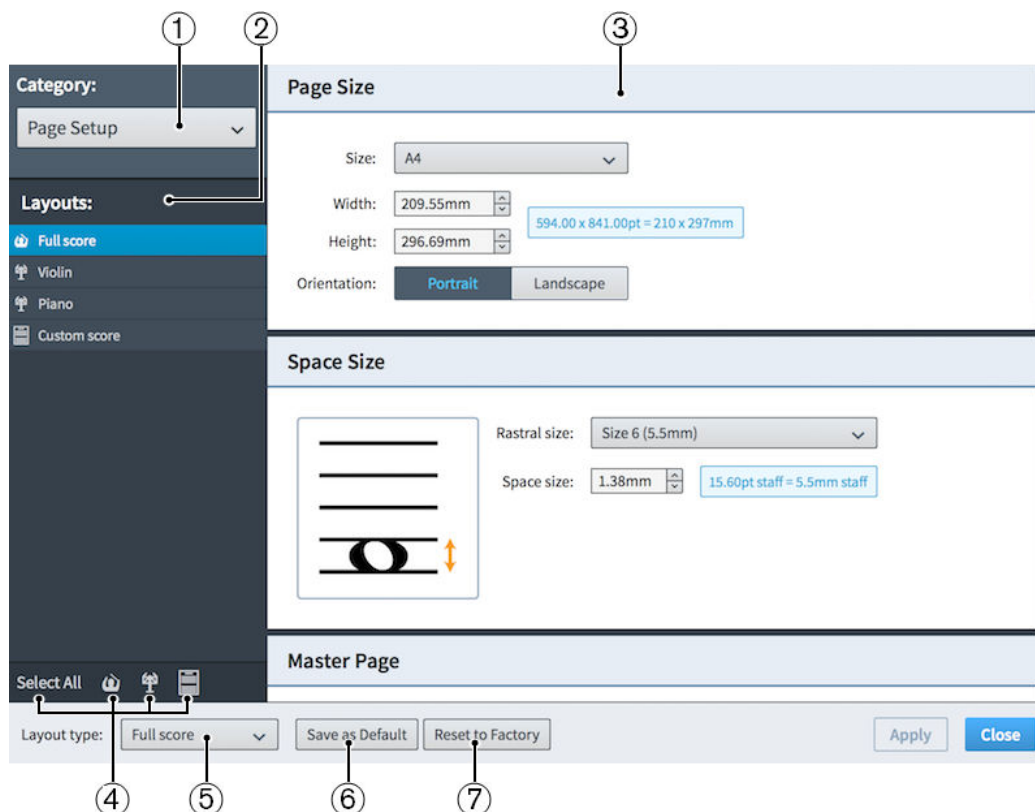
Layout Options

The **Layout Options** dialog consists of the following items:

1   Category menu

Select a category from the **Category** menu to show the page containing all the relevant options for the selected category.

2   Layouts list

Lists 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.

●   **Ctrl/Cmd**-click to select multiple layouts.

●   **Shift**-click to select multiple adjacent layouts.

3   Section

Pages are divided into sections, which can contain multiple options. Sections that contain many options are divided into subsections. The currently selected option is highlighted. Click other options to choose them instead.

4   Selection options

Allow you to select layouts in the **Layouts** list according to their type.

●   **Select All** selects all layouts in the **Layouts** list, regardless of their type.

●   **Select All Full Score Layouts** selects all full score layouts in the **Layouts** list only.

●   **Select All Part Layouts** selects all part layouts in the **Layouts** list only.

●   **Select All Custom Score Layouts** selects all custom score layouts in the **Layouts** list only.

5   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.

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6 **Save as Default**

Saves all options that you set in **Layout Options** as default for the selected layout type in new projects.

7 **Reset to Factory**

Resets all your options to the default factory settings for the selected layout type. You can use this to remove all changes you have made.

RELATED LINKS

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.

        ⚙️

    - In Setup mode, right-click an instrumental part or a full score in the **Layouts** panel and choose **Layout Options** from the context menu.

2. In the **Layouts** list, select the layouts in which you want to change options in one of the following ways:

    - Click **Select All**.
    - Click **Select All Full Score Layouts**.
    - Click **Select All Part Layouts**.
    - Click **Select All Custom Score Layouts**.
    - **Ctrl/Cmd**-click individual layouts.
    - **Shift**-click adjacent layouts.

    By default, the layout currently open in the music area is selected when you open the dialog.

3. Select a page from the **Category** menu.

4. Look through the available options, and change the options you want.

5. Click **Apply**, then **Close**.

    NOTE

    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

Before you start writing music, you must specify the players that are playing one or multiple instruments.

A player can be a solo player, which represents a single person who can play one or more instruments. For example, a clarinettist may double alto saxophone or bass clarinet.

A player can also be a sectional player, which represents multiple people, each of whom plays the same instrument. For example, a violin section or the soprano section of a choir.

Dorico uses this knowledge about players and their instruments to assist you in producing a practical score efficiently, for example, by making it very easy to handle instrument doubling, divisi, and condensing music for multiple players onto a smaller number of staves.

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

- An instrumental part layout is created.
- 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 included in all existing flows.

RELATED LINKS

Adding solo/section players

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

PREREQUISITE
The **Players** panel is open.

PROCEDURE

1. In the **Players** panel, add an empty-handed player in any of the following ways:

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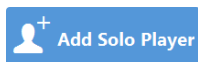
   - If you have started a new project, click **Add Section Player** in the project start area.

   - 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 by clicking the plus symbol in solo player cards.

[+]

Alternatively, you can right-click a player and choose **Add Instrument to Player**.

2. Select an instrument in the instrument picker in any of the following ways:

- Start entering the instrument name you want, then select it from the filtered list.
- Click an instrument family and then an instrument.
- Press **Up Arrow**/**Down Arrow** to select an instrument family, then press **Tab** to switch to the instrument column. Press **Up Arrow**/**Down Arrow** to select an instrument.

   TIP

   - An enclosure line shows which instrument family or instrument is selected when using the keyboard to navigate.
   - Press **Shift**-**Tab** to switch back to the previous column in the instrument picker.

3. Add the selected instrument in any of the following ways:

- Press **Return**.
- Click **Add**.

RESULT

The solo/section player is automatically named after the selected instrument.

TIP

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

Duplicating players

You can duplicate players. This adds another player of the same type.

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.

Player, layout, and instrument names

In Dorico, 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 three different names that relate to players and instruments are:

- Player name

- Layout name

- Instrument name

You can change all of these names for individual players independently of other instruments of the same type. Each name is used in different places. Player and layout names are shown using text tokens.

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 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 come with a set of instrument names that you can change.

You can change the instrument names for individual instruments independently, even if other players in the project are playing the same instrument.

You can save your changes to instrument names as default, so your names are used whenever you add that instrument again in the project.

NOTE

Changing the default instruments names does not change the instrument names of existing instruments of that type in your project.

Edit Instrument Names dialog

You can change the instrument names used in staff labels in the **Edit Instrument Names** dialog. You can specify singular and plural full instrument names, and singular and plural short instrument names for each instrument.

- 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**.

The **Edit Instrument Names** dialog includes the following options:

Singular full name

Allows you to set the name shown in staff labels whenever full instrument names are shown and the staff contains a single player.

Singular short name

Allows you to set the name shown in staff labels whenever short instrument names are shown and the staff contains a single player.

Plural full name

Allows you to set the name shown in staff labels whenever full instrument names are shown and the staff contains multiple players.

Plural short name

Allows you to set the name shown in staff labels whenever short instrument names are shown and the staff contains multiple players.

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**
- **Follow Layout Options**
- **Never**

Save as default for instrument

Activating the checkbox saves your changes in the dialog as the default for any new instruments of that type that you add to the project.

RELATED LINKS
Changing instrument names on page 70
Project-wide layout options for staves on page 700

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. Save your changes in any of the following ways:

- Press **Return**.

- Click outside of the text field.

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.

RELATED LINKS
Edit Instrument Names dialog on page 68

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. Save your changes in any of the following ways:

- Press **Return**.

- Click outside of the layout name field.

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
Edit Instrument Names dialog on page 68

Changing instrument names

Instrument names are used in staff labels. 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**.
    The **Edit Instrument Names** dialog opens.

3. Enter new names in any of the name fields.

4. 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 use the original default names.

If you saved your changes as default, any instruments of the same type added later use your new instrument names. The instrument names of any other instruments of the same type already in your score are not changed.

RELATED LINKS
Edit Instrument Names dialog on page 68
Changing layout names on page 69

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.

PROCEDURE

1. In the **Players** panel, select the players that you want to delete.

2. Delete the players in any of the following ways:

    ● Press **Backspace** or **Delete**.

    ● Click **Delete Player**.

    ● Right-click a single player and choose **Delete Player** from the context menu.

        NOTE

        You can only delete a single player at a time when using the context menu.

3. Choose one of the following options in the warning message that opens:

    ● **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 contains more than the deleted player.

Ensembles

If you add an ensemble in Dorico, multiple players are added to your project at the same time.

Dorico 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 follow standard patterns, such as double woodwind which refers to two flutes, two oboes, two clarinets, and two bassoons.

Adding ensembles

You can add multiple players at once by adding ensembles, such as a complete string section or four-part choir.

PREREQUISITE

The **Players** panel is open.

PROCEDURE

1. Do one of the following:

    ● 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. In the instrument picker, select an ensemble in any of the following ways:

- In the search field, enter the first letters of the ensemble, then select it from the filtered list, and click **Add Ensemble to Score**.

- Scroll through the popover list, select an ensemble, and click **Add Ensemble to Score**.

- Use **Tab**/**Shift-Tab** and the arrow keys on your computer keyboard to scroll through the popover list. To select an ensemble, press **Return**.

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
Changing player names on page 68
Project start area on page 41
Starting new projects from project templates on page 36

Instruments

You can assign instruments to solo and section players as well as to ensembles.

In Dorico, you can assign multiple instruments to solo players, as solo players often play multiple instruments, such as an oboist doubling the cor anglais.

Before you can assign instruments, you must add players or ensembles, which may in turn also be assigned to groups if needed. If you add ensembles, it is by default not necessary to add any instruments, since these are already included when you select the type of ensemble. However, you can add further instruments to ensembles.

Instruments in Dorico 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 always change the initial specification and add or delete instruments.

RELATED LINKS
Piano roll editor on page 303
VST and MIDI Instruments panel on page 309

Instrument numbering

When there are multiple instruments of the same type in the same score, they are each automatically given a number for easy and clear identification.

For example, if there is only one flute in a score, it is called Flute, but if there are three flutes, they are called Flute 1, Flute 2, and Flute 3.

Dorico automatically numbers instruments when there are multiple instruments of the same type in your project.
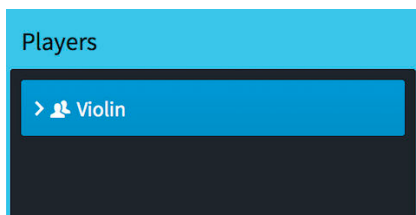
Players	Players
> 👥 Violin	> 👥 Violin I
	> 👥 Violin II
One violin with no number	Adding a second violin automatically generates numbers for both violins
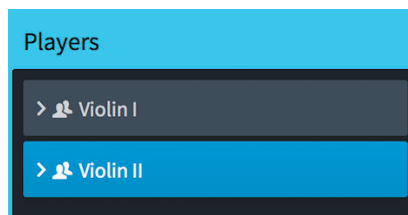
NOTE

Instrument numbers are automatically generated for players if the following criteria are met:

- Players are the same type, either solo or section.
- Players have at least one instrument in common.
- Players are in the same group.
- Instrument names are the same.

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 67
Changing instrument names on page 70
Player groups on page 86

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 stores all note information in concert pitch and automatically transposes notes as appropriate for the transposition of the instrument. This means notes 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
Concert vs. transposed pitch on page 94
Changing whether layouts are transposing/non-transposing on page 93

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, open the instrument picker in any of the following ways:

    - Select the solo or section player and press **Shift-I**.
    - Click the plus symbol to the right of the added empty-handed player.

      ➕

    - Right-click the player and choose **Add Instrument to Player** from the context menu.

2. Select an instrument in the instrument picker in any of the following ways:

    - Start entering the instrument name you want, then select it from the filtered list.
    - Click an instrument family and then an instrument.
    - Press **Up Arrow**/**Down Arrow** to select an instrument family, then press **Tab** to switch to the instrument column. Press **Up Arrow**/**Down Arrow** to select an instrument.

      TIP

      - An enclosure line shows which instrument family or instrument is selected when using the keyboard to navigate.
      - Press **Shift-Tab** to switch back to the previous column in the instrument picker.

3. Add the selected instrument in any of the following ways:

    - Press **Return**.
    - Click **Add**.

4. Optional: Repeat steps 1 to 3 to add multiple instruments to a single solo player.

    NOTE

    You can only add a single instrument to each section player.

RESULT

The selected instrument is added to the player. If you selected multiple players, the instrument is only added to the first player in the **Players** panel.

TIP

If you want to add multiple instruments to your project at the same time, you can add ensembles or use a project template.

RELATED LINKS
Adding ensembles on page 71
Starting new projects from project templates on page 36

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 77

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. You can change pitched instruments and individual unpitched percussion instruments, but you cannot change percussion kits into other instruments.

NOTE

Only unpitched percussion instruments are shown in the instrument picker when you choose **Change Instrument** for an unpitched percussion instrument.

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.
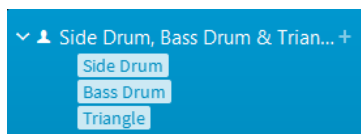
2. Hover over the label of the instrument you want to change, click the arrow that appears, and choose **Change Instrument**.

75

>

The instrument picker opens.

3. Select an instrument in the instrument picker in any of the following ways:

- Start entering the instrument name you want, then select it from the filtered list.

- Click an instrument family and then an instrument.

- Press **Up Arrow**/**Down Arrow** to select an instrument family, then press **Tab** to switch to the instrument column. Press **Up Arrow**/**Down Arrow** to select an instrument.

   TIP

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

   - Press **Shift**-**Tab** to switch back to the previous column in the instrument picker.

4. Change to the selected instrument in any of the following ways:

- Press **Return**.

- Click **Add**.

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.

Moving instruments between players

You can move individual instruments between players without affecting any music already input for those instruments.

PROCEDURE

- In the Players panel, move instruments to other players in any of the following ways:

   - Click and drag instruments individually and release them over the player card to which you want to move them.

   - 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
Adding solo/section players on page 65

Deleting instruments

You can delete instruments from players.

IMPORTANT

If you delete an instrument from a player, any music that you have created for this instrument is also deleted.

PROCEDURE

1. In the **Players** panel, click the disclosure arrow in the player card of the player holding the instrument you want to delete.

    The player card opens.

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.

Edit Percussion Kit dialog

You can make changes to percussion kits in the **Edit Percussion Kit** dialog, which opens automatically when you create empty kits or combine existing instruments into a kit.

●   You can open the **Edit Percussion Kit** dialog to edit existing percussion kit instruments by expanding the player card of the player holding the percussion kit in the **Players** panel in Setup mode. Then click the arrow in its label and choose **Edit Percussion Kit**.

NOTE

Percussion kit instrument labels are green in the **Players** panel in Setup mode.
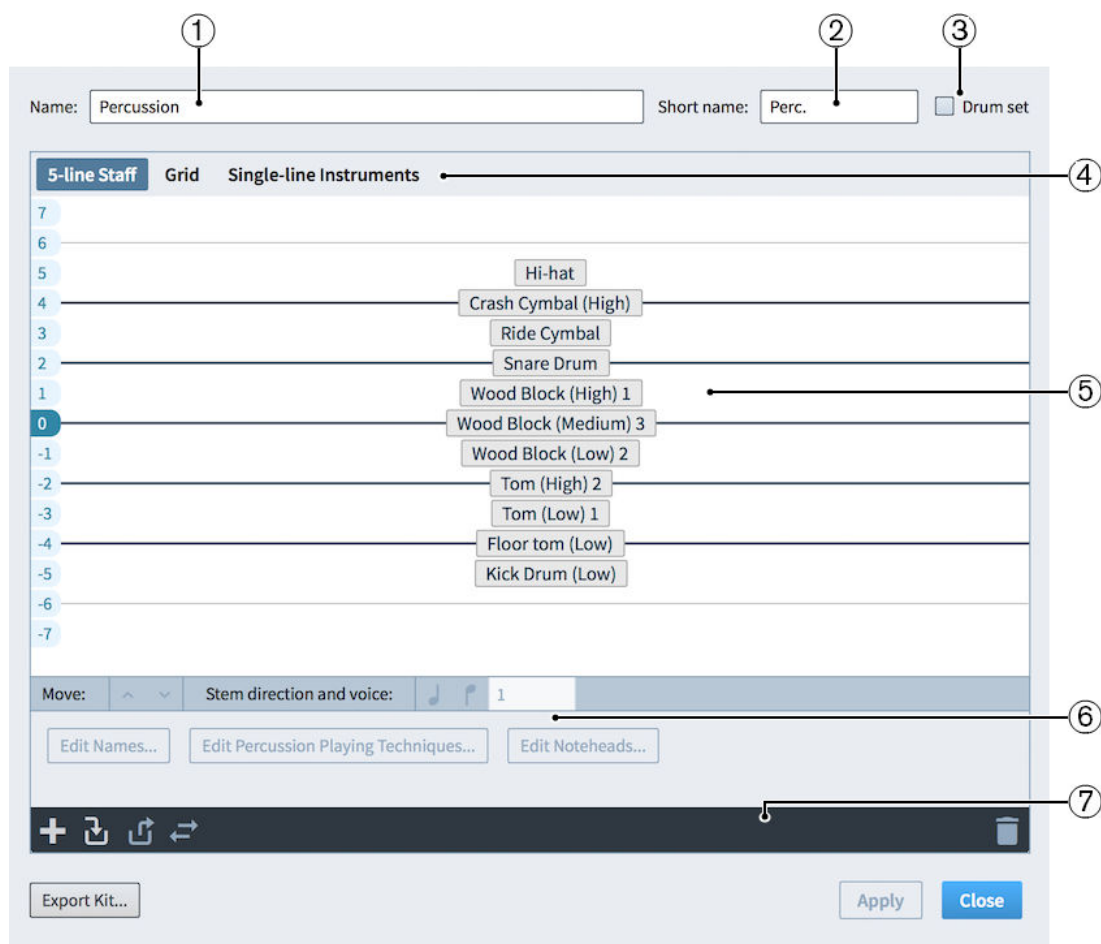
Edit Percussion Kit dialog

1   Name

Allows you to enter 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 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

Allows you to define the percussion kit as a drum set by activating the checkbox. Percussion kits that are defined as drum sets follow your settings for drum sets on the **Percussion** page in **Notation Options**, including for voicing and default stem directions.

4   Presentation types

Allows you to select a percussion kit presentation type in order to edit how the selected percussion kit appears in that presentation type.

- **5-line Staff**

  Kit instruments are shown on a five-line staff. You can determine which instruments are shown on each line and in each space of the staff. A single staff label containing the name of the kit is shown.

- **Grid**

  Kit instruments are shown on a grid, with each instrument on its own line. You can customize how large the gaps between each line are. Staff labels are shown for each instrument in a smaller font than normal staff labels.

- **Single-line Instruments**

Kit instruments are shown as individual instruments with their own lines. Normal-sized staff labels are shown for each instrument.

5   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.

You can access dialogs to change the noteheads used for each instrument in the kit by clicking **Edit Noteheads**, and how combinations of noteheads and 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.

Staff labels use different information, depending on the kit presentations.

7   Action bar

The action bar at the bottom of the dialog provides other operations that apply to all presentation types.

Edit Percussion Kit dialog action bar

1   **Add New Instrument**

Opens the instrument picker, allowing you to choose a new unpitched percussion instrument to be added to the kit.

2   **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.

3   **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.

4   **Change Instrument**

Shows the instrument picker, allowing you to choose a new unpitched instrument to replace the selected instrument, while retaining its music.

5   **Delete Instrument**

Deletes the instrument from the kit, including its music.

RELATED LINKS

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**.

   The **Edit Percussion Kit** dialog opens.

3.   Click **Add New Instrument**.

4.   Select a percussion instrument in the instrument picker in any of the following ways:

   ●   Start entering the instrument name you want, then select it from the filtered list.

   ●   Click an instrument family and then an instrument.

   ●   Press **Up Arrow**/**Down Arrow** to select an instrument family, then press **Tab** to switch to the instrument column. Press **Up Arrow**/**Down Arrow** to select an instrument.

   TIP

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

   ●   Press **Shift**-**Tab** to switch back to the previous column in the instrument picker.

5.   Add the selected instrument in any of the following ways:

   ●   Press **Return**.

   ●   Click **Add**.

6.   Click **Close**.

RESULT

The selected instrument is added to the percussion kit.

RELATED LINKS
Edit Percussion Kit dialog on page 77

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**.

   The **Edit Percussion Kit** dialog opens.

3.   Click the instrument you want to change.

4.   Click **Change Instrument** in the action bar.

⇄

5. Select a percussion instrument in the instrument picker in any of the following ways:

- Start entering the instrument name you want, then select it from the filtered list.
- Click an instrument family and then an instrument.
- Press **Up Arrow**/**Down Arrow** to select an instrument family, then press **Tab** to switch to the instrument column. Press **Up Arrow**/**Down Arrow** to select an instrument.

    TIP

    - An enclosure line shows which instrument family or instrument is selected when using the keyboard to navigate.
    - Press **Shift**-**Tab** to switch back to the previous column in the instrument picker.

6. Change to the selected instrument in any of the following ways:

- Press **Return**.
- Click **Change**.

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.

RELATED LINKS
Edit Percussion Kit dialog on page 77

Defining percussion kits as drum sets

You can define individual percussion kits as drum sets. Drum sets follow your project-wide setting for voicing in drum sets with five-line staff presentations.

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**.

    The **Edit Percussion Kit** dialog opens.

3. Activate **Drum set** in the top right of the dialog.
4. Click **Apply**, then **Close**.

RESULT

The selected percussion kit is defined as a drum set. The arrangement of voices for instruments in the kit when using the five-line staff presentation type follows your project-wide setting on the **Percussion** page in **Write** > **Notation Options**.

> **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
Notation Options dialog on page 110
Edit Percussion Kit dialog on page 77
Percussion Instrument Playing Techniques dialog on page 790

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**.

   The **Edit Percussion Kit** dialog opens.

3. Click **Grid** at the top of the dialog.

4. Click the first instrument you want to include in the group.

5. **Shift**-click the last instrument you want to include in the group.

   > **NOTE**
   >
   > You can only include adjacent instruments in groups.

6. Click **Add**.

RESULT

A group is created containing the selected instruments. The group is given a default name that you can change.

RELATED LINKS
Edit Percussion Kit dialog on page 77
Renaming groups in grid presentation percussion kits on page 82

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**.

The **Edit Percussion Kit** dialog opens.

3.   Click **Grid** at the top of the dialog.

4.   Open the **Edit Percussion Grid Group Names** dialog in any of the following ways:

●   Double-click the group.

●   Click the group, then click **Edit**.

⌀

Groups are shown as colored blocks in the column to the left of the list of percussion kit instruments.

5.   Enter the names you want to give the group in the corresponding fields in the **Edit Percussion Grid Group Names** dialog:

●   **Full Name**

●   **Short Name**

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

RESULT

The name of the group is changed. This also changes the staff label for the group.

NOTE

Staff labels for groups in grid presentation percussion kits use a different paragraph style to the staff labels for non-grouped instruments in grid presentation percussion kits.

EXAMPLE

Ride Cymbal —— Hi-hat —— Wood Block 1 —— Wood Block 2 ▌▐ Wood Block 3 Tom 1 —— Tom 2 —— Kick Drum ——	Ride Cymbal —— Hi-hat —— Wood blocks ▌▐ Tom 1 —— Tom 2 —— Kick Drum ——
Ungrouped grid presentation percussion kit	Grid presentation percussion kit with wood blocks grouped

RELATED LINKS

Edit Percussion Kit dialog on page 77
Staff labels for percussion kits on page 698

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**.

The **Edit Percussion Kit** dialog opens.

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.

RELATED LINKS
Edit Percussion Kit dialog on page 77

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.

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**.

The **Edit Percussion Kit** dialog opens.

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 a percussion instrument whose position you want to change.

5.   Change the position of the selected instrument in any of the following ways:

●   Click **Move** up arrow to move it upwards.

●   Click **Move** down arrow to move it downwards.

●   Click and drag the 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 position of the selected instrument 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
Edit Percussion Kit dialog on page 77
Moving notes to different instruments in percussion kits on page 786

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**.

      The **Edit Percussion Kit** dialog opens.

3.   Click **Grid** at the top of the dialog.

4.   Click the instrument below which you want to change the gap size.

5.   Change the value in the **Gap** field in any of the following ways:

      ●   Enter a value into the value field and press **Return**.

      ●   Click the arrows beside the value field.

6.   Click **Apply**, then **Close**.

RESULT

The size of the gap below the selected instrument is changed.

RELATED LINKS
Edit Percussion Kit dialog on page 77

Removing individual instruments from percussion kits

You can remove individual instruments from percussion kits, for example, if you want to move individual instruments in percussion kits to other players.

PROCEDURE

1.   In the **Players** panel, expand the card of the player holding the kit from which you want to delete instruments.

2.   Click the arrow that appears in the kit instrument label when you hover over it and choose **Edit Percussion Kit**.

      The **Edit Percussion Kit** dialog opens.

3.   Click the instrument you want to remove from the kit.

4.   Click **Remove Instrument From Kit** in the action bar.

5.   Click **Close**.

RESULT

The selected instrument appears as an individual instrument belonging to the same player but separate from the percussion kit.

You can then move the instrument to other players if required.

RELATED LINKS
Edit Percussion Kit dialog on page 77
Moving instruments between players on page 76

85

Player groups

Grouping players together means they are positioned together in the score, numbered independently, and are bracketed together according to the ensemble type chosen on the **Brackets and Braces** page in **Engraving Options**.

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 for to bracket players properly 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.

Similarly, you can create a group for an off-stage group of players in a large-scale work.

If the instruments were not already next to each other according to orchestral order, adding a player group changes the order of players in the score project-wide.

Adding groups of players

You can organize players into groups, for example, if you want to bracket them together.

PREREQUISITE

The **Players** panel is open.

PROCEDURE

1. Optional: In the **Players** panel, select the players that you want to include in the group.

2. At the bottom of the **Players** panel, click **Add Group**.

RESULT

If you selected one or more players, they are added to the group. If no player was selected, an empty group is added to the **Players** panel.

RELATED LINKS
Adding players to groups on page 87
Brackets and braces on page 422

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 the new name.

3. Press **Return**.

Deleting player groups

You can delete groups of players.

NOTE

If you delete a group, you can keep the players that you added to the group.

PROCEDURE

1. In the **Players** panel, select the group that you want to delete.

2. Delete the group in any of the following ways:

   - Click **Delete**.

   - Press **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 groups of players on page 86
Adding solo/section players on page 65

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 button.
    - 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 within your project, for example, movements or songs.

Every project contains at least one flow, and by default, every layout includes the music from every flow in your project. If you create a new flow in Dorico, the following happens:

- All music that you write for the new flow is automatically included in the existing full score and instrumental part layouts. You can exclude any flow from any layout by deactivating the respective flow card.
- All players are added to the new flow. You can exclude players from the flow by deactivating the respective player card.

    IMPORTANT

    If you exclude a player from a flow, any notes that you have already input for that player in that flow are deleted.

You can change certain options in each flow independently in the **Notation Options** dialog.

RELATED LINKS
Flows in Dorico on page 33
Flows panel on page 61
Changing options in Notation Options on page 112
Players on page 65
Layouts on page 91
Changing the players assigned to flows on page 89
Changing the flows assigned to layouts on page 92

Adding flows

If you need more than one flow in your project, you can add new flows.

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 added to all existing full score and part layouts.

Changing the players assigned to flows

By default, all players in your project are added to all flows. 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.

IMPORTANT

If you exclude 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, change the players assigned to the flow in the following ways:

● Activate the checkbox in the player card of each player you want to assign to the flow.

● Deactivate the checkbox in the player card of each player you want to remove from the flow.

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
Flows on page 88
Players on page 65
Layouts on page 91
Changing the flows assigned to layouts on page 92
Changing the players assigned to layouts on page 92

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 in the **Flows** panel in Setup mode, those names are automatically added in the **Title** field for the appropriate flow in the **Project Info** dialog. If you change the name in the **Flows** panel again later, the flow title is updated in the **Project Info** dialog.

Titles shown in scores and parts in the music area are linked to the **Title** field for each flow in the **Project Info** dialog.

This link is maintained until you change the names of flows in the **Project Info** dialog. Once you change flow titles in the **Project Info** dialog, changing flow names in the **Flows** panel no longer updates the **Title** field for that flow in the **Project Info** dialog.

This allows you to organize flows in Setup mode with different names to their official title.

RELATED LINKS
Project Info dialog on page 62
Text tokens on page 254

Renaming flows in Setup mode

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, open the flow name text field in any of the following ways:

    ● Double-click the name of the flow.

    ● Right-click the name of the flow and choose **Rename** from the context menu.

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.

Changing flow titles in the Project Info dialog

You can change flow titles in the **Project Info** dialog. Once you have done so, flow titles are no longer changed if you change their name in the **Flows** panel in Setup mode.

PROCEDURE

1. Choose **File** > **Project Info**.
    The **Project Info** dialog opens.

2. Select the flow whose title you want to change from the menu. Alternatively, use the arrow buttons beside the menu to choose the flow.

3. Enter the new title you want 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 to what you entered.

NOTE

This breaks the link between flow names in the **Flows** panel in Setup mode and the title shown in the music area.

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. Delete the flows in any of the following ways:

    ● Press **Backspace** or **Delete**.

    ● Click **Delete Flow**.

    ● Right-click the flow and choose **Delete Flow** from the context menu.

Layouts

Layouts allow you to present the music in your project differently for different purposes. For example, part layouts only include the music that player needs to play whereas full score layouts contain all staves in the project.

Dorico provides three types of layouts:

Full score

A full score layout includes by default all players and all flows in your project. You can remove players and flows that you do not need. Full score layouts are concert pitch by default.

Instrumental part

An instrumental part layout is automatically created when you add a player to your project. You can add further players to the instrumental part layout. You can also create empty instrumental part layouts and add players.

By default, instrumental part layouts contain all flows but you can exclude flows that you do not need. 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 to add, for example, only one flow instead of all flows or only vocal and piano staves to create a condensed score for the chorus. Custom score layouts are concert pitch by default.

RELATED LINKS
Page layouts on page 262
Flows on page 88
Players on page 65
Changing the flows assigned to layouts on page 92
Changing the players assigned to layouts on page 92

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, select 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.

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, change the players assigned to the layout in the following ways:

   - Activate the checkbox in the player card of each player you want to assign to the layout.

   - Deactivate the checkbox in the player card of each player you want to remove from the layout.

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 67
Changing layout names on page 69
Flows on page 88
Players on page 65
Layouts on page 91
Changing the players assigned to flows on page 89
Changing the flows assigned to layouts on page 92

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, change the flows assigned to the selected layout in the following ways:

   - Activate the checkbox in the flow card of each flow you want to assign to the layout.

   - Deactivate the checkbox in the flow card of each flow you want to remove from the layout.

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
Flows on page 88
Players on page 65
Layouts on page 91
Changing the players assigned to layouts on page 92
Changing the players assigned to flows on page 89

Renaming layouts

You can change the name of layouts.

If you add an instrumental part layout to project, its default name is **Empty part**. The default names of full score and custom score layouts are **Full score** and **Custom score**. If you add several layouts, an incremental number is added to the default names.

PROCEDURE

1. In the **Layouts** panel, open the layout name text field in any of the following ways:

   - Double-click the name of the layout.

   - Right-click the name of the layout and choose **Rename** from the context menu.

2. Enter the new name for the layout or edit the existing name.

3. Press **Return**.

RELATED LINKS
Instrument numbering on page 72

Changing whether layouts are transposing/non-transposing

You can change whether each layout in your project is transposing or non-transposing. In Dorico, full score layouts are non-transposing and part layouts are transposing by default.

For example, full scores are often non-transposing to show notes at concert pitch but part layouts are often transposing so the player can read the notes they must play in order to achieve the desired sounding pitch.

PROCEDURE

1. In Setup mode, choose **Setup** > **Layout Options**.
   The **Layout Options** dialog opens.

2. In the **Layouts** list, select the layouts you want to change to transposing/non-transposing in one of the following ways:

- Click **Select All**.
- Click **Select All Full Score Layouts**.
- Click **Select All Part Layouts**.
- Click **Select All Custom Score Layouts**.
- **Ctrl/Cmd**-click individual layouts.
- **Shift**-click adjacent layouts.

By default, the layout currently open in the music area is selected when you open the dialog.

3. Select **Players** from the **Category** menu.

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 see music at transposed pitch in any layout by choosing **Edit** > **Transposed Pitch**, and see music at concert pitch in any layout by choosing **Edit** > **Concert Pitch**.

Concert vs. transposed pitch

Layouts in Dorico 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 instruments on page 73
Transposing key signatures alongside selections on page 549
Enharmonic equivalent key signatures on page 549

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.

NOTE

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

PROCEDURE

- Open another layout in any of the following ways:

  - Press **Shift**-**Alt**-**]** to switch to the next layout.

  - Press **Shift**-**Alt**-**[** 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 an item on a staff or in the piano roll of the player whose layout you want to open and choose **Window** > **Counterpart Layout**.

  - Select a layout from the menu in the middle of the toolbar.

Full score	⌄
Full score	
Viola	
Piano	
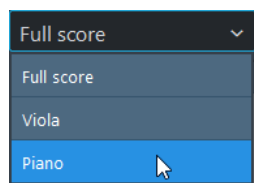
RESULT

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

RELATED LINKS

Sorting layouts

You can sort selected layouts in the **Layouts** panel.

PROCEDURE

1. Click and drag a layout card to a different position in the panel.
   An insertion line indicates where the players will be positioned.

2. Release the mouse button.

RESULT

The layout is inserted at the selected position.

Deleting layouts

You can delete layouts from the list of layouts in the **Layouts** panel.

PROCEDURE

1. Select the layouts that you want to delete.

2. Delete the layouts in any of the following ways:

   - Press **Backspace** or **Delete**.

   - Click **Delete Layout**.

     🗑

   - Right-click a single layout and choose **Delete Layout** from the context menu.

NOTE

You can only delete a single layout at a time when using the context menu.

Write mode

In Write mode, you can create your music. You can input notes and insert notations into your project.

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 that you need 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**.
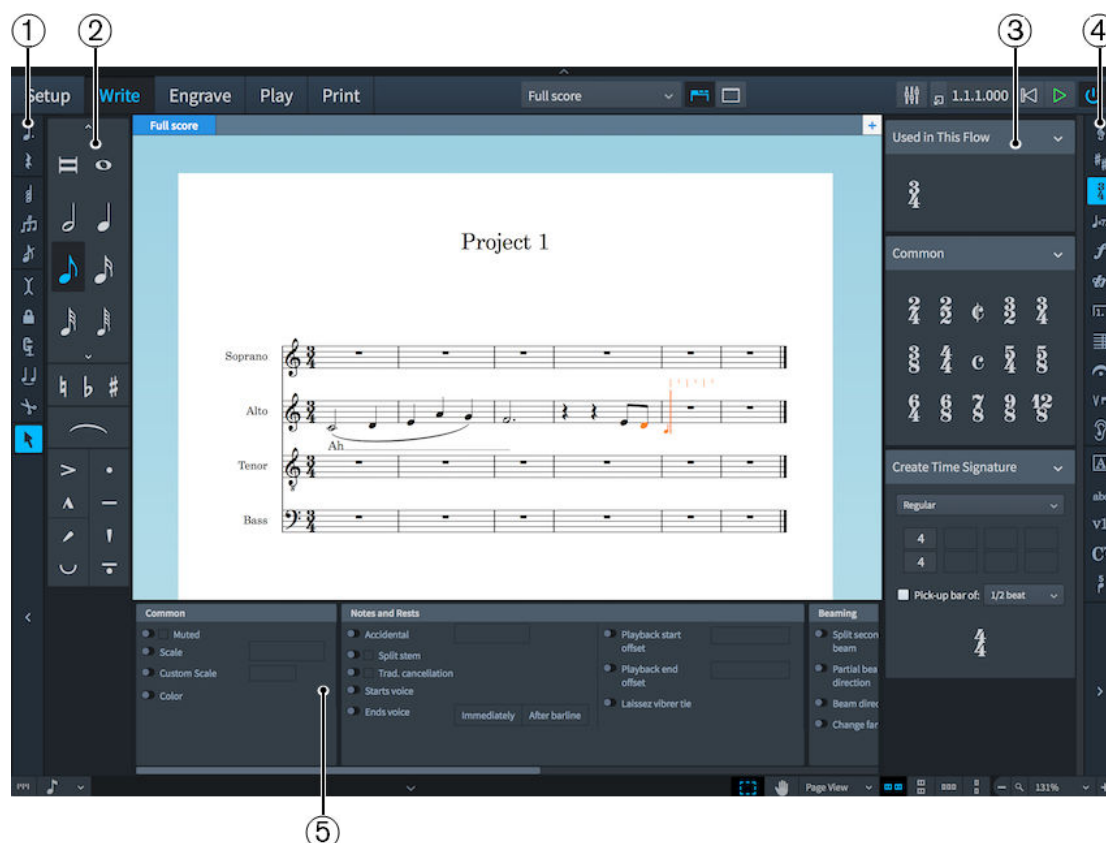
Toolboxes and panels in Write mode

The following panels and toolboxes are available:

1   Notes toolbox

Contains all tools that allow you to modify the note input.

2   Notes panel

Contains the note types, accidentals, and articulations that are most commonly used during note input.

3   Notations panel

Contains all the notation items that you can use for your music.

4   Notations toolbox

Allows you to select tools that determine which notation items are shown in the Notations panel.

5   Properties panel

Contains quick access properties that are required to make specific modifications to the notation.

Notes toolbox

The tools in the Notes toolbox allow you to modify notes.

Dotted Notes

Adds rhythm dots to notes or chords, and removes rhythm dots from notes or chords.

You can also activate/deactivate **Dotted Notes** by pressing **.** (period).

You can increase the number of dots on notes by pressing **Alt-.** (period).

Rests

Allows you to input rests of the duration currently selected in the Notes panel.

You can also activate/deactivate **Rests** by pressing **,** (comma).

Chords

Allows you to add several notes at the same rhythmic position in order to build a chord. This function prevents the caret from advancing automatically after inputting a note.

You can also activate/deactivate **Chords** by pressing **Q**

Tuplets

Inserts 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

Allows you to input grace notes at the current rhythmic position.

You can also activate/deactivate **Grace Notes** by pressing **/**.

Insert

Inserts music instead of overwriting.

You can also activate/deactivate **Insert** by pressing I.

Lock to Duration

Uses the duration of existing music for note input via MIDI or computer keyboard. This tool helps 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

Always creates the explicit duration that you have specified on the Notes panel. 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 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 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 step 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 in different voices or to tie grace notes to rhythmic notes.

You can also activate/deactivate **Tie** by pressing T.

Scissors

Splits a note or chord in two at the rhythmic position where the tool is applied.

You can also activate/deactivate **Scissors** by pressing U.

Select

Activates/Deactivates mouse input.

RELATED LINKS

Notes panel

The Notes panel contains buttons that allow you to input note durations, accidentals, slurs, and articulations.

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

- Press **Ctrl/Cmd-7**.
- Click the disclosure arrow below the Notes toolbox.
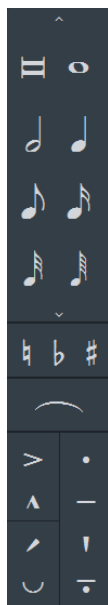
The upper part of the Notes panel contains note durations that you can input.

NOTE

Not all the available note durations are visible by default. To see all note durations, click **Show/Hide All Notes** at the top or bottom of the note durations list.

In the middle part of the Notes panel, you can activate accidentals and slurs.

At the bottom part of the Notes panel, you can activate articulations.

Properties panel

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.

The options that are available on the Properties panel depend on the item that you select in your score. Only properties relevant to the currently selected item are displayed. If you select multiple different types of notation items, only properties that they have in common are displayed.

For example, if you select a note with no other notations or articulations, the **Common** and **Notes and Rests** groups are displayed. If you select a tied note with an articulation, the **Common** group, the **Notes and Rests** group, the **Ties** group, and the **Articulations** group are displayed. This shows you all the options that you can change for that note.

NOTE

If you need to change parts of notations, for example, the bow of a tied note, switch to Engrave mode.

You can hide/show the Properties panel in Write mode and Engrave mode in any of the following ways:

● Press **Ctrl/Cmd-8**.

● Click the disclosure arrow at the bottom of the window.

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● Choose **Window** > **Show Bottom Panel**.
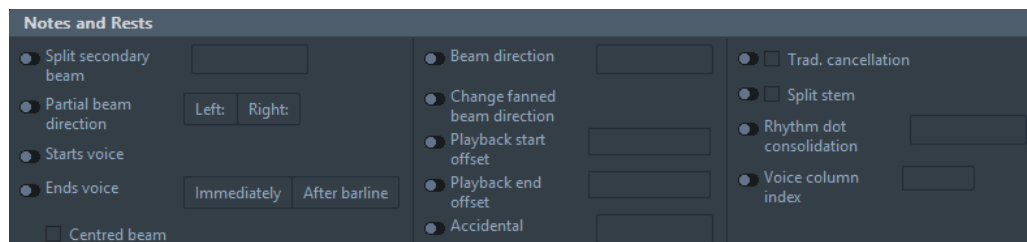
Notes and Rests group of the Properties panel in Write mode

RELATED LINKS

Changing the properties of individual items in Write mode

You can change the properties of notes and notations.

NOTE

You can only change a complete note or a complete notation. To make changes to individual parts of notes or notations, switch to Engrave mode, for example, if you want to change the length of a note stem. To change notes and notations project-wide for your project, you must edit the **Notation Options**, by choosing **Write** > **Notation Options** or by pressing **Ctrl/Cmd-Shift-N**.

PROCEDURE

1. Select a note or notation item in the score.

2. Open the Properties panel 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. Change the appropriate properties in the Properties panel.

RESULT

The complete note or notation item is changed. The changes are immediately displayed in the music area.

RELATED LINKS

Notations toolbox

The tools in the Notations toolbox allow you to determine what notation items are shown in the Notations panel.

Clefs

Opens sections in the Notations panel that allow you to select different clefs and octave lines.

Key Signatures, Tuning Systems, and Accidentals

Opens sections in the Notations panel that allow you to specify and select different key signatures, and to select different tonality systems and accidentals.

Time Signatures (Meter)

Opens sections in the Notations panel that allow you to specify and select different time signatures.

Tempo

Opens sections in the Notations panel that allow you specify and select different tempos and tempo changes.

Dynamics

Opens sections in the Notations panel that allow you to specify and select different dynamics.

Ornaments

Opens sections in the Notations panel that allow you to select different ornaments and glissando lines.

Repeat Structures

Opens sections in the Notations panel that allow you to input different repeat ending structures and segments, and select and remove different single-note and multi-note tremolos.

Bars and Barlines

Opens sections in the Notations panel that allow you to insert bars and to create barlines.

Holds and Pauses

Opens sections in the Notations panel that allow you to insert different types of fermatas, breath marks, and caesuras.

Playing Techniques

Opens sections in the Notations panel that allow you to insert playing techniques for various instrument groups.

Cues

Opens sections in the Notations panel that allow you to find suitable places for cues and input cues.

Rehearsal Marks

Inserts a rehearsal mark at the selected note.

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.

Fingerings

Opens the fingerings popover above the selected note on the staff, which allows you to input fingerings.

RELATED LINKS
Lyrics popover on page 202
Chord symbols popover on page 168
Fingerings popover on page 143
Cues panel on page 218
Text editor options in Write mode on page 214

Notations panel

The Notations panel contains the notation items for your music.

Depending on your selection in the Notations toolbox, different notation options are available in the Notations panel.

You can hide/show the Notations panel as often as you want, 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 20

Introduction to inputting and editing

Dorico distinguishes the processes for inputting and editing music.

Whenever you see the caret, you are inputting new music. When you do not see the caret, you are editing existing music.

You can switch back and forth between inputting and editing.

We recommend that you spend a moment to understand the difference between how Dorico 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
Differentiating between inputting and editing your music on page 104
Mouse input settings on page 108
Large selections on page 109
Filters on page 109
Note input on page 112
Notations input on page 141

Differentiating between inputting and editing your music

Depending on whether you input or you edit notes, the tools in the toolboxes and the panels behave differently.

To input notes, the caret must be activated.

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.

If no notes or chords are selected in the music area and you select a duration from the Notes panel, either by pressing its key command or by clicking it with the mouse, mouse input is activated. If you move the mouse pointer over the music, a shadow note is displayed to indicate where the note will be input if you click.

To edit notes, one or more items must be selected in the music area. If one or more notes or chords are selected in the music area, the Notes toolbox and Notes panel affect the selected notes and chords. If you select a new duration from the Notes panel, either by pressing its key command or by clicking it with the mouse, the durations of the selected notes and chords are all edited to match the chosen duration.

RELATED LINKS
Caret on page 112
Caret activation/deactivation on page 114
Inputting notes on page 115
Rhythmic grid on page 105
Moving notes rhythmically on page 578
Changing the pitch of individual notes on page 138

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 value 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.

The rhythmic grid helps you to identify the following:

● The exact input position when using the caret or the mouse

● 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

It also allows you to control how precisely notes and items are positioned when inputting them with the mouse or when copying and pasting. For example, setting the rhythmic grid value 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.

You can change the rhythmic grid value at any time.

RELATED LINKS
Caret on page 112
Moving the caret manually on page 115
Changing the rhythmic grid value on page 105

Changing the rhythmic grid value

You can change the value of the rhythmic grid. The value 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.

NOTE

The rhythmic grid value is set to eighth notes (quavers) by default.

PROCEDURE

● Change the value of the rhythmic grid in any of the following ways:

  ● Press **Alt-]** to decrease the rhythmic grid value.

  ● Press **Alt-[** to increase the rhythmic grid value.

  ● 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 on the status bar.

RESULT

Decreasing the rhythmic grid value makes it finer. Increasing the rhythmic grid value makes it coarser.

RELATED LINKS
Status bar on page 45

Positions of new items

The input positions of new items depends on whether you input or edit music.

When you input music and the caret is activated, Dorico creates any note or notation at the rhythmic position of the caret.

When you edit music and one or more notes or chords are selected in the music area, Dorico creates a new item 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.

EXAMPLE
Adding a time signature in front of a selected note

You can add a 3/4 time signature in front of a specific note in any of the following ways:

- Select the note, press **Shift**-**M**, enter 3/4 into the time signatures popover, and press **Return**.

- With no note selected, click **Time Signatures (Meter)** in the Notations toolbox. Then click 3/4 in the **Common** section, and click at the position where you want to insert the time signature.

RELATED LINKS
Moving notes rhythmically on page 578

Signposts

In Dorico, signposts indicate the positions of important items that either cannot be seen in the score, such as key signatures with no accidentals or items you have hidden.

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.
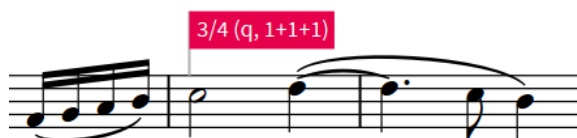
The signpost of a hidden time signature

You can hide/show signposts for the following items:

- Accidentals

- Chord symbols

- Clefs

- Cues
- Dynamics
- Frame breaks
- Key signatures
- Note spacing changes input using the **Note Spacing Change** dialog
- 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 so remain legible.
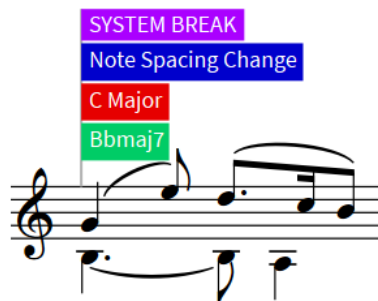
Multiple signposts for different items at the same rhythmic position

NOTE

By default, signposts are not printed or included when you export graphics files. However, you can include signposts and other annotations when printing/exporting layouts.

RELATED LINKS
Annotations on page 352

Hiding/Showing signposts

You can hide/show all signposts or only hide/show signposts for specific items at any time in Setup, Write, and Engrave modes.

PROCEDURE

- Hide/Show signposts in any of the following ways:
  - To hide/show all signposts, choose **View** > **Signposts** > **Hide Signposts**.
  - To hide/show signposts for specific items, choose **View** > **Signposts** > **[Type of item]**.

Mouse input settings

There are a number of different settings that you can choose from to determine how mouse input functions in Dorico.

You can set your preferences for mouse input in the **Editing** section of the **General** 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 cursor with item**

  Items are loaded onto the cursor 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 **Allow multiple items to be created with the mouse** is activated, you can load an item onto your cursor 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 cursor 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 in the whole application, not just in the current project.

RELATED LINKS
Preferences on page 53

Selecting/Deselecting notes and items individually

You can select 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.

NOTE

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.
   - 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.

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.

TIP

If you want to select only a certain type of item, such as lyrics or dynamics, you can then use the corresponding filters.

Filters

Filters in Dorico allow you to select only a specific type of item from a larger selection. Dorico includes a filter for every notation item.

- You can find the available filters by choosing **Edit** > **Filter** > **[Item]** > **[Item type]**.

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, including grace notes, their position in chords, and according to their accidental and pitch.

Voices

Allows you to filter voices according to their stem-direction.

Dynamics

Allows you to filter all dynamics as well as gradual and immediate dynamics.

Tempos

Allows you to filter all tempo marks as well as absolute, relative, and gradual tempo changes.

Lyrics

Allows you to filter all lyrics as well as by their line number, type, and placement relative to the staff.

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 553

Notation Options dialog

The **Notation Options** dialog provides multiple options that allow you to make changes that affect the way music is notated for each flow.

The changes that you can make affect the following:

- Note and rest grouping, such as the handling of syncopated rhythms or of different rhythms in different time signatures
- Voices, such as the sharing of noteheads among voices or the order in which multiple voices are tucked together
- Accidentals, such as the handling of cautionary accidentals
- Transposition, such as the handling of key signatures in transposing instruments

TIP

If you want to make direct changes to notes and notations, you can use the different options in the Properties panel.

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

- Press **Ctrl/Cmd-Shift-N** in any mode.
- Choose **Write** > **Notation Options** in Write mode.
- Choose **Setup** > **Notation Options** in Setup mode.
- Click **Notation Options** on the right of the **Flows** panel in Setup mode.
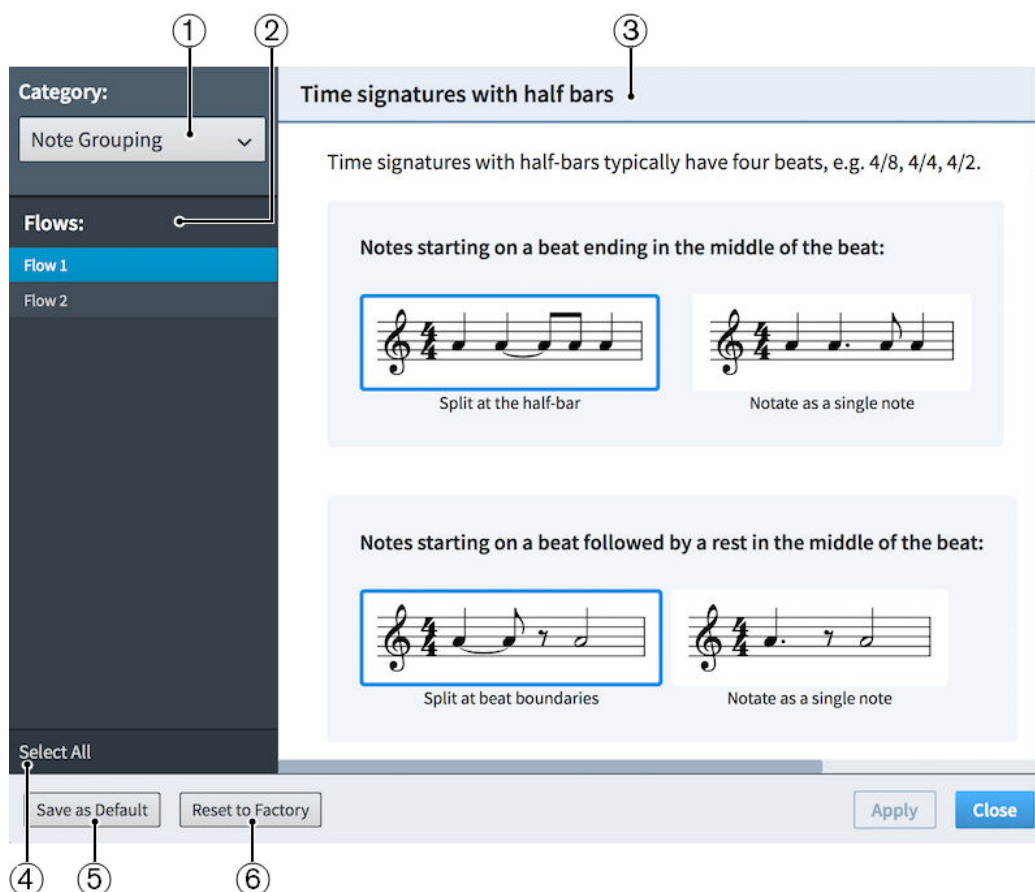
Notation Options

The **Notation Options** dialog consists of the following items:

1   **Category** menu

Select a category from the **Category** menu to show the page containing all the relevant options for the selected category.

2   **Flows** list

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

- **Ctrl/Cmd**-click to select multiple flows.

- **Shift**-click to select multiple adjacent flows.

3   Section

Pages are divided into sections, which can contain multiple options. Sections that contain many options are divided into subsections. The currently selected option is highlighted. Click other options to choose them instead.

4   **Select All**

Allows you to select all flows in the **Flows** list.

5   **Save as Default**

Saves all options that you set in **Notation Options** as default for new projects.

6   **Reset to Factory**

Resets all your options to the default factory settings. You can use this to remove all changes you have made.

RELATED LINKS
Flows on page 88

Changing options in Notation Options

You can change options in the **Notation Options** dialog for each flow independently.

PROCEDURE

1. In Write mode, choose **Write** > **Notation Options**.
    The **Notation Options** dialog opens.

2. In the **Flows** list, select the flows in which you want to make changes in one of the following ways:

    - **Ctrl/Cmd**-click individual flows.

    - **Shift**-click adjacent flows.

    - Click **Select All**.

    By default, only the current flow is selected when you open the dialog.

3. Select a category from the **Category** menu.

4. Make the changes you want to make in the area on the right.

5. Click **Apply**, then **Close**.

Note input

There are several different ways to input notes.

You can input notes using any of the following devices, and switch 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

Caret

In Dorico, the caret shows the rhythmic position at which notes, chords or notation items are input.

A caret is a mark that is commonly used in proofreading of written 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 can also be 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.

In Dorico, the caret is a vertical line that extends above and below the staff. If you are inputting notes, the caret advances to the next rhythmic position automatically. If you are inputting

chords, the caret does not move on its own, and you must move it to the next rhythmic position. The caret has a note symbol beside it in most cases, which indicates the stem direction 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 tool or on the number of voices that you are using.

Insert

The caret shows V and inverted V shapes at the top and bottom. In **Insert** mode, inserted notes shift all the music that follows along by the input duration instead of replacing existing notes.

Caret in **Insert** mode

Chords

The caret shows a plus symbol on the left at the top. Allows you to input multiple notes at the same rhythmic position.
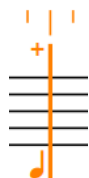
Caret when inputting chords

Lock to Duration

The caret line is dashed. Allows you to repitch notes without changing their duration or rhythm.

Caret when **Lock to Duration** is activated

Grace Notes

The caret is smaller than the default caret. 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 on the left at the bottom

- The number of the voice into which you are about to input 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

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

RELATED LINKS

Caret activation/deactivation

If you activate the caret, you can write music. If you deactivate the caret, you can edit your music.

You can activate the caret in any of the following ways:

- Select an item and press **Shift**-**N** or **Return**.

- Double-click the rhythmic position on the staff where you want to begin inputting notes.

You can deactivate the caret in any of the following ways:

- Press **Esc**.

Switching to another mode also deactivates the caret, as the caret can only be activate in Write mode.

Moving the caret manually

The caret automatically moves as you input notes normally, 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:

  - Press **Right Arrow**/**Left Arrow** to move the caret according to the current rhythmic grid value.

  - Press **Space** to advance the caret according to the note value currently selected.

  - Press **Ctrl/Cmd-Right Arrow**/**Ctrl/Cmd-Left Arrow** to move the caret to the next/previous bar.

  - Press **Up Arrow**/**Down Arrow** to move the caret to the staff above/below.

  - Press **Ctrl/Cmd-Up Arrow**/**Ctrl/Cmd-Down Arrow** to move the caret to the top/bottom staff in the system.

RELATED LINKS

Inputting notes

You can input notes into your project during step input, when note input is activated. You can input notes with a computer keyboard, by clicking with a mouse pointer, or by playing notes with a MIDI keyboard.

NOTE

- If you want to input notes into multiple instruments held by a single player, we recommend that you do so in galley view, where you can see all staves at once.

- During step input, you must specify the duration, accidentals, and articulations before specifying the pitch. This applies to all input methods.

  You can later add notations to notes after they have been input when note input is deactivated.

PROCEDURE

1. Optional: In the status bar, select **Galley View** from the view selector.
2. Start note input in any of the following ways:

   - Select the staff where you want to input notes and press **Shift-N** or **Return**.

   - Select the staff where you want to input notes and choose **Write** > **Note Input**.

   - Double-click the staff where you want to input notes.

3. Select a note value in any of the following ways:

   - Press the number on your computer keyboard that corresponds to the rhythmic value you want. For example, press **6** for quarter notes (crotchets), **5** for eighth notes (quavers), **7** for half notes (minims), and so on.

- Click the rhythmic value you want in the Notes panel on the left of the window.

4. Optional: Activate a rhythm dot.

5. Optional: Add an accidental.

6. Optional: Add an articulation.

7. Input the pitches you want in any of the following ways:

- Press the letters on your keyboard that correspond to the notes you want:

  A, **B**, **C**, **D E**, **F**, and **G**.

  > NOTE
  >
  > Dorico 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** as well as the letter for the note.
  >
  > - To input a note below the previously input note, press **Ctrl** (macOS) or **Ctrl-Alt** (Windows) as well as the letter for the note.
  >
  > You must press **Ctrl** on Mac, not **Cmd**.

- Click the staff at the rhythmic positions where you want to input notes.

  > TIP
  >
  > A shadow notehead appears when inputting with a mouse pointer to indicate where the note will be input.

- Play the notes you want on a MIDI keyboard.

8. Press **Esc** or **Return** to stop note input.

RESULT

Notes are input with the selected duration. Notes continue to be input with a rhythm dot and any articulations until you deactivate them. However, accidentals are only added to the first note you input after selecting them.

Beams are automatically formed between adjacent notes that are an eighth note or shorter, as appropriate for the time signature and their position in the bar.

> TIP
>
> - You can change the default beam grouping in your project on the **Beam Grouping** page in **Notation Options**.
>
> - You can also move the caret to other rhythmic positions without having to input notes.

RELATED LINKS

Register selection during step input

Dorico automatically selects the register of pitches during step input, but you can override this and select the register manually.

Register selection during step input

During step input, Dorico 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** as well as the letter for the note.

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

NOTE

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

Register selection when inputting chords

When **Chords** is activated, Dorico 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** (macOS) or **Ctrl**-**Alt** (Windows) as well as the letter for the note name.

For example, press **Ctrl**-**F** (macOS) or **Ctrl**-**Alt**-**F** (Windows) to input an F below the lowest note in the chord at the caret position.

NOTE

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

RELATED LINKS

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. Select a note value in any of the following ways:

    - Press the number on your computer keyboard that corresponds to the rhythmic value you want. For example, press **6** for quarter notes (crotchets), **5** for eighth notes (quavers), **7** for half notes (minims), and so on.

    - Click the rhythmic value you want in the Notes panel on the left of the window.

3. Add a rhythm dot in any of the following ways:

- Press **.** (period).

- In the Notes toolbox, activate **Dotted Notes**.

> **NOTE**
>
> The tool remains activate until you either select a different note duration or deactivate it.

4. Optional: Press **Alt-.** (dot) 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.

5. Press **Esc** or **Return** to stop note input.

RESULT

During step 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 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

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 step input, and switch between voices as often as you want.

You can also input notes into a new voice on a staff with existing notes. Once you have created a voice somewhere on a staff, you can input notes into that voice anywhere else on the same staff.

PROCEDURE

1. In Write mode, start note input.

2. Position the caret on the staff on which you want to input multiple voices, at the rhythmic position where you want the multiple voices to start.

3. Create a new voice in any of the following ways:

- Press **Shift-V**.

- Choose **Write** > **Create 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: Switch between voices in any of the following ways:

    ●   Press **V**.

    ●   Choose **Write** > **Next Voice**.

7. Press **Esc** or **Return** to stop note input.

RESULT

Notes are input into new voices, as indicated by the caret symbol.

NOTE

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 must 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.

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 112
Inputting notes on page 115
Adding notes above/below existing notes on page 133

Inputting notes in Insert mode

When **Insert** mode is activated, you can input notes before existing notes without overriding them. This allows you to push existing notes forwards at the same time as inputting new notes at the previous positions of the existing notes.

PROCEDURE

1. In Write mode, start note input.

2. Select a note value in any of the following ways:

   - Press the number on your computer keyboard that corresponds to the rhythmic value you want. For example, press **6** for quarter notes (crotchets), **5** for eighth notes (quavers), **7** for half notes (minims), and so on.

   - Click the rhythmic value you want in the Notes panel on the left of the window.

3. Activate **Insert** mode in any of the following ways:

   - Press **I**.

   - Click **Insert** in the Notes toolbox on the left of the window.

     When **Insert** mode is activated, the caret shows V and inverted V shapes at the top and bottom.

4. Input the pitches you want in any of the following ways:

   - Press the letters on your keyboard that correspond to the notes you want.

   - Click the staff at the rhythmic positions where you want to input notes.

     TIP

     A gray notehead appears when inputting with a mouse pointer to indicate where the note will be input.

   - Play the notes you want on a MIDI keyboard.

5. Deactivate **Insert** mode in any of the following ways:

   - Press **I**.

   - Click **Insert** in the Notes toolbox on the left of the window.

6. Press **Esc** or **Return** to stop note input.

RESULT

Notes are inserted before existing notes, without overriding any existing notes at rhythmic positions after the caret. Any existing notes after the caret are pushed ahead to subsequent rhythmic positions.

NOTE

You can deactivate **Insert** mode and immediately continue inputting notes as before.

Chords cannot be activated at the same time as **Insert** mode.

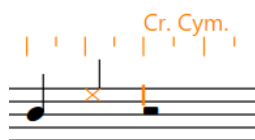## Inputting notes in percussion kits

You can input notes on percussion instruments within kits using any presentation type in the same ways as inputting notes on pitched instruments. However, the caret is smaller when inputting notes in percussion kits than when inputting music on the staves of pitched instruments.

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 currently selected by the caret, and playing technique if applicable, is shown above the staff, directly above the rhythmic grid display.

Inputting notes on instruments with five-line staff kit presentation

PROCEDURE

1. In Write mode, select an item in the percussion kit into which you want to input notes, at the rhythmic position from which you want to input notes.

2. Start note input in any of the following ways:

   - Press **Shift-N** or **Return**.

   - Choose **Write** > **Note Input**.

   - Double-click the staff.

3. Move the caret up/down to input notes on different instruments in any of the 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-Up Arrow** to cycle upwards through playing techniques.

   - Press **Shift-Alt-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 **General** 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 on the **General** page in **Preferences**.

- Any kit presentation type: Click the staff on the lines or in the spaces where you want to input notes, and at the rhythmic positions where you want them.

- Any kit presentation type: Press **Y** to input notes for the instrument and playing technique shown above the rhythmic grid.

6. Press **Esc** or **Return** to stop note input.

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.

In the **Note Input** section of the **General** page in **Preferences** you can find options relating to note input for percussion.

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, it is recommended that you set **Use staff position** for percussion input.

Use percussion map is only normally useful when you are inputting notes onto a drum set and you have already memorized the General MIDI percussion map.

RELATED LINKS

Default note selection during step input for percussion kits

During step 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 **General** page. For example, if you want to use staff positions to determine notes, choose **Use staff position** for **Input notes 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 would mean either the kick drum in the bottom space, or the ride cymbal on the top line.

When inputting notes in pitched instruments, Dorico 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 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 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.
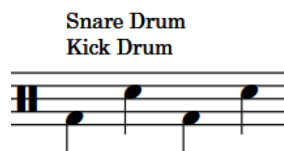
NOTE

Dorico 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 on page 53
Stem direction on page 711

Inputting rests

Dorico automatically shows rests as appropriate in the gaps between the notes you input. However, you can also input rests manually.

PROCEDURE

1. In the Notes toolbox, select **Rests** in any of the following ways:

    - Press **,** (comma).
    - Click **Rests** in the Notes toolbox.

2. Optional: Click a duration in the Notes panel.

3. Input a rest in any of the following ways:

    - Play a note on the MIDI keyboard.
    - Press **Y**, or any of the letters from **A** to **G**.

RESULT

A rest of the selected duration is input. If you input more than one rest, Dorico automatically combines the rests into a rest of a different duration that makes sense in combination with the input notes. However, you can force the duration of rests if you want rests of a specific duration.

RELATED LINKS
Rests on page 656
Implicit vs. explicit rests on page 657
Forcing the duration of notes/rests on page 125

Selecting note/rest durations

You can select durations for notes/rests either from the Notes panel or by using one of the assigned key commands.

PREREQUISITE

If you want to change which durations are listed, click **Show/Hide All Notes** at the top or bottom of the notes list.

 /

PROCEDURE

- Do one of the following:

    - Press one of the respective key commands. For example, press **6** for quarter notes (crotchets), **5** for eighth notes (quavers), **7** for half notes (minims), and so on.
    - Click a duration in the Notes panel.

RELATED LINKS
Notes panel on page 100
Key commands in Dorico on page 10
Inputting notes on page 115

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.
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.
    - Press **Shift-Alt-Right Arrow** to lengthen notes by the current rhythmic grid value.
    - Press **Shift-Alt-Left Arrow** to shorten notes by the current rhythmic grid value.
    - Press **Ctrl/Cmd-Shift-Alt-Right Arrow** to double the length of notes.
    - Press **Ctrl/Cmd-Shift-Alt-Left Arrow** to halve the length of notes.
    - Choose **Write** > **Edit Duration** > **Lengthen Duration by Grid Value**.
    - Choose **Write** > **Edit Duration** > **Shorten Duration by Grid Value**.
    - Choose **Write** > **Edit Duration** > **Lengthen Duration**.
    - Choose **Write** > **Edit Duration** > **Shorten Duration**.

RESULT

The duration of the selected notes is changed.

Forcing the duration of notes/rests

Dorico automatically notates and beams notes/rests appropriately, according to the current time signature and their position in the bar. If you want to specify how the durations of notes/rests are notated, you can force their duration.

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 automatically divides the note to show the correct grouping.

PROCEDURE

1. In Write mode, start note input.
2. Optional: If you want to force the duration of rests, select **Rests** in any of the following ways:

    - Press **,** (comma).

- Click **Rests** in the Notes toolbox.

3. Activate **Force Duration** in any of the following ways:

- Press **O**.

- Click **Force Duration** in the Notes toolbox.

4. Select the duration you want.

5. Input the notes or rests you want.

6. Optional: Deactivate **Force Duration**.

RESULT

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.

NOTE

Notes that cross barlines are notated as tied notes.

You can change how notes are grouped in different contexts project-wide on the **Note Grouping** page in **Write** > **Notation Options**.

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 positions of rests.

EXAMPLE

Default notation of notes in 6/8

Notes in the down-stem voice input with forced durations

RELATED LINKS

Inputting ties

You can input ties manually to join two notes of the same pitch, both during step input and by joining two existing notes with a tie.

In general, Dorico creates ties automatically as required. If you specify a rhythmic duration that cannot be notated with a single note value, Dorico automatically creates chains of tied notes as necessary for the meter.

For example, if you want to input a tie between two quarter notes across a barline, you can simply input a half note at the rhythmic position where you want to input the first quarter note. Dorico automatically splits the half note into two quarter notes, one on each side of the barline, and joins them with a tie.

In the following cases, you must input ties manually:

● If you later want to change the duration, and want to join it with a tie to the following note to make it longer.

● If the notes that you want to tie together are not rhythmically adjacent, for example, if the notes are separated by intervening notes of a different pitch.

● If the notes that you want to tie together are in different voices.

● If you want a grace note to be tied to a note that is not a grace note.

PROCEDURE

1. In Write mode, do one of the following:

● Start note input.

● Select the note from which you want the tie to start.

2. Input a tie in any of the following ways:

● Press **T**.

● Click **Tie** in the Notes toolbox.

3. Optional: During step 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. If the second note is a different pitch to the first note, no tie is input.

RESULT

During step 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 on the same staff.

NOTE

Depending on the current time signature and your settings on the **Note Grouping** page in **Write** > **Notation Options**, inputting a tie between two notes can instead create a single note of a different duration. For example, inputting a tie between the first two quarter notes in a 4/4 time signature creates a minim.

You can override your note grouping settings and fix your notated rhythm in any of the following ways:

● Press **O**.

● Click **Force Duration** in the Notes toolbox.

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Dorico now notates your input notes with the rhythmic durations specified, as long as they can fit inside the bar.

RELATED LINKS

Inputting grace notes

You input grace notes in the same ways as inputting normal notes, and they can have any rhythmic note value. You can only input grace notes during note input.

TIP

You can also add accidentals and articulations to grace notes in the same ways as for normal notes.

PROCEDURE

1. In Write mode, start note input.
2. Position the caret at the rhythmic position where you want to input grace notes.
3. Start inputting grace notes in any of the following ways:

   - Press **/**, and the number for the rhythmic duration you want. For example, press **/** then **5** to input eighth grace notes (quaver grace notes).

     TIP

     You can select these in any order.

   - Click the rhythmic duration you want in the Notes panel, and click **Grace Notes** in the Notes toolbox, in any order.

4. Optional: Press **Alt-/** to switch between inputting slashed/unslashed grace notes.

   The **Grace Notes** toolbox button when inputting unslashed grace notes.

   TIP

   You can also change the grace note type after you have input grace notes.

5. Enter, click, or play in the pitches you want.
6. Stop inputting grace notes and return to inputting normal notes in any of the following ways:

   - Press **/** again.
   - Click **Grace Notes** in the Notes toolbox.

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 517
Inputting notes on page 115
Inputting accidentals on page 135
Inputting articulations on page 141
Changing the type of grace notes on page 521

Inputting chords

You can input chords during step input, when both note input and **Chords** are activated. You can input notes with a computer keyboard, by clicking with a mouse pointer, or by playing notes with a MIDI keyboard.

PROCEDURE

1. Start note input in any of the following ways:

    ●   Select the staff where you want to input notes and press **Shift-N** or **Return**.

    ●   Select the staff where you want to input notes and choose **Write** > **Note Input**.

    ●   Double-click the staff where you want to input notes.

2. Select a note value in any of the following ways:

    ●   Press the number on your computer keyboard that corresponds to the rhythmic value you want. For example, press **6** for quarter notes (crotchets), **5** for eighth notes (quavers), **7** for half notes (minims), and so on.

    ●   Click the rhythmic value you want in the Notes panel on the left of the window.

3. Activate the **Chords** input tool in any of the following ways:

    ●   Press **Q**.

    ●   Click **Chords** in the Notes toolbox on the left of the window.

    When **Chords** is activated, a + sign appears at the top of the caret. This allows you to input multiple notes at the same rhythmic position, according to the current position of the caret.
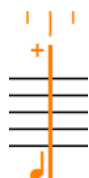
4. Input the pitches you want in any of the following ways:

    ●   Press the letters on your keyboard that correspond to the notes you want to input at the caret position.

NOTE

Dorico 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** (macOS) or **Ctrl-Alt** (Windows) as well as the letter for the note name.

- Click the staff at the rhythmic positions where you want to input notes.

TIP

A gray notehead appears when inputting with a mouse pointer to indicate where the note will be input.

- Play the notes you want on a MIDI keyboard.

NOTE

When **Chords** is activated, notes are input at the same rhythmic position and above the previous note until you advance the caret manually.

5. Optional: Advance the caret to input chords at other rhythmic positions.

6. Deactivate **Chords** in any of the following ways:

- Press **Q** again.
- Click **Chords** again in the Notes toolbox on the left of the window.

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.

TIP

You can deactivate **Chords** 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.

NOTE

- **Chords** cannot be activated at the same time as **Insert** mode.
- When chords contain two pitches in the same register but with different accidentals, that is known as an altered unison. Altered unisons are shown with either single stems or with split stems, depending on your settings on the **Accidentals** page in **Write** > **Notation Options**.

RELATED LINKS

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.

NOTE

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. In Write mode, start note input.

2. Select a note value in any of the following ways:

   - Press the number on your computer keyboard that corresponds to the rhythmic value you want. For example, press **6** for quarter notes (crotchets), **5** for eighth notes (quavers), **7** for half notes (minims), and so on.

   - Click the rhythmic value you want in the Notes panel on the left of the window.

3. Open the tuplets popover in any of the following ways:

   - Press **;**.

   - Choose **Write** > **Create Tuplet**.

   - Click **Tuplets** in the Notes toolbox.

4. Enter the tuplet you want into the popover as a ratio. For example, enter **3:2** to input triplets.

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

   The tuplet is entered.

6. Enter or play in the pitches you want.

   Dorico continues inputting tuplets of the same ratio until told to stop.

   TIP

   You can advance the caret using **Space** to continue inputting tuplets of the same ratio at later rhythmic positions.

7. Stop inputting tuplets in any of the following ways:

   - Press **Shift-;** to 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.

   NOTE

   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.

RESULT

The pitches you enter or play in are input as tuplets, starting from the caret position.

RELATED LINKS

Tuplets popover

You can input tuplets with the keyboard by using the tuplets popover in Write mode. It can only be opened during step input.

You can open the tuplets popover when note input is activate in Write mode in any of the following ways:

- Press ;.

  Tuplets are often described in ratios, such as 3:2, so the tuplets popover uses the semicolon key to be memorable.

- Choose **Write** > **Create Tuplet**.

- Click **Tuplets** in the Notes toolbox.

The icon on the left-hand side of the popover matches the corresponding button in the Notes toolbox on the right of the window.
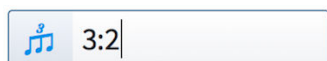
Tuplets popover with an example entry

Tuplets button in the Notes toolbox

When inputting tuplets with the keyboard, Dorico continues inputting notes as the specified tuplet until any of the following happens:

- You press **Shift-;** to return to inputting normal notes.

- You move the caret with the arrow keys.

- You stop note input.

The table shows some examples of what to enter into the tuplets popover, and the tuplets that are input into the music as a result.

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

NOTE

The duration of each note in the tuplet, and the total duration of the tuplet, depends on the note value selected when you open the popover. The ratio specified relates to the selected note value.

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 131
Tuplets on page 771

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. Open the add intervals popover in any of the following ways:
   - Press **Shift-I**.
   - Choose **Write** > **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
Add intervals popover on page 133
Changing the pitch of individual notes on page 138

Add intervals popover

The add intervals popover allows you to add notes above and below existing notes, and also transpose existing notes.

This popover 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:

- Press **Shift-I**.
- Choose **Write** > **Add Intervals Popover**.

The table shows some examples of how to structure your entry to transpose notes or add notes to existing notes.

Action	Popover entry
Transpose notes upwards.	t3 or t6

Action	Popover entry
Transpose notes downwards.	**t-5** or **t-3**
Add notes a third above.	**3** or **3rd**
Add notes a fourth below.	**-4** or **-4th**
Add multiple notes	**3,6** or **-3,3,4**

NOTE

Separate notes with commas, not with spaces.

Add notes above or below all notes in selected chords.	**3 all** or **-M2,m3 to all**

NOTE

Separate notes with commas, not with spaces.

Add notes only to the top notes in chords.	**-3 top** or **dim5 top**
Add notes only the to 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 mictrotonal intervals.	**t 3 8 qt**

NOTE

The first number is the interval degree.

The second number is the number of quarter tones.

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.

RELATED LINKS

Transposing existing notes with the 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. Open the add intervals popover in any of the following ways:

    - Press **Shift**-**I**.

    - Choose **Write** > **Add Intervals Popover**.

3. Enter the intervals of the transposition you want. 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

Inputting accidentals

You can input notes with accidentals, both during step input and by adding them to existing notes.

NOTE

Accidentals that are part of the 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.

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, Tuning Systems, and Accidentals panel on the right of the window.

3. Optional: During step input, enter the note you want with your selected accidental.

> **NOTE**
>
> ● Depending on the accidental duration system in place, subsequent accidentals for the same note in the same register might not appear in the same bar.
>
> ● If you input notes using a MIDI device, Dorico automatically shows an accidental if necessary. It selects a sharp, flat, or natural based on key signature and context. You can later respell accidentals.

RESULT

The accidental is added to the selected existing notes.

During step input, the selected accidental is only input on the next note you input. You must reselect the accidental if you also want to input it on subsequent notes.

RELATED LINKS

Respelling accidentals

You can change the enharmonic spelling of notes, so they are shown as their enharmonic equivalents.

Dorico uses an algorithm that automatically decides the spelling of pitches, based on key signature and context.

However, there are occasions when you might need to change how an accidental is spelled, such as to show clearly the stepwise movement in a phrase, or to avoid altered unisons in a chord.

In Dorico, you can switch between each available enharmonic spelling, allowing you to see at least three options for every pitch. There are always at least three options, as Dorico 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 Write mode, select the notes you want to respell.

2. Respell the selected notes upwards/downwards in any of the following ways:

   ● Press **Alt-=** to respell upwards.

   ● Press **Alt--** to respell downwards.

   ● Choose **Write** > **Respell** > **Respell Using Note Name Above** to respell upwards.

   ● Choose **Write** > **Respell** > **Respell Using Note Name Below** 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 |

Accidental selection during MIDI input

Dorico interprets MIDI data to create accidentals, and automatically determines the spelling of notes according to preset rules.

Dorico 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 prefers sharp accidentals in a key with sharps, and flats in a key with flats. If you change the spelling of an accidental, Dorico follows your spelling preference whenever that note is used again in the score.

If you input notes with accidentals outside the key signature, Dorico 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.

Dorico makes retrospective changes to how it has spelled accidentals, depending on how your input 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♭.

You can disable this setting in **Write** > **Note Input Options**.

Disabling automatic accidental respelling

You can turn off the automatic respelling of accidentals, to prevent Dorico from making retrospective changes to accidentals.

PROCEDURE

1. Open **Note Input Options** in any of the following ways:

    ● Press **Ctrl/Cmd-Shift-I** in any mode.

    ● Choose **Write** > **Note Input Options** in Write mode.

2. Click **MIDI Input** in the page list.

3. Deactivate **Allow spelling of notes to be adjusted retrospectively**.

4. Click **Apply**, then **Close**.

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 scale degrees, by step, and by transposing up/down 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:
   - Press **Alt-Up Arrow** to move notes up one staff position, for example, from B to C.
   - Press **Alt-Down Arrow** to move notes down one staff position, for example, from C to B.
   - Press **Shift-Alt-Up Arrow** to transpose notes up a single octave division. For example, a semitone in 12-EDO or a quarter tone in 24-EDO.
   - Press **Shift-Alt-Down Arrow** to transpose notes down a single octave division. For example, a semitone in 12-EDO or a quarter tone in 24-EDO.
   - Press **Ctrl/Cmd-Alt-Up Arrow** to transpose notes up an octave.
   - Press **Ctrl/Cmd-Alt-Down Arrow** to transpose notes down an octave.

RESULT

The pitch or register of the selected notes is changed.

NOTE

You can press **Alt-Up Arrow** and **Alt-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.

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 copy notes from one staff to another and keep the same rhythm but have different pitches.

PROCEDURE

1. Select the first note you want to repitch.
2. Start note input in any of the following ways:
   - Press **Shift-N** or **Return**.
   - Choose **Write** > **Note Input**.
   - Double-click the staff.
3. Activate **Lock to Duration** in any of the following ways:
   - Press **L**.
   - Click **Lock to Duration** in the Notes toolbox.

4. Enter the pitches you want.

5. Optional: Deactivate **Lock to Duration**.

NOTE

Lock to Duration automatically deactivates when you reach the last existing note on the staff. Note input continues as usual with eighth notes (quavers) as the duration by default.

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.
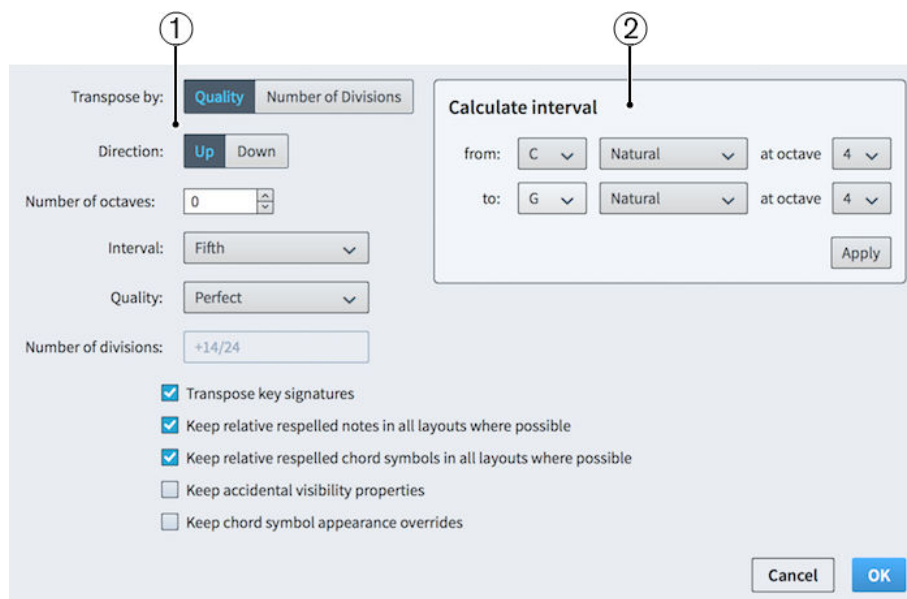
RELATED LINKS
Caret on page 112

Transpose dialog

You can transpose a selection of notes, including key signatures, using the **Transpose** dialog. You can transpose according to an interval and quality or by a set number of divisions of the octave.

● 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.

Additional options also allow you to transpose any key signatures included in your selection and keep relative respelled notes and chord symbols where possible.

2 **Calculate interval**

Allows you to set transpositions 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 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 point of your selection.

RELATED LINKS
Add intervals popover on page 133

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**.
The **Transpose** dialog opens.

3. Change the options as applicable for the transposition you want.

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.

Activating/Deactivating mouse input

You can activate/deactivate mouse 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 **General** page in **Preferences**.

EXAMPLE

Select when deactivated

Select when activated

RELATED LINKS
Preferences on page 53

Notations input

You can input many types of notations both during step input and by adding them to existing notes.

Inputting articulations

You can input notes with articulations during step 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. 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.
3. Optional: Enter the notes or chords you want with your selected articulations.

RESULT

The selected articulations are added to the selected notes.

During step input, the selected articulations are added to all notes that are input until the articulations are deactivated.

NOTE

You cannot add some combinations of articulations to the same notes. For example, you cannot have both staccato and staccatissimo marks on the same notes, as both articulations indicate that notes are played shorter.

RELATED LINKS
Articulations on page 367
Note input on page 112
Key commands for articulations on page 141

Key commands for articulations

You can input articulations by clicking the corresponding button of the articulation you want in the Notes panel on the left of the window in Write mode, or 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: ˊ	{
Unstressed: ˇ	@ (Windows) **Shift**-' (macOS)
Staccato: ˙	]
Tenuto: ˗	# (Windows) \ (macOS)
Staccatissimo: ', ', or '	}
Combined tenuto and staccato: ˗	~ (Windows) | (macOS)

RELATED LINKS
Articulations on page 367
Inputting articulations on page 141

Inputting fingerings

You can input fingerings on existing notes using the fingerings popover.

Fingerings are associated with individual noteheads and so you can only add fingerings to existing noteheads. Therefore, you cannot input fingerings during step input, and the popover does not advance automatically.

NOTE

- You can only add fingerings to notes at one rhythmic position at a time, and you can only input the same number of 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.

- 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, select the 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. Open the fingerings popover in any of the following ways:

   - Press **Shift**-**F**.

   - Click **Fingering** in the Notations toolbox.

- Choose **Write** > **Create Fingerings**.

3. 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.

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

RESULT

The fingerings are input on the selected notes.

RELATED LINKS
Fingering on page 500
Fingerings popover on page 143
Changing the rhythmic position of substitution fingerings on page 501
Fingerings for valved brass instruments on page 509
Deleting fingerings on page 505

Fingerings popover

The table shows some examples of what to enter into the fingerings popover and the fingerings that are input into the music as a result.

You can open the fingerings popover in Write mode in any of the following ways:

- Press **Shift-F**.

- Choose **Write** > **Create Fingerings**.

- Click **Fingering** in the Notations toolbox.

Type of fingering	Example popover entry
Single fingerings for individual notes, including for brass valve numbers and trombone slide positions.	1, 2, 3, and so on.
Valved brass instruments	12
Single fingerings for each note in chords	1,3,5

NOTE

For keyboards, Dorico automatically orders numbers appropriately according to the hand playing the notes. The default is:

- Right hand for the upper staff

- Left hand for the lower staff

Left hand fingerings	L2, G2, S5, I2, or H2
Right hand fingerings	R5, D5, or M5

Type of fingering	Example popover entry
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. For example, in keyboard music the thumb may depress two keys simultaneously.	1,1
Alternative fingerings	2(3)

NOTE

You must use parentheses in the popover, even if you choose to show alternative fingerings in square brackets.

Editorial fingerings	[4]

NOTE

You must use square brackets in the popover, even if you choose to show alternative fingerings in parentheses.

Finger substitutions	1-3
Thumb indicator for string instruments.	T

This list is 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.

You can change the appearance and position of each type of fingering on the **Fingering** page in **Engrave** > **Engraving Options**.

RELATED LINKS

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, Tuning Systems, and Accidentals panel.

Inputting key signatures with the popover

You can input key signatures with the keyboard by entering the key signature you want into the key signatures popover.

You can open the key signatures popover in Write mode in any of the following ways:

- Press **Shift-K**.

- 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.
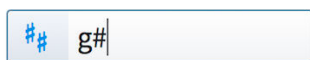
Key signatures popover with an example entry

Key Signatures, Tuning Systems, and Accidentals button in the Notations toolbox

Inputting key signatures with the panel

You can open the Key Signatures, Tuning Systems, and Accidentals panel by clicking **Key Signatures, Tuning Systems, and Accidentals** in the Notations toolbox in Write mode.

The Key Signatures, Tuning Systems, and Accidentals panel contains the following sections:

Tonality System

Select tonality systems to use and create new tonality systems.

Used in This Flow

Contains all the key signatures currently used in the flow.

Key Signatures

Create key signatures by choosing whether it is major or minor, and changing the number of sharps or flats.

Custom Key Signatures

Contains any custom key signatures you have created for the currently selected tonality system.

Accidentals

Contains all accidentals available in the currently selected tonality system.

NOTE

The order in which you should follow steps for inputting key signatures with the mouse depends on your preferences for **Creating items with the mouse** in the **Editing** section of the **General** page in **Preferences**.

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

- Press **Ctrl/Cmd-,** (comma).

- Choose **Dorico** > **Preferences** (macOS).

- Choose **Edit** > **Preferences** (Windows).

You can hide/show the panel whose icon is currently selected in the Notations toolbox in any of the following ways:

- Press **Ctrl/Cmd-9**.
- Click its disclosure arrow.
- Choose **Window** > **Show Right Panel**.

RELATED LINKS

Key signatures popover

The table shows some examples of what to enter into the key signatures popover and the key signatures that are input into the music as a result.

You can open the key signatures popover in Write mode in any of the following ways:

- Press **Shift-K**.
- Choose **Write** > **Create Key Signature**.

Type of key signature	Popover entry
Open or atonal key signature	**open** or **atonal**
Major keys (capital letters)	**C**, **D** or **Eb**, **Ab**, and so on.
Minor keys (lowercase letters)	**g**, **d**, **f#**, **bb**, and so on.
Number of sharps	**3s**, **2#**, and so on.
NOTE	
Assumes the major key for that many sharps.	
Number of flats	**4f**, **5b**, and so on.
NOTE	
Assumes the major key for that many sharps.	

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 section of the Key Signatures, Tuning Systems, and Accidentals panel

You can use the **Key Signatures** section in the Key Signatures, Tuning Systems, and Accidentals panel to create and input custom key signatures.

You can show/hide the **Key Signatures** section by clicking the section title, which has a disclosure arrow beside it.

The **Key Signatures** section contains the following parts:

1 Two buttons at the top, which allow you to select either **Major** or **Minor** for your key signature.

2 Two buttons on the right.

- The down button is the **More Sharps/Fewer Flats** button. Each time you click on this button, one sharp accidental is added to the key signature, or one flat accidental is removed from the key signature.

- The up button is the **Fewer Sharps/More Flats** button. Each time you click on this button, one sharp accidental is removed from the key signature, or one flat accidental is added to the key signature.

3 The button showing how the key signature looks on a staff. Clicking this button inputs the key signature it displays. If nothing in the project is selected, the key signature is loaded onto the cursor.
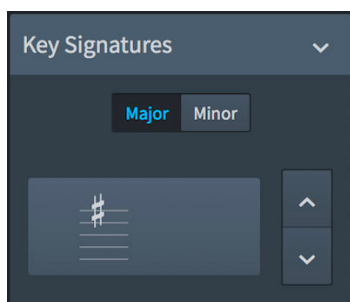
The **Key Signatures** section of the Key Signatures, Tuning Systems, and Accidentals panel.

RELATED LINKS
Key signatures on page 533

Inputting key signatures with the popover

You can input key signatures using the key signatures popover, both during step input and by adding them to existing music. You can also input key signatures only on single staves.

PROCEDURE

1. In Write mode, do one of the following:

   - Start note input.

   - Select an existing barline immediately to the left of where you want to input a key signature.

   - Select an existing notehead or rest immediately to the right of where you want to input a key signature.

   - Select an existing key signature that you want to change.

2. Open the key signatures popover in any of the following ways:

   - Press **Shift-K**.

   - Choose **Write** > **Create Key Signature**.

3. 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.

4. Input the key signature and close the popover in one of the following ways:

- Press **Return** to input a key signature on all staves.
- Press **Alt-Return** to input a key signature on a single staff.

RESULT

During step input, key signatures are input at the caret position, even if this is in the middle of a bar.

> NOTE
>
> It is preferable to input a change of key signature at a barline. You can move it to different rhythmic positions later.

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 inputting key signatures to existing music, they are input immediately to the right of a barline, or immediately to the left of a selected note, 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.

Pressing **Alt** when closing the popover inputs the key signature only on the selected staff.

> 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, but you can check the transpositions by choosing **Edit** > **Transposed Pitch** to see your current layout with transposed pitches, rather than concert pitches.
>
> You can also open the part of a transposing instrument and compare it to the concert pitch score.

RELATED LINKS

Inputting key signatures with the panel

You can input key signatures using the Key Signatures, Tuning Systems, and Accidentals panel, both during step 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 of **Create item at selection**.

PROCEDURE

1. In Write mode, do one of the following:

- Start note input.

- Select an existing barline immediately to the left of where you want to input a key signature.

- Select an existing notehead or rest immediately to the right of where you want to input a key signature.

- Select an existing key signature that you want to change.

2. In the Notations toolbox, click **Key Signatures, Tuning Systems, and Accidentals**.

The Key Signatures, Tuning Systems, and Accidentals panel opens on the right of the window.

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** design editor in the Key Signatures, Tuning Systems, and Accidentals panel.

4. Input the key signature you want in one of the following ways:

- Click a key signature to input it on all staves.

- **Alt**-click a key signature to input it on a single staff only.

RESULT

During step input, key signatures are input at the caret position, even if this is in the middle of a bar.

NOTE

It is preferable to input a change of key signature at a barline. You can move it to different rhythmic positions later.

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 immediately to the right of a barline, or immediately to the left of a selected note, 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.

Pressing **Alt** when clicking a key signature inputs the key signature only on the selected staff.

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, but you can check the transpositions by choosing **Edit** > **Transposed Pitch** to see your current layout with transposed pitches, rather than concert pitches.

You can also open the part of a transposing instrument and compare it to the concert pitch score.

RELATED LINKS

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 where there are common time signatures ready to use. There is also a **Create Time Signature** section to create uncommon time signatures.

> 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 when using the time signatures popover.

Inputting time signatures with the popover

You can input time signatures with the keyboard by entering the time signature you want into the time signatures popover.

You can open the time signatures popover in Write mode in any of the following ways:

- Press **Shift-M**.

- 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.
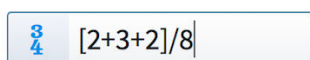
Time signatures popover with an example entry

Time Signatures (Meter) button in the Notations toolbox

Inputting time signatures with the panel

You can input time signatures with the mouse by clicking the time signatures you want in the Time Signatures (Meter) panel on the right of the window in Write mode.

You can open the Time Signatures (Meter) panel by clicking **Time Signatures (Meter)** in the Notations toolbox.

The Time Signatures (Meter) panel contains the following sections:

Used In This Flow

Any time signatures already used in the current flow are shown in this section.

Common

Common time signatures, such as 4/4, 3/4, 6/8, and 7/8, are shown in this section.

Create Time Signature

Design your own time signatures in this section, including alternating time signatures and aggregate time signatures.

NOTE

The order in which you should follow steps for inputting time signatures with the mouse depends on your preferences for the **Creating items with the mouse** option, in the **Editing** section of the **General** page in Preferences.

You can hide/show the panel whose icon is currently selected in the Notations toolbox in any of the following ways:

- Press **Ctrl/Cmd-9**.
- Click its disclosure arrow.
- Choose **Window** > **Show Right Panel**.

RELATED LINKS

Time signatures popover

The table shows some examples of what to enter into the time signatures popover, and the time signatures that are input into the music as a result.

You can open the time signatures popover in Write mode in any of the following ways:

- Press **Shift-M**.
- Choose **Write** > **Create Time Signature**.

Type of time signature	Popover entry
Simple time signatures. 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. For example, a 4/4 bar with a dotted quarter note pick-up, or a 6/8 bar with 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. NOTE 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	X or x

Type of time signature	Popover entry
Additive time signature with explicit beat grouping.	3+2+2/8, 3+2/4, and so on.
Specify beat grouping, but don't show it in the time signature.	[2+3+2]/8
For example, show a time signature of 7/8 but beaming is subdivided into 2+3+2 eighth notes.	
Aggregate time signature: a dashed barline is shown in the bar to show the division between the different meters.	2/4|6/8
Interchangeable time signature, with different styles: parenthesized, slash, equals sign, and dashed.	2/4 (6/8), 2/4 / 6/8, 2/4 = 6/8, or 2/4 – 6/8

NOTE

You must include spaces either side of the slashes, equals signs, or dashes, and between numbers and parentheses.

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

Create Time Signature section of the Time Signatures (Meter) panel

In the Time Signatures (Meter) panel on the right of the window in Write mode, there is a **Create Time Signature** section in which you can create uncommon time signatures. You can hide/show this section by clicking the section title, which has a disclosure arrow.

The **Create Time Signature** section of the Time Signatures (Meter) panel

The **Create Time Signature** section contains the following parts:

1   Type of time signature menu

Allows you to choose one of the following types of time signature:

- **Regular**
- **Interchangeable**
- **Aggregate**
- **Alternating**

2   Spaces for up to four time signatures

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 the time signature. If nothing in the project is selected, the time signature is loaded onto the cursor.

RELATED LINKS
[Time signatures](#) on page 751
[Inputting time signatures with the panel](#) on page 154

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 step 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.

PROCEDURE

1.   In Write mode, do one of the following:

- Start note input.
- Select a barline where you want to input a new time signature.
- Select a notehead or rest immediately to the right of where you want to input a new time signature.
- Select an existing time signature that you want to change.

2.   Open the time signatures popover in any of the following ways:

- Press **Shift-M**.
- Choose **Write** > **Create Time Signature**.

3. Enter the time signature you want into the popover.

For example, [2+2+3]/8 for a 7/8 time signature with a custom beat grouping, or enter 4/4,1 for a 4/4 time signature with one quarter note upbeat.

4. Input the time signature and close the popover in one of the following ways:

- Press **Return** to input a time signature on all staves.

- Press **Alt-Return** to input a time signature on a single staff.

RESULT

During step 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 immediately to the right of a selected barline, a immediately to the left of a selected note, even if this is in the middle of an existing bar.

Holding down **Alt** inputs time signatures only on the selected staff.

All subsequent bars follow the input time signature, until the next existing time signature or the end of the flow, whichever comes first. Dorico automatically inputs and moves barlines as required so that subsequent music is barred correctly.

RELATED LINKS

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 step input and by adding them later to existing music. You can also input time signatures only on single staves.

PREREQUISITE

If necessary, you have created the time signature you want in the **Create Time Signature** section of the Time Signatures (Meter) panel.

NOTE

These steps describe inputting with the default mouse input preference of **Create item at selection**.

PROCEDURE

1. In Write mode, do one of the following:

- Start note input.

- Select a barline where you want to input a new time signature.

- Select a notehead or rest immediately to the right of where you want to input a new time signature.

- Select an existing time signature that you want to change.

2. Optional: For pick-up bars, activate **Pickup bar of** in the **Create Time Signature** section 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.

3. Input the time signature you want in one of the following ways:

    - Click a time signature to input it for all staves.

    - **Alt**-click a time signature to input a it on a single staff.

RESULT

During step 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 immediately to the right of a selected barline, a immediately to the left of a selected note, even if this is in the middle of an existing bar.

Holding down **Alt** inputs time signatures only on the selected staff.

All subsequent bars follow the input time signature, until the next existing time signature or the end of the flow, whichever comes first. Dorico automatically inputs and moves barlines as required so that subsequent music is barred correctly.

RELATED LINKS
Time signatures on page 751
Inputting notes on page 115
Create Time Signature section of the Time Signatures (Meter) panel on page 152
Inputting time signatures with the popover on page 153
Mouse input settings on page 108

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.

Normally you do not need to create bars in Dorico, 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.

> **TIP**
>
> Another way to add bars is by choosing a note value, such as a whole note when in a 4/4 time signature, in the Notes panel in Write mode and press **Space** repeatedly during step input.

Inputting bars with the popover

You can input bars and barlines with the keyboard by entering an appropriate short-hand for the number of bars or the type of barline you want into the bars and barlines popover.

You can open the bars and barlines popover in Write mode in any of the following ways:

- 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.
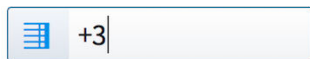
Bars and barlines popover with an example entry for inputting bars
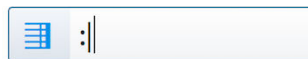
Bars and barlines popover with an example entry for a barline

Bars and Barlines button in the Notations toolbox

Inputting bars with the panel

You can also input bars and barlines with the mouse using the Bars and Barlines panel on the right of the window in Write mode.

You can open the Bars and Barlines panel by clicking **Bars and Barlines** in the Notations toolbox on the right of the window in Write mode.

The panel contains the following sections:

- **Insert Bars**
- **Insert Bar Rest**
- **Insert Barline**

You can hide/show the panel whose icon is currently selected in the Notations toolbox in any of the following ways:

- Press **Ctrl/Cmd-9**.
- Click its disclosure arrow.
- Choose **Window** > **Show Right Panel**.

Inputting bars/beats with the system track

Additionally, you can input bars using the system track. The system track also allows you input other rhythmic durations, that is, a specified beat region.

The system track is shown by default in new projects.

RELATED LINKS

Bars and barlines popover

You can input bars and barlines, and delete bars, by entering text and numbers into the bars and barlines popover.

You can open the bars and barlines popover in Write mode in any of the following ways:

- Press **Shift-B**.
- Choose **Write** > **Create Bar or Barline**.

Bars

Example action	Popover entry
Add two bars	+2
Add fourteen bars	+14
Delete one bar	–1
Delete six bars	–6
Add a bar rest	rest

This list is not comprehensive, as you can add and delete any number of bars using the popover. It is intended to illustrate how you can structure your entry to input and delete bars, and input bar rests.

Barlines

Type of barline	Popover entry
Normal (Single)	**|**, **single**, or **normal**
Double	**||** or **double**
Final	**|]** or **final**
Dashed	**:**, **dash**, or **dashed**
Tick	**'** or **tick**
Short	**,** or **short**
Thick	**thick**
Start repeat	**|:** or **start**
End repeat	**:|** or **end**
End/start repeat	**:|:**, **:||:**, **end-start**, or **endstart**

RELATED LINKS

Inputting bars with the popover

You can input bars using the bars and barlines popover, both during step input and by adding them to existing music.

PROCEDURE

1. In Write mode, do one of the following:

   - Start note input.

   - Select an existing barline after which you want to add new bars.

   - Select an existing note or whole bar before which you want to add new bars.

2. Open the bars and barlines popover in any of the following ways:

   - Press **Shift-B**.

   - Choose **Write** > **Create Bar or Barline**.

3. Enter + (plus), followed by the number of bars you want to add.

   For example, enter +2 to add two bars.

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

RESULT

The number of bars specified is input.

During step input, bars are input from the caret position. If the caret is in the middle of the bar, 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 to existing music, bars are added after a selected barline and before any other selected item.

RELATED LINKS
Bars and barlines popover on page 156
Bars on page 374
Inputting bars with the panel on page 158

Inputting bars with the panel

You can input bars using the Bars and Barlines panel, both during step input and by adding them to existing music.

PROCEDURE

1. In Write mode, do one of the following:

   - Start note input.

   - Select an existing barline after which you want to add new bars.

   - Select an existing note or whole bar before which you want to add new bars.

2. In the Bars and Barlines panel, change the number of bars you want to input in the value field in the **Insert Bars** section in any of the following ways:

   - Enter a value into the value field.

   - Click the arrows beside the value field.

3. 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.

TIP

You can complete steps 2 and 3 in any order.

4. Click **Insert Bars**.

RESULT

The number of bars specified is input.

During step 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 or bar.

RELATED LINKS
Bars on page 374
Inputting bars with the popover on page 158

Inputting bar rests during step input

For music in a single voice, you do not have to input bar rests. Bar rests appear in each new bar automatically when you advance the caret by pressing **Space** or **Right Arrow**.

When inputting music in multiple voices, rests are normally created automatically when there is a gap in the secondary voice. However, if the music is in strict counterpoint and you want the secondary voice to begin with an explicit bar rest, you can create a bar rest during step input with the popover.

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.

3. Open the bars and barlines popover in any of the following ways:

- Press **Shift-B**.
- Choose **Write** > **Create Bar or Barline**.

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.

RESULT

Bar rests are input 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 step input.

Inputting barlines with the popover

You can input barlines using the bars and barlines popover, both during step input and by adding them to existing music. You can also use the popover to change the type of existing barlines.

PROCEDURE

1. In Write mode, do one of the following:

   - Start note input.

   - Select an existing note or rest immediately to the right of where you want to input a barline.

   - Select an existing barline you want to change.

2. Open the bars and barlines popover in any of the following ways:

   - Press **Shift-B**.

   - Choose **Write** > **Create Bar or Barline**.

3. Enter the barline you want into the popover.

   For example, enter || for a double barline.

4. Input the barline and close the popover in one of the following ways:

   - Press **Return** to input a barline on all staves.

   - Press **Alt-Return** to input a barline on a single staff.

     NOTE

     You can only input barlines onto single staves that already have an independent time signature.

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

RESULT

During step input, barlines are input at the caret position.

When you add barlines to existing music, they are added immediately to the left of a selected note or rest.

When you change existing barlines, the new barline directly replaces the selected barline.

Surrounding music automatically adjusts to accommodate the barline. For example, note grouping, rests, and tied notes all adjust if necessary.

Inputting barlines with the panel

You can input barlines using the Bars and Barlines panel, both during step 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 of **Create item at selection**.

PROCEDURE

1. In Write mode, do one of the following:

- Start note input.
- Select an existing note or rest immediately to the right of where you want to input a barline.
- Select an existing barline you want to change.

2. Input the barline you want in one of the following ways:

- Click a barline to input it for all staves.
- **Alt**-click a barline to input it on a single staff.

  NOTE

  You can only input barlines onto single staves that already have an independent time signature.

3. In the Bars and Barlines panel, click the barline you want.

RESULT

During step input, barlines are input at the caret position.

When you add barlines to existing music, they are added immediately to the left of a selected note or rest.

When you change existing barlines, the new barline directly replaces the selected barline.

Surrounding music automatically adjusts to accommodate the barline. For example, note grouping, rests, and tied notes all adjust if necessary.

RELATED LINKS
Barlines on page 380
Bars and barlines popover on page 156
Inputting notes on page 115
Inputting barlines with the popover on page 160
Mouse input settings on page 108

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.

Inputting dynamics with the popover

You can input dynamics with the keyboard by entering the dynamics you want into the dynamics popover.

You can open the dynamics popover in Write mode in any of the following ways:

- Press **Shift-D**.

- Choose **Write** > **Create Dynamic**.

You can enter any dynamic into the popover, during step input and by adding them to existing notes. However, expressive text, such as "sim.", *poco*, *molto*, or *subito*, must accompany a dynamic level, such as *p* or *f*.

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

Inputting dynamics with the panel

You can input dynamics with the mouse by clicking dynamics in the Dynamics panel on the right of the window in Write mode.

Open the Dynamics panel by clicking **Dynamics** in the Notations toolbox on the right of the window in Write mode.

The Dynamics panel contains the following sections:

Immediate Dynamics

Contains dynamics such as *pp*, *f*, *molto*, and *possibile*.

Gradual Dynamics

Contains dynamics such as ⋖, ⋗, *molto*, and *poco*.

Force/Intensity of Attack

Contains dynamics such as *sfz* and *fz*.

Combined Dynamics

Create your own combinations of dynamics. For example, *fff pp*.
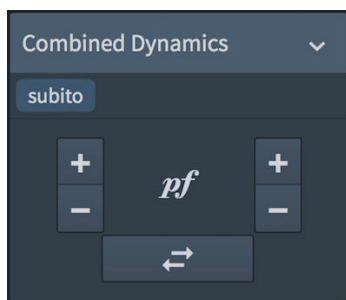
You can hide/show the panel whose icon is currently selected in the Notations toolbox in any of the following ways:

- Press **Ctrl/Cmd-9**.

- Click its disclosure arrow.

- Choose **Window** > **Show Right Panel**.

RELATED LINKS

Dynamics popover

The table shows some examples of what to enter into the dynamics popover and the dynamics that are input into the music as a result.

You can open the dynamics popover in Write mode in any of the following ways:

- Press **Shift-D**.

- Choose **Write** > **Create Dynamic**.

Dynamic or expression	Popover entry
pianissimo: $\boldsymbol{pp}$	pp
piano: $\boldsymbol{p}$	p
mezzo piano: $\boldsymbol{mp}$	mp
mezzo forte: $\boldsymbol{mf}$	mf
forte: $\boldsymbol{f}$	f
fortissimo: $\boldsymbol{ff}$	ff
subito	**subito**, **sub**, or **sub.**
possibile	**possibile**, **poss**, or **poss.**
poco	**poco**
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*: $><$	><

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Dynamic or expression	Popover entry
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 expressive text freely. It is intended to illustrate how you can structure your entry to input different types of dynamics.

TIP

You can input crescendo and diminuendo hairpins directly into the score without the popover by pressing **Shift-,** and **Shift-.**.

You can change the appearance of gradual dynamics project-wide on the **Dynamics** page in **Engraving Options**, or individually by activating **Gradual style** in the **Dynamics** group of the Properties panel, and selecting one of the available options.

Inputting expressive text into the dynamics popover

You can enter other expressions into the dynamics popover, such as **espressivo** or **dolce**, and they appear in the correct italic font beside the dynamic.

However, you must also enter an accompanying immediate dynamic, such as **p** or **f**, and separate the two with a space, for example, **f molto** or **p espressivo**.

You can hide immediate dynamics if you only want to show the expressive text.

RELATED LINKS

Inputting dynamics with the popover

You can input dynamics and expressive text using the dynamics popover, both during step 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 step 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.

    - Select existing notes across which you want to add dynamics.

2. Open the dynamics popover in any of the following ways:

    - Press **Shift-D**.

- Choose **Write** > **Create Dynamic**.

3. Enter the dynamic you want into the popover.

   For example, **p**, **p<f>p**, or **f>**.

4. Input the dynamics and close the popover in one of the following ways:

   - Press **Return** to input the dynamics for all voices on the staff.

   - Press **Alt-Return** to input the dynamics only into the selected voice.

   Open-ended dynamics, such as **p<**, automatically extend during step input as you continue inputting notes, or if you advance the caret by pressing **Space** or the arrow keys.

5. Optional: During step input, stop open-ended dynamics by opening the popover again and entering another immediate dynamic. For example, enter **f**.

6. Optional: During step input, input dynamics and close the popover in one of the following ways:

   - Press **Return** to input dynamics for all voices on the staff.

   - Press **Alt-Return** to input dynamics only into the voice indicated by the quarter note symbol beside the caret.

RESULT

The selected dynamics are input. They are positioned according to your settings on the **Dynamics** page in **Engrave** > **Engraving Options**. Voice-specific dynamics are placed below the staff by default, even if they are input into an up-stem voice.

During step 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 and gradual dynamics are added across the selection.

TIP

You can move dynamics within dynamics phrases and change the placement of dynamics relative to the staff later.

NOTE

- If you entered a dynamic phrase into the popover, 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 expressive text, such as *molto*, appears before immediate dynamics rather than after them, even if you do not enter them in that order. This follows the generally accepted practice for expressive text placement.

  You can hide immediate dynamics later if you only want to show expressive text.

RELATED LINKS

Inputting dynamics with the panel

You can input dynamics and expressive text using the Dynamics panel, both during step 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 step input by following these steps when the caret is at the rhythmic position of the dynamic you want to change.

NOTE

These steps describe inputting with the default mouse input preference of **Create item at selection**.

PROCEDURE

1. In Write mode, do one of the following:

    - Start note input.
    - Select existing notes across which you want to add dynamics.

2. In the Notations toolbox, click **Dynamics**.

    The Dynamics panel opens on the right of the window.

3. Input the dynamics you want in one of the following ways:

    - Click the dynamics you want in the Dynamics panel to input them for all voices on the staff.
    - **Alt**-click the dynamics you want in the Dynamics panel to input them only into the selected voice.

    Do not deselect dynamics if you want to add expressive or qualifying text to them.

    When inputting voice-specific dynamics, you can release **Alt** once you have input the dynamic level, such as f.

    NOTE

    Gradual dynamics have a default duration of a quarter note. You can lengthen/shorten gradual dynamics later.

    TIP

    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.

4. Optional: In the Dynamics panel, click the expressive/qualifying texts you want in the **Immediate Dynamics** and **Gradual Dynamics** sections.

RESULT

The selected dynamics are input. They are positioned according to your settings on the **Dynamics** page in **Engrave** > **Engraving Options**. Voice-specific dynamics are placed below the staff by default, even if they are input into an up-stem voice.

During step 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 and gradual dynamics are added across the selection.

TIP

You can move dynamics within dynamics phrases and change the placement of dynamics relative to the staff later.

NOTE

Some expressive text, such as *molto*, appears in the score before the dynamic rather than after it. This follows the generally accepted practice for expressive text placement.

RELATED LINKS

Input methods for chord symbols

You can input chord symbols in Dorico with the computer keyboard and also with MIDI keyboards.

Inputting chord symbols with the computer keyboard

All the different types of chord symbols can be input with the computer keyboard by using the chord symbols popover.

You can open the chord symbols popover in Write mode in any of the following ways:

● Press **Shift**-**Q**.

● Choose **Write** > **Create Chord Symbol**.

● Click **Chord Symbols** in the Notations toolbox.

C^7

The icon on the left-hand side of the popover matches the corresponding button in the Notations toolbox on the right of the window.

C^7	D#sus4
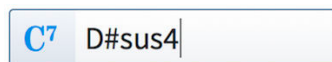
Chord symbols popover with an example entry

C^7

Chord Symbols button in the Notations toolbox

The appearance of chord symbols project-wide is determined by the options you set on the **Chord Symbols** page in **Engrave** > **Engraving Options**.

NOTE

The short-hand you use in the popover to create the chord symbol does not determine the appearance of the resulting chord symbol.

For example, you can enter a C major chord as either C or Cmaj or CM, but in both cases the appearance of the resulting chord symbol is the same, as specified in **Engraving Options**.

Inputting chord symbols with a MIDI keyboard

You can play chords on your MIDI keyboard to input chord symbols when the chord symbol popover is open.

Options for how Dorico interprets the notes you play on your keyboard can be found on the **Chord Symbols** page in **Write** > **Note Input Options**.

The options include:

- Whether you want Dorico to consider the inversion in which you play a given chord, or write the chord symbol as if it had been played in root position.

- Whether you want Dorico to notate omissions. For example, if you play C and E, it could be notated as "C" or "C(omit5)".

- How you want Dorico to notate added notes and suspensions.

- How you want Dorico to handle complex enharmonic relationships between roots and altered bass notes.

Examine these options carefully to make sure your settings suit your needs.

RELATED LINKS

Chord symbols popover

You can input chord symbols with different combinations of components using the chord symbols popover. The following tables contain examples of what to enter into the chord symbols popover for the different chord symbol components possible in Dorico.

You can open the chord symbols popover in Write mode in any of the following ways:

- Press **Shift**-**Q**.

- Choose **Write** > **Create Chord Symbol**.

- Click **Chord Symbols** 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 C, D♭, F♯, B, and so on.	C, Db, F#, B, and so on.

Type of chord symbol root	Popover entry
German note names C, D♭, F♯, B, and so on.	C, **Des**, **Fis**, **H**, and so on.
Fixed-do solfège C, D♭, F, F♯, B, and so on.	**do**, **reb**, **so**, **so#**, **ti**, and so on.
Nashville numbers representing scale degrees Assuming C major: 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 **+**
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
G/B	Gmaj,B
C(♭5)/E♭	Cmajb5/Eb
Fm/D♯	Fmi/D#

Polychord symbols

Example polychord symbols	Popover entry
G7/D	G7;D
G/E	G;E
Cmaj7/D	Cmaj7|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

Modal chord symbol	Popover entry
Whole tone	wholetone
Octatonic or diminished half-whole	diminishedhalfwhole, diminishedsemitonetone, octatonichalfwhole, or octatonicsemitonetone
Octatonic or diminished whole-half	diminishedwholehalf, diminishedtonesemitone, octatonicwholehalf, or octatonictonesemitone

NOTE

The appearance of the resulting chord symbols in your project depends on the options you have selected on the **Chord Symbols** page in **Engrave** > **Engraving Options**.

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.

RELATED LINKS
Inputting chord symbols on page 173
Chord symbols on page 427

Navigation during chord symbol input

You can input multiple chord symbols without re-opening the popover each time by navigating through your score.

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 popover to one of the following positions, whichever is closest: • Next/Previous note • Next/Previous rest • Next/Previous rhythmic grid position	Right Arrow/Left Arrow

Popover navigation	Key command
Move the popover to the next/previous chord symbol.	**Ctrl/Cmd-Right Arrow**/**Ctrl/Cmd-Left Arrow**
Move the popover back to the previous chord symbol.	**Backspace**

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 change this behavior using the **Advance during chord symbol input via MIDI keyboard** options on the **MIDI Input** page in **Write** > **Note Input Options**.

Furthermore, you can define specific keys or buttons on your MIDI keyboard to trigger different navigation behaviors, by using the **MIDI Learn** button on the **Key Commands** page in **Preferences** to assign specific keys to the **NoteInput** > **Advance Chord Symbol Input** commands.
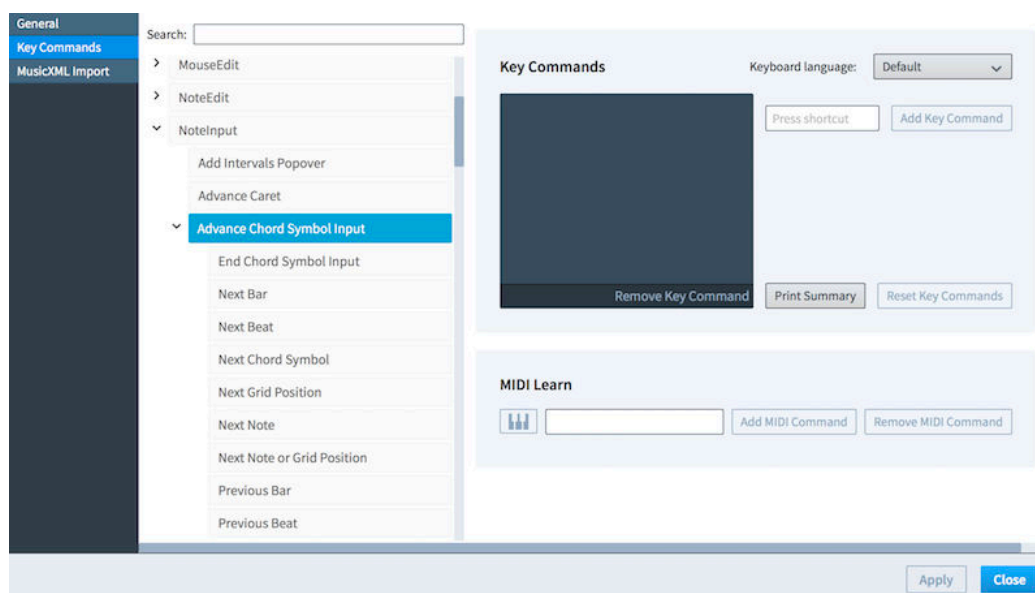
The **Preferences** dialog, where you can set keys to command the different navigation parameters.

RELATED LINKS

Assigning navigation behaviors for chord symbols to MIDI keyboards

You can assign specific keys or buttons on your MIDI keyboard to trigger different navigation behaviors for chord symbols.

PROCEDURE

1. Open **Preferences** in any of the following ways:
   - Press **Ctrl/Cmd-,** (comma).
   - Choose **Edit** > **Preferences** (Windows).
   - Choose **Dorico** > **Preferences** (macOS).
2. Click **Key Commands** in the page list on the left of the dialog.

3. Show the options under **NoteInput** > **Advance Chord Symbol Input** in the key command list in any of the following ways:

- Double-click each option.

- Click the disclosure arrow beside each option.

4. Click the parameter to which you want to assign a MIDI keyboard command from the available behaviors under **Advance Chord Symbol Input**. For example, click **Next Bar** to assign a key to move the chord symbols popover to the next bar.

5. Click **MIDI Learn**.

6. Press the key on your MIDI keyboard that you want to assign to the selected parameter.

7. Click **Add MIDI Command**.

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

RELATED LINKS
Preferences on page 53

Inputting chord symbols

You input chord symbols using the chord symbols popover.

PROCEDURE

1. In Write mode, select the note or rest where you want to input the first chord symbol.

2. Open the chord symbols popover in any of the following ways:

- Press **Shift**-**Q**.

- Choose **Write** > **Create Chord Symbol**.

- Click **Chord Symbols** in the Notations toolbox.

3. 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.

- Playing the chord you want using a MIDI keyboard.

4. Optional: Advance the popover to continue inputting chord symbols on following notes.

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

RESULT

The chord symbol specified is input.

NOTE

The chord symbol may look different to what you entered into the popover. For example, entering D|C7 may result in two chords placed directly above each other, or two chords placed beside each other, depending on your settings on the **Chord Symbols** page in **Engrave** > **Engraving Options**.

RELATED LINKS
Chord symbols popover on page 168
Chord symbols on page 427
Input methods for chord symbols on page 167
Navigation during chord symbol input on page 171

Inputting polychords with a MIDI keyboard

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 symbol.

TIP

You can also input polychords by entering the two chords separated by a semicolon or pipe/vertical line character into the chord symbols popover.

RELATED LINKS
Chord symbols on page 427
Input methods for chord symbols on page 167
Chord symbols popover on page 168
Inputting chord symbols on page 173

Indicating root notes in chord symbols with a MIDI keyboard

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 on page 427
Inputting chord symbols on page 173
Chord symbols popover on page 168
Input methods for chord symbols on page 167

Indicating altered bass notes in chord symbols with a MIDI keyboard

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 when using a 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 on page 427
Chord symbols popover on page 168
Inputting chord symbols on page 173

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 clicking clefs and octave lines in the Clefs panel.

Inputting clefs and octave lines with the popover

You can input clefs and octave lines with the keyboard by entering an appropriate short-hand for the clef or octave line you want into the clefs and octave lines popover. Clefs and octave lines share the same popover, as both affect the pitch and register of notes.

You can open the clefs and octave lines popover in Write mode in any of the following ways:

- Press **Shift-C**.

- 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.
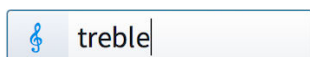
Clefs and octave lines popover with an example entry for a clef
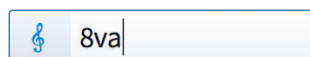
Clefs and octave lines popover with an example entry for an octave line

Clefs button in the Notations toolbox

Inputting clefs and octave lines with the mouse

Clefs and octave lines can be input with the mouse using the Clefs panel on the right of the window in Write mode.

You can open the Clefs panel by clicking **Clefs** in the Notations toolbox on the right of the window in Write mode.

In the Clefs panel, there are separate sections for clefs and octave lines. Clefs are divided across multiple sections:

Common clefs

These are the clefs you are most likely to need.

Uncommon clefs

These are less frequently used clefs, but still sometimes used.

Archaic clefs

These are clefs that are not commonly used any more.

You can hide/show the panel whose icon is currently selected in the Notations toolbox in any of the following ways:

- Press **Ctrl/Cmd-9**.
- Click its disclosure arrow.
- Choose **Window** > **Show Right Panel**.

RELATED LINKS

Clefs and octave lines popover

You can create different clefs and octave lines by entering text and numbers into the clefs and octave lines popover.

You can open the clefs and octave lines popover in Write mode in any of the following ways:

- Press **Shift-C**.
- Choose **Write** > **Create Clef**.

Clefs

Type of clef	Popover entry
Treble G clef	g, G, or **treble**
Bass F clef	f, F, or **bass**
Tenor C clef	ct, CT, or **tenor**
Alto C clef	ca, CA, or **alto**
Treble G clef, octave below	g8ba, G8ba, g8d, G8d, **treble8ba**, or **treble8d**
Treble G clef, two octaves below	g15ba, G15ba, g15d, G15d, **treble15ba**, or **treble15d**
Treble G clef, octave above	g8va, G8va, g8u, G8u, **treble8va**, or **treble8u**
Treble G clef, two octaves above	g15ma, G15ma, g15u, G15u, **treble15ma**, or **treble15u**
Alto C clef, octave below	ca8ba, CA8ba, ca8d, CA8d, **alto8ba**, or **alto8d**

Type of clef	Popover entry
Tenor C clef, octave below	ct8ba, CT8ba, ct8d, CT8d, tenor8ba, or tenor8d
Bass F clef, octave below	f8ba, F8ba, f8d, F8d, bass8ba, or bass8d
Bass F clef, two octaves below	f15ba, F15ba, f15d, F15d, bass15ba, or bass15d
Bass F clef, octave above	f8va, F8va, f8u, F8u, bass8va, or bass8u
Bass F clef, two octaves above	f15ma, F15ma, f15u, F15u, bass15ma, or bass15u
Unpitched percussion	perc
4-string tablature	tab4
6-string tablature	tab6
Baritone bass clef	baritonebass
Baritone clef	baritone
Mezzo-soprano clef	mezzo
Soprano C clef	soprano
Sub-bass clef	subbass
Invisible clef	invisible

NOTE

More clefs are available in the Clefs panel, including Indian drum clef and Percussion clef (rectangular).

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
End of octave line.	| or **stop**
For example, enter **stop** to specify where an octave line ends during step input.	

Inputting clefs with the popover

You can input clefs using the clefs and octave lines popover, both during step input and by adding them to existing music. You can also use the popover to change the type of existing clefs.

In Dorico, you cannot hide clefs. Therefore, if you do not want to show any clef, you must input an invisible clef.

PROCEDURE

1. In Write mode, do one of the following:
   - Start note input.
   - Select the note from which you want a new clef to start.
   - Select the clef you want to change.
2. Open the clefs and octave lines popover in any of the following ways:
   - Press **Shift-C**.
   - Choose **Write** > **Create Clef**.
3. Enter the appropriate short-hand for the clef you want into the popover.
   For example, enter **bass** or **G8ba**.
4. Press **Return** to close the popover.

RESULT

During step 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.

When you change existing clefs, the new clef directly replaces the selected clef.

Clefs apply to all notes on the staff until the next clef, or the end of the flow.

Inputting clefs with the panel

You can input clefs using the Clefs panel, both during step input and by adding them to existing music.

In Dorico, you cannot hide clefs. Therefore, if you do not want to show any clef, you must input an invisible clef.

> **NOTE**
>
> These steps describe inputting with the default mouse input preference of **Create item at selection**.

PROCEDURE

1. In Write mode, do one of the following:

   - Start note input.
   - Select the note from which you want a new clef to start.
   - Select the clef you want to change.

2. In the Notations toolbox, click **Clefs**.

   The Clefs panel opens on the right of the window.

3. In the Clefs panel, click the clef you want.

RESULT

During step 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 later 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.

When you change existing clefs, the new clefs directly replaces the selected clef.

Clefs apply to all notes on the staff until the next clef, or the end of the flow.

RELATED LINKS
Clefs on page 443
Input methods for clefs and octave lines on page 175
Mouse input settings on page 108

Inputting octave lines with the popover

You can input octave lines using the clefs and octave lines popover, both during step input and by adding them to existing music.

PROCEDURE

1. In Write mode, do one of the following:

   - Start note input.
   - Select the existing notes to which you want to add an octave line.

2. Open the clefs and octave lines popover in any of the following ways:

   - Press **Shift-C**.
   - Choose **Write** > **Create Clef**.

3. Enter the appropriate short-hand for the octave line you want into the popover.

   For example, enter **8va** for an octave line that shifts notes up one octave.

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

5. Optional: During step input, press **Space** to advance the caret and extend the octave line.

   The octave line also extends automatically as you continue inputting notes.

6. Optional: During step input, stop any octave line by opening the clefs and octave lines popover again and entering one of the following:

- |
- stop

RESULT

During step 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

Inputting octave lines with the panel

You can input octave lines using the Clefs panel, both during step input and by adding them to existing music.

NOTE

These steps describe inputting with the default mouse input preference of **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.

2. In the Notations toolbox, click **Clefs**.

   The Clefs panel opens on the right of the window.

3. In the Clefs panel, click the octave line you want.

   Alternatively, when adding octave lines to existing notes, you can click the octave lines you want in the Clefs panel first, and then click and drag to the length you want.

RESULT

During step input, octave lines are input at the caret position. However, if input 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 notes are played higher or lower than notated.

TIP

You can also lengthen/shorten octave lines after they have been input.

Input methods for holds and pauses

You can input holds and pauses with the keyboard by using the holds and pauses popover in Write mode, and with the mouse by using the Holds and Pauses panel.

Inputting holds and pauses with the popover

You can input holds and pauses with the keyboard by entering the type of hold or pause you want into the holds and pauses popover.

You can open the holds and pauses popover in Write mode in any of the following ways:

- Press **Shift-H**.

- 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.
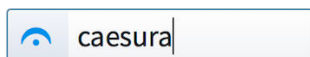
Holds and pauses popover with an example entry

Holds and Pauses button in the Notations toolbox

Inputting holds and pauses with the panel

You can input holds and pauses with the mouse by clicking different holds and pauses in the Holds and Pauses panel.

You can open the Holds and Pauses panel by clicking **Holds and Pauses** in the Notations toolbox on the right of the window in Write mode.

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.

You can hide/show the panel whose icon is currently selected in the Notations toolbox in any of the following ways:

- Press **Ctrl/Cmd-9**.

- Click its disclosure arrow.

- Choose **Window** > **Show Right Panel**.

Holds and pauses popover

Enter the following commands or symbols into the holds and pauses popover to create the different holds and pauses available.

You can open the holds and pauses popover in Write mode in any of the following ways:

- Press **Shift-H**.

- Choose **Write** > **Create Hold or Pause**.

Type of hold or pause	Popover entry
Fermata	**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**

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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

Inputting holds and pauses with the popover

You can input holds and pauses using the holds and pauses popover, both during step input and by adding them to existing music.

PROCEDURE

1. In Write mode, do one of the following:

    ● Start note input.

    ● Select an existing note to which you want to add a hold or pause.

    NOTE

    You can only add one hold or pause to one note at a time.

2. Open the holds and pauses popover in any of the following ways:

- • Press **Shift-H**.

- • Choose **Write** > **Create Hold or Pause**.

3. Enter the hold or pause you want into the popover.

For example, enter **fermata** or **caesura**.

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

RESULT

During step input, the specified hold or pause is input at the caret position.

Fermatas appear above the selected note, and above all notes or rests at that rhythmic position, or the rhythmic position of the note, chord, or rest that corresponds with the end of the fermata on every staff.

Breath marks appear to the right of the caret or selected note.

Caesuras appear to the left of the caret or selected note, and appear on all staves at that same rhythmic position.

RELATED LINKS
Holds and pauses popover on page 182
Holds and pauses on page 524

Inputting holds and pauses with the panel

You can input holds and pauses using the Holds and Pauses panel, both during step input and by adding them to existing music.

NOTE

These steps describe inputting with the default mouse input preference of **Create item at selection**.

PROCEDURE

1. In Write mode, do one of the following:

- • Start note input.

- • Select an existing note to which you want to add a hold or pause.

    NOTE

    You can only add one hold or pause to one note at a time.

2. In the Notations toolbox, click **Holds and Pauses**.

The Holds and Pauses panel opens on the right of the window.

3. In the Holds and Pauses panel, click the hold or pause you want.

RESULT

During step input, the specified hold or pause is input at the caret position.

Fermatas appear above the selected note, and above all notes or rests at that rhythmic position, or the rhythmic position of the note, chord, or rest that corresponds with the end of the fermata on every staff.

Breath marks appear to the right of the caret or selected note.

Caesuras appear to the left of the caret or selected note, and appear on all staves at that same rhythmic position.

Correct positioning for caesura input

Caesuras are commonly placed at the end of a bar, before a barline. In Dorico, caesuras must be attached to the note immediately after the position you want it to appear, as then Dorico can automatically position them correctly.

If you input caesuras with your mouse input preference set to **Load cursor with item**, you must click the first note in the next bar for a caesura to appear before the barline. You can also click directly on the barline.

A correctly input caesura. The dotted guidelines 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 guidelines link the caesura to the notehead immediately after the barline.

If your dotted guidelines 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.

Input methods for ornaments, arpeggio signs, and glissando lines

You can input ornaments, including arpeggio signs and glissando lines, 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 step input and by adding them to existing notes, but you cannot input glissando lines during step input. You can only input glissando lines by adding them to existing notes.

Inputting ornaments with the popover

You can input ornaments with the keyboard by entering the ornament you want into the ornaments popover.

You can open the ornaments popover in Write mode in any of the following ways:

- Press **Shift-O**.

- 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.
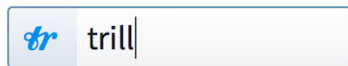
Ornaments popover with an example entry

Ornaments button in the Notations toolbox

Inputting ornaments with the panel

You can open the Ornaments panel by clicking **Ornaments** in the Notations toolbox on the right of the window in Write mode.

The Ornaments panel contains the following sections:

- **Baroque and Classical**
- **Arpeggiation**
- **Glissandi**

NOTE

You cannot input arpeggio signs with the mouse during step input.

You can hide/show the panel whose icon is currently selected in the Notations toolbox in any of the following ways:

- Press **Ctrl/Cmd-9**.
- Click its disclosure arrow.
- Choose **Window** > **Show Right Panel**.

RELATED LINKS

Ornaments popover

You can enter the following commands into the ornaments popover to create the different ornaments, arpeggio signs, and glissando lines available.

You can open the ornaments popover in Write mode in any of the following ways:

- Press **Shift-O**.
- Choose **Write** > **Create Ornament**.

Ornaments

Type of ornament, glissando line, or arpeggio sign	Popover entry
Trill: 𝆮	tr or **trill**
Short trill: 𝆲	**shorttr**

Type of ornament, glissando line, or arpeggio sign	Popover entry
Turn: ∾	turn
Mordent: ⩊	mor or mordent
Inverted turn: ∾	invturn or invertedturn

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

Glissando lines

Type of glissando line	Popover entry
Straight glissando line	gliss
Wavy glissando line	glisswavy

TIP

Other ornaments are available in the Ornaments panel on the right of the window in Write mode.

RELATED LINKS
Inputting ornaments with the popover on page 187
Inputting ornaments with the panel on page 188
Ornaments on page 583
Arpeggio signs on page 591
Glissando lines on page 600
Input methods for ornaments, arpeggio signs, and glissando lines on page 185

Inputting ornaments with the popover

You can input ornaments using the ornaments popover, both during step 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. Open the ornaments popover in any of the following ways:

   - Press **Shift-O**.

   - Choose **Write** > **Create Ornament**.

3. Enter the appropriate short-hand for the ornament you want into the popover.

   For example, enter **trill** for a trill or **mor** for a mordent.

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

RESULT

During step input, ornaments are input at the caret position. Trills last the duration of the rhythmic value of the note input at the caret position.

When adding ornaments to existing notes, ornaments 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 popover on page 186
Ornaments on page 583
Inputting notes on page 115

Inputting ornaments with the panel

You can input ornaments using the Ornaments panel, both during step input and by adding them to existing notes.

> **NOTE**
>
> These steps describe inputting with the default mouse input preference of **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**.

   The Ornaments panel opens on the right of the window.

3. In the Ornaments panel, click the ornament you want.

RESULT

During step 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, ornaments 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 583
Inputting notes on page 115
Mouse input settings on page 108

Inputting arpeggio signs with the popover

You can input arpeggio signs using the ornaments popover, both during step input and by adding them to existing notes. You can also input cross-staff arpeggio signs between notes in different staves that belong to the same instrument, such as piano or harp.

NOTE

You can only add one arpeggio sign to one note or chord at a time.

PROCEDURE

1.   In Write mode, do one of the following:

      ●   Start note input.

      ●   Select the existing notes to which you want add an arpeggio sign.

      For instruments with multiples staves, such as piano and harp, you can select existing notes in multiple staves to create cross-staff arpeggio signs.

      NOTE

      You cannot create cross-staff arpeggio signs between different instruments.

2.   Optional: During step input, activate **Chords** in any of the following ways:

      ●   Press **Q**.

      ●   In the Notes toolbox, click **Chords**.

3.   Open the ornaments popover in any of the following ways:

      ●   Press **Shift-O**.

      ●   Choose **Write** > **Create Ornament**.

4.   Enter the appropriate short-hand for the arpeggio sign you want into the popover.
      For example, enter arpup for an up arpeggio or enter arpdown for a down arpeggio.

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

6.   Optional: During step input, input the notes you want.

RESULT

During step 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 note or chord.

The length of arpeggio signs is adjusted automatically so that they span the range of all notes on the staff at that rhythmic position.

RELATED LINKS
Ornaments popover on page 186

Inputting arpeggio signs with the panel

You can input arpeggio signs on existing notes using the Ornaments panel. You can also input cross-staff arpeggio signs between notes in different staves that belong to the same instrument, such as piano or harp.

NOTE

- You can only add one arpeggio sign to one note or chord at a time, and you cannot input arpeggio signs with the mouse during step input.

- These steps describe inputting with the default mouse input preference of **Create item at selection**.

  You cannot create cross-staff and cross-voice arpeggio signs if your preference is set to **Load cursor with item**.

PROCEDURE

1. In Write mode, select the existing notes to which you want add an arpeggio sign.

For instruments with multiples staves, such as piano and harp, you can select existing notes in multiple staves to create cross-staff arpeggio signs.

NOTE

You cannot create cross-staff arpeggio signs between different instruments.

2. In the Notations toolbox, click **Ornaments**.

The Ornaments panel opens on the right of the window.

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. Its length is adjusted automatically so that it spans the range of all notes on the staff at that rhythmic position.

RELATED LINKS

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/non-adjacent notes.

NOTE

You cannot input glissando lines during step 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.   Open the ornaments popover in any of the following ways:

   ● Press **Shift**-**O**.

   ● Choose **Write** > **Create Ornament**.

3.   Enter the appropriate short-hand 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 on the staff, even if this crosses rests.

NOTE

You cannot input a glissando line on the last note on a staff.

NOTE

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 186
Input methods for ornaments, arpeggio signs, and glissando lines on page 185
Glissando lines on page 600
Changing glissando line text on page 602
Changing when glissando line text is shown on page 602

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/non-adjacent notes.

NOTE

   ● These steps describe inputting with the default mouse input preference of **Create item at selection**.

     If your preference is set to **Load cursor 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 step 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**.

   The Ornaments panel opens on the right of the window.

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 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 600
Input methods for ornaments, arpeggio signs, and glissando lines on page 185
Mouse input settings on page 108

Input methods for pedal lines, retakes, and pedal level changes

You can input pedal lines, retakes, and pedal level changes with the keyboard by using the same popover as for playing techniques, as both affect the sound that the instrument produces, and with the mouse by using the Playing Techniques panel.

Inputting pedal lines with the popover

You can input pedal lines with the keyboard by entering the pedal line you want into the playing techniques popover.

You can open the playing techniques popover in Write mode in any of the following ways:

- Press **Shift-P**.

- 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.
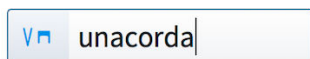
Playing techniques popover with an example entry

Playing Techniques button in the Notations toolbox

Inputting pedal lines with the panel

Pedal lines are located in the **Keyboard** section of the Playing Techniques panel on the right of the window in Write mode. You can input pedal lines with the mouse on existing notes or existing staves, but not during step input.

You can open the Playing Techniques panel by clicking **Playing Techniques** in the Notations toolbox.

Click the **Keyboard** disclosure arrow to show options for pedal lines.
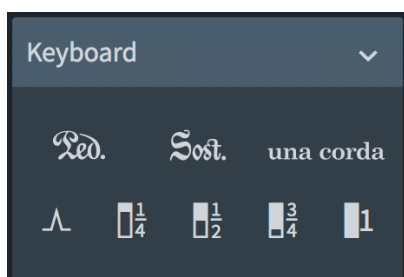
The most common options for pedal lines

The buttons in the first row create new pedal lines. The buttons in the second row add retakes and changes of pedal level to an existing pedal line. Further options in the **Keyboard** section allow you to input other keyboard playing techniques.

You can hide/show the panel whose icon is currently selected in the Notations toolbox in any of the following ways:

● Press **Ctrl/Cmd-9**.

● Click its disclosure arrow.

● Choose **Window** > **Show Right Panel**.

RELATED LINKS

Playing techniques popover for pedal lines

You can enter the following commands and symbols into the playing techniques popover to create the different pedal lines available.

You can open the playing techniques popover in Write mode in any of the following ways:

- Press **Shift-P**.
- Choose **Write** > **Create Playing Technique**.

Type of pedal line, retake, or pedal level change	Popover entry
Sustain pedal line	ped
Set sustain pedal level to 1/4	1/4
Set sustain pedal level to 1/2	1/2
Set sustain pedal level to 3/4	3/4
Fully depress sustain pedal	1
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*

RELATED LINKS

Inputting pedal lines, retakes, and pedal level changes with the popover

You can input pedal lines using the playing techniques popover, both during step input and by adding them to existing music. Because the pedal line extends automatically as you input notes during step input, you can input retakes and pedal level changes when you reach the appropriate rhythmic position.

TIP

You can also input retakes and pedal level changes at rhythmic positions before you input pedal lines or notes. They are shown when the pedal line passes their rhythmic position.

PROCEDURE

1. In Write mode, do one of the following:
   - Start note input.
   - Select the notes to which you want the pedal line to apply.

2. Open the playing techniques popover in any of the following ways:

- Press **Shift-P**.

- Choose **Write** > **Create Playing Technique**.

3. Enter the appropriate short-hand 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 step 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 step input, input retakes or pedal level changes by opening the playing techniques popover again when the caret is at the rhythmic position you want and enter the appropriate short-hand for the retake or pedal level change you want into the popover.

For example, enter **^** or **retake** for a retake.

7. Optional: During step input, stop the pedal line by opening the playing techniques popover again and enter the appropriate short-hand into the popover.

For example, enter ***** to stop a sustain pedal line.

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

RESULT

During step 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 notes.

RELATED LINKS
Playing techniques popover for pedal lines on page 193
Pedal lines on page 613
Sustain pedal retakes and pedal level changes on page 614
Inputting notes on page 115
Adding retakes and pedal level changes to existing pedal lines with the popover on page 616
Positions of pedal lines on page 621

Inputting pedal lines, retakes, and pedal level changes with the panel

You can input pedal lines, retakes, and pedal level changes using the Playing Techniques panel.

NOTE

- When using the panel, you cannot input pedal lines, retakes, or pedal level changes during step input.

- These steps describe inputting with the default mouse input preference of **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**.

The Playing Techniques panel opens on the right of the window.

3. In the Playing Techniques panel, click the pedal line you want in the **Keyboard** section.

> **NOTE**
>
> 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.

4. Optional: Select an item at the rhythmic position where you want to input a retake or pedal level change.

5. Optional: In the Playing Techniques panel, click the retake or pedal level change you want in the **Keyboard** section.

RELATED LINKS
Pedal lines on page 613
Sustain pedal retakes and pedal level changes on page 614
Input methods for pedal lines, retakes, and pedal level changes on page 192
Adding retakes and pedal level changes to existing pedal lines with the panel on page 617
Mouse input settings on page 108

Input methods for playing techniques

You can input playing techniques with the keyboard by using the playing techniques popover, and with the mouse by using the Playing Techniques panel.

Inputting playing techniques with the popover

You can input playing techniques with the keyboard by entering the playing technique you want into the playing techniques popover.

When you start entering a playing technique into the playing techniques popover, a menu appears that shows valid playing techniques containing the letters or words you enter. You can choose one of these playing techniques to input.

You can open the playing techniques popover in Write mode in any of the following ways:

- Press **Shift-P**.

- Choose **Write** > **Create Playing Technique**.

You can do this based either on the range of selected notes, or during step input.

The icon on the left-hand side of the popover matches the corresponding button in the Notations toolbox on the right of the window.
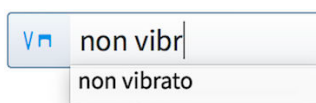
Playing techniques popover with an example entry

Playing Techniques button in the Notations toolbox

Inputting playing techniques with the panel

Playing techniques for all instruments can be found in the Playing Techniques panel on the right of the window in Write mode.

You can open the Playing Techniques panel by clicking **Playing Techniques** in the Notations toolbox on the right of the window in Write mode.

Each section in the Playing Techniques panel contains playing technique texts and playing technique symbols appropriate for that instrument family. The Playing Techniques panel contains the following sections:

- **Common**
- **Wind**
- **Brass**
- **Unpitched Percussion**
- **Pitched Percussion**
- **Keyboard**
- **Choral**
- **Strings**
- **Other**

TIP

You can hover your mouse pointer over each option to show the name of each playing technique.

You can hide/show the panel whose icon is currently selected in the Notations toolbox in any of the following ways:

- Press **Ctrl/Cmd-9**.
- Click its disclosure arrow.
- Choose **Window** > **Show Right Panel**.

RELATED LINKS
Playing techniques on page 633
Playing techniques popover on page 197
Inputting playing techniques with the popover on page 199
Inputting playing techniques with the panel on page 200

Playing techniques popover

The table shows some examples of what to enter into the playing techniques popover, and the playing techniques that are input into the music as a result.

When you start entering a playing technique into the playing techniques popover, a menu appears that shows valid playing techniques containing the letters or words you enter. You can choose one of these playing techniques to input.

You can open the playing techniques popover in Write mode in any of the following ways:

- Press **Shift-P**.
- Choose **Write** > **Create Playing Technique**.

Playing technique	Popover entry
Vibrato	vibrato
Senza vibrato	senza vibrato
Naturale (nat.)	nat
Con sordino	con sord

Playing technique	Popover entry
Strong air pressure	strong air pressure
Double-tongue	double-tongue
Down bow	downbow
Up bow	upbow
Sul ponticello	sul pont
Sul tasto	sul tasto
Poco sul tasto	pst
Pizzicato	pizz
Spiccato	spicc
Arco	arco
Tongue click (Stockhausen)	tongue click
Finger click (Stockhausen)	finger click
Vibraphone motor on	motor on
Vibraphone motor off	motor off
Open	open
Damp	damp
Damp (large)	damp large
Full *barré*	full barre
Half *barré*	half barre
Strum up	strum up
Strum down	strum down
Left hand	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 becomes available in the popover menu.

NOTE

As playing techniques correspond to specific samples, they must be input as described or selected from the popover menu.

RELATED LINKS

Inputting playing techniques with the popover

You can input playing techniques using the playing techniques popover, both during step input and by adding them to existing notes.

PROCEDURE

1.   In Write mode, do one of the following:

   ●   Start note input.

   ●   Select an existing note to which you want to add a playing technique.

      NOTE

      You can only add playing techniques to one note at a time.

2.   Open the playing techniques popover in any of the following ways:

   ●   Press **Shift-P**.

   ●   Choose **Write** > **Create Playing Technique**.

3.   Enter the appropriate short-hand for the playing technique you want into the popover.

   For example, **non vibrato** or **tongue click**.

   When you start entering a playing technique into the playing techniques popover, a menu appears that shows valid playing techniques containing the letters or words you enter, which you can select.
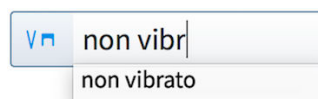
4.   Press **Return** to close the popover.

RESULT

The playing technique is added to the selected note.

During step input, playing techniques are input at the caret position.

RELATED LINKS

Inputting playing techniques with the panel

You can input playing techniques using the Playing Techniques panel, both during step input and by adding them to existing notes.

NOTE

These steps describe inputting with the default mouse input preference of **Create item at selection**.

If you want to add the same playing technique to multiple notes, activate **Allow multiple items to be created with the mouse** in the **Editing** section of the **General** page in **Preferences**, 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 existing note to which you want to add a playing technique.

        NOTE

        You can only add playing techniques to one note at a time.

2. In the Notations toolbox, click **Playing Techniques**.

    The Playing Techniques panel opens on the right of the window.

3. In the Playing Techniques panel, click the playing technique you want.

RESULT

The playing technique selected is added to the selected note.

During step input, playing techniques are input at the caret position, even if your preference is set to **Load cursor with item**.

RELATED LINKS
Playing techniques on page 633
Input methods for playing techniques on page 196
Mouse input settings on page 108

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. Open the lyrics popover in any of the following ways:

    - Press **Shift**-**L**.

    - Choose **Write** > **Create Lyrics**.

    - Click **Lyrics** in the Notations toolbox.

    By default, the lyrics popover opens with lyric line input selected.

3. Optional: Change the type of lyric in one of the following ways:

- Press **Down Arrow** to change the lyric line number.

- Press **Shift**-**Up Arrow** to input lyrics above the staff.

- Press **Up Arrow** to input chorus lines.

- Press **Alt**-**Down Arrow** to input lyric line translations.

4. Enter the word or syllable you want to add to the selected note into the popover.

- Press **Shift**-**Alt**-**Space** to enter multiple words on a single note.

- Press **Alt**-- (hyphen) to include a hyphen within a single word or syllable.

- Press _ (underscore) to include an elision in a lyric.

5. Advance the popover to the next note in one of the following ways:

- Press **Space** if you entered a complete word, or the final syllable in a multi-syllabic word.

- Press - (hyphen) if you entered one syllable of a multi-syllabic word that is not the final syllable.

- Press **Right Arrow** if you do not want the syllable to be followed by an extension line or hyphen.

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.

NOTE

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 popover

You 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:

- Press **Shift**-**L**.
- Choose **Write** > **Create Lyrics**.
- Click **Lyrics** in the Notations toolbox.

v1.

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.

| 1 | when |
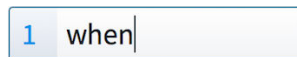
The lyrics popover with an example entry for Line 1

You can change the lyric line number by pressing **Down Arrow** when the lyrics popover is open.

| 2 | now |

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.

| c | Ooh, |

The lyrics popover with an example entry for a chorus line

Lyric line translations

You can input lyric line translations by pressing **Alt**-**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.

| 1* | quand |
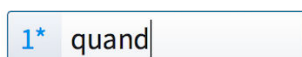
The lyrics popover with an example entry for a lyric line translation

RELATED LINKS

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 moves to that lyric.	**Right Arrow**/**Left Arrow**
Move the popover forwards/backwards from syllable to syllable within lines of lyrics.	**Alt**-**Right Arrow**/**Alt**-**Left Arrow**
Add spaces within a word or syllable, without advancing the popover.	**Shift**-**Alt**-**Space**
Add a hyphen within a single word or syllable, without advancing the popover.	**Alt**-- (hyphen)
Add an elision slur within a word or syllable.	_ (underscore)

RELATED LINKS

Inputting rehearsal marks

You can input rehearsal marks with the mouse and the keyboard. You can input rehearsal marks during step input and later by adding them to existing music.

NOTE

These steps describe inputting with the default mouse input preference of **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. Input a rehearsal mark in any of the following ways:

- Press **Shift-A**.

- Choose **Write** > **Create Rehearsal Mark**.

- Click **Rehearsal Marks** in the Notations toolbox.

  [A]

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 639
General Preferences on page 53

Inputting repeat endings

You can input repeat endings using the Repeat Structures panel. There is no popover for repeat endings.

You can open the Repeat Structures panel by clicking **Repeat Structures** in the Notations toolbox.

[1.]

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**/**Left Arrow**.

- Select the bars that you want to include in the first ending.

  > **TIP**
  >
  > You only need to select a single note or rest in each bar to include those bars in the first ending.

2. In the Repeat Structures panel, click **Create Repeat Ending** in the **Repeat Endings** section.

  [1.]

RESULT

The repeat ending is input, with the first ending segment covering the bars in which you selected notes, 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.

Adding additional repeat endings

You can have more than two possible endings in each repeat ending structure by adding repeats.

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**/**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 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.

3. Optional: Repeat as many times as required for the number of additional endings you want.

RESULT

A new repeat ending segment is added. The existing previous repeat ending segment now ends with a closed line, with an end repeat barline created if necessary.

TIP

You can also add additional repeat ending segments by selecting the repeat ending and changing the value for **No. endings** in the **Repeat Endings** group of the Properties panel.

However, **No. endings** only adds additional repeat ending segments that contain one bar, and does not automatically input or reposition repeat barlines. You must input repeat barlines as appropriate manually.

EXAMPLE
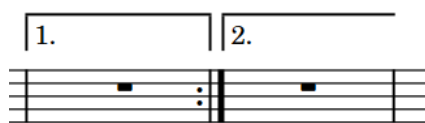
Default repeat ending structure with two endings   Repeat ending structure with additional third ending
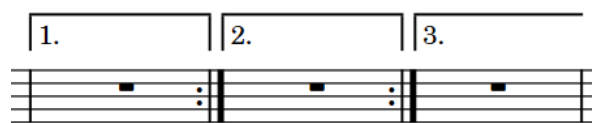
Inputting single-note tremolos

You can input single-note tremolos that indicate a single note is repeated.

PROCEDURE

1. In Write mode, select the notes on which you want to input single-note tremolos.
2. Click the button with the number of single-note 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.

RESULT

Single-note tremolos are input on the selected notes with the number of tremolo strokes specified.

Inputting multi-note tremolos

You can input multi-note tremolos that indicate notes are repeated in a pattern similar to a trill. You can also input multi-note tremolos across more than two notes if they are tuplets, which indicates that the notes in the tuplet are repeated in the notated sequence.

PROCEDURE

1. In Write mode, select one of the following:

    - Pairs of adjacent notes between which you want to input multi-note tremolos
    - Individual notes on which you want to input multi-note tremolos

      NOTE

      You cannot input multi-note tremolos on notes that are not immediately followed by another note.

    - Tuplets across which you want to input multi-note tremolos

You can select whole tuplets, including their brackets, or just the noteheads in the tuplets.

2.   Click the button with the number of multi-note tremolo strokes you want in the **Tremolos** section of the Repeat Structures panel.

For example, click **Three Strokes Multi-note Tremolo** to input multi-note tremolos with three strokes.

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.

The appearance of stems in multi-note half note tremolos depends on your setting on the **Tremolos** page in **Engrave** > **Engraving Options**.

Multi-note tremolos with three tremolo strokes across tuplets

Tremolos on page 763
Repeat Structures panel on page 207
Deleting tremolos on page 766
Changing the appearance of multi-note half note tremolos project-wide on page 769

Repeat Structures panel

The Repeat Structures panel allows you to input repeat endings and tremolos. 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 cannot input tremolos with the keyboard.

You can open the Repeat Structures panel in Write mode by clicking **Repeat Structures** in the Notations toolbox on the right of the window.

Tremolos on page 763

Inputting slurs

You can input slurs, both directly during step input and later on. When adding slurs later to existing notes, you can add slurs to notes in 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 in 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. Input a slur in any of the following ways:

   ● Press **S**.

   ● Click **Slur** in the Notes panel.

     TIP

     Alternatively, click **Slur** in the Notes panel first, and then click and drag to input a slur and extend it to your preferred length.

3. Optional: During step input, input the notes you want.

   The slur extends automatically, even if there are rests between the notes you input.

4. Optional: During step input, press **Shift-S** to end the slur on the currently selected note.

RESULT

During step input, a slur begins from the currently selected note, not from the caret position. The slur extends automatically as you input notes, and ends 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.

RELATED LINKS

Input methods for tempo marks

You can input tempo marks with the keyboard by using the tempo popover, and with the mouse by using the Tempo panel. You can input a tempo mark containing just a text instruction, metronome mark, or a combination of the two.

Inputting tempo marks with the popover

You can input tempo marks with the keyboard by entering the tempo mark you want into the tempo popover.

When you start entering a tempo into the tempo popover, a menu appears that shows suggested tempos containing the letters or words you enter. You can choose 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:

- Press **Shift-T**.
- 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.
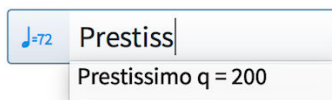
Tempo popover with an example entry

Tempo button in the Notations toolbox

Inputting tempo marks with the panel

You can input tempo marks with the mouse by using the Tempo panel on the right of the window in Write mode.

You can open the Tempo panel by clicking **Tempo** in the Notations toolbox on the right of the window in Write mode.

NOTE

The order in which you should follow steps for inputting tempo marks with the mouse depends on your preferences for the **Creating items with the mouse** option in the **Editing** section of the **General** page in **Preferences**.

You can hide/show the panel whose icon is currently selected in the Notations toolbox in any of the following ways:

- Press **Ctrl/Cmd-9**.
- Click its disclosure arrow.
- Choose **Window** > **Show Right Panel**.

RELATED LINKS

Tempo popover

The table shows examples of what to enter into the tempo popover, and the tempo marks that are input into the music as a result.

When you start entering a tempo into the tempo popover, a menu appears that shows suggested tempos containing the letters or words you enter. You can choose 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:

- Press **Shift-T**.
- Choose **Write** > **Create Tempo**.

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
𝅗𝅥 = 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	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

This list is not comprehensive as you can enter tempos freely. 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.

RELATED LINKS

Tempo panel

You can find all the different types of tempo marks organized into sections in the Tempo panel in Write mode.

Used in This Flow

Contains any tempo marks already used in the flow, including custom tempo marks added using the tempo popover.

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 narrow the range shown in the list by adjusting the sliding bar 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 in boxes.

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 in boxes.

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*.

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RELATED LINKS
Tempo marks on page 719
Types of tempo marks on page 719

Inputting tempo marks with the popover

You can input tempo marks using the tempo popover, both during step input and by adding them to existing music.

PROCEDURE

1.   In Write mode, do one of the following:

    ● Start note input.

    ● Select a barline, notehead, or rest at the rhythmic position where you want to add a tempo mark.

    ● Select multiple items that span the duration across which you want to add a gradual tempo change.

2.   Open the tempo popover in any of the following ways:

    ● Press **Shift**-**T**.

    ● Choose **Write** > **Create Tempo**.

3.   Enter the tempo you want into the popover.

    For example, q=72 or **Allegretto**.

    When you start entering a tempo into the tempo popover, a menu appears that shows suggested tempos containing the letters or words you enter. You can select one of these suggestions or you can enter your own tempo into the popover.
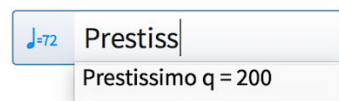
4.   Press **Return** to close the popover.

RESULT

During step 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 selected barline, notehead, or rest. Gradual tempo changes span the duration of the selected items.

TIP

You can lengthen/shorten gradual tempo changes later.

RELATED LINKS
Tempo popover on page 209
Tempo marks on page 719

Inputting tempo marks with the panel

You can input tempo marks using the Tempo panel, both during step input and by adding them to existing music.

NOTE

These steps describe inputting with the default mouse input preference of **Create item at selection**.

PROCEDURE

1. In Write mode, do one of the following:

   ● Start note input.

   ● Select a barline, notehead, or rest at the rhythmic position where you want to add a tempo mark.

   ● Select multiple items that span the duration across which you want to add a gradual tempo change.

2. In the Notations toolbox, click **Tempo**.

   The Tempo panel opens on the right of the window.

3. In the Tempo panel, click the tempo mark you want.

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 step input, tempo marks are input at the caret position. Gradual tempo changes, such as *rallentando*, are also input at the caret position but do not extend as you input notes, and are input with a default duration of a quarter note.

When adding tempo marks to existing music, they are added at the rhythmic position of the selected barline, notehead, or rest. Gradual tempo changes span the duration of the selected items.

TIP

You can lengthen/shorten gradual tempo changes later.

RELATED LINKS

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. Select the position where you want to input text in any of the following ways:

   - Activate the caret and move it to the position where you want to add text.
   - Select a note or notation to determine a position.

2. Open the text editor in any of the following ways:

   - Press **Shift-X** to add staff text.
   - Press **Shift-Alt-X** to add system text.
   - Choose **Write** > **Create Text** to add staff text.
   - Click **Text** to add staff text.

     abc

3. Enter the text you want.
4. Optional: Press **Return** to insert a line break.
5. Optional: Format the text using the text editor options.
6. Close the text editor in any of the following ways:

   - Press **Esc** or **Ctrl/Cmd-Return**.
   - Click outside of the text editor.

RESULT

The text you entered into the text editor is input into the score. It is automatically placed above the staves to which it applies, using the default paragraph style, and two and a half spaces from the outside of the staves.

In Dorico, system text is categorized as a system object. Therefore, system text follows 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
Text editor options in Write mode on page 214
Text frames on page 254
Changing the placement of text relative to the staff on page 283
System objects on page 707
Changing the positions of system objects on page 708

Text editor options in Write mode

The text editor allows you to add and format text.

The text editor opens in the following circumstances:

- You add or change text that is attached to a staff.
- You enter text within a text frame.
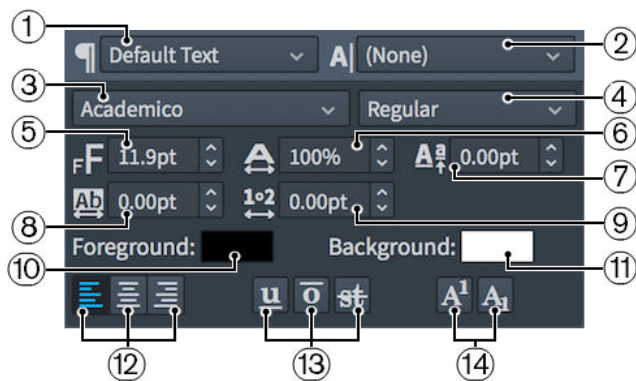
Text editor pop-up in Write mode

The text editor provides the following options:

1   Paragraph Style

Determines the appearance and alignment of the text for a whole paragraph.

NOTE

Text that is attached to a staff is always treated as a single paragraph.

2   Character Style

Determines the appearance of selected text.

NOTE

If you use one of the defined character styles in the text editor, the appearance that is defined by the selected paragraph style is overridden.

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.

5   Font Size

Allows you to change the size of selected text.

6   Font Stretch

Allows you to make selected text wider or narrower.

7   Baseline Shift

Allows you to gradually shift the baseline of selected text 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   Foreground Color

Allows you to change the foreground color of selected text.

11   Background Color

Allows you to change the background color of selected text.

12   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:

- **Alignment Left**
- **Alignment Center**
- **Alignment Right**

13 **Line Types**

Allows you to show any of the following types of lines, in any combination, on selected text:

- **Underline**
- **Overline**
- **Strikethrough**

14 **Script Types**

Allows you to position selected text in one of the following positions relative to the text on the baseline:

- **Superscript**
- **Subscript**

RELATED LINKS
Inputting text on page 214
Entering text in text frames on page 258
Paragraph Styles dialog on page 276
Character Styles dialog on page 279

Inputting cues

You can input cues by using the cues popover.

When you start entering the name of an instrument that exists in your project into the cues popover, a menu appears that shows candidate instruments that you can choose to show in the cue, excluding the destination instrument.

NOTE

The cues popover uses the names of instruments as they are set in your project and language.

Each staff of grand staff instruments is listed separately, for example, **Piano (a)** and **Piano (b)**.

Each unpitched percussion instrument is listed separately. If you have a drum set in your project, each individual instrument in the drum set appears as a candidate for cueing. For example, you can show just the kick drum in a cue.
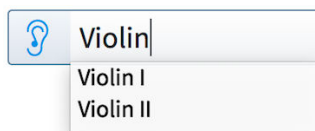
The cues popover with an example entry showing the menu of candidate instruments.

NOTE

- You cannot use entire percussion kits in cues.
- If you directly input a cue at the same position as an existing cue, the new cue overrides the existing cue, which is deleted. However, you can have multiple cues at the same rhythmic positions if you create them in separate bars and move them or lengthen/ shorten them later.

PROCEDURE

1. In Write mode, select one of the following on the staff in which you want the cue to appear:

    - A note or rest at the position you want the cue to start.

    - Multiple notes or rests spanning the duration you want the cue to last.

    TIP

    You can lengthen/shorten cues after they have been input.

2. Open the cues popover in any of the following ways:

    - Press **Shift-U**.

    - Choose **Write** > **Create Cue**.

    - Click **Insert Cue** in the Cues panel.

3. Enter the first few letters of the instrument whose music you want to show in the cue.

    The candidate instrument menu appears below the popover and shows possible candidate instruments.

4. Select the instrument whose music you want to show in the cue in any of the following ways:

    - Press **Up Arrow**/**Down Arrow** to highlight it in the candidate instrument menu, then press **Return**.

    - Click it in the candidate instrument menu.

    - Enter the full name of the instrument into the cues popover, then press **Return** twice.

    NOTE

    If you do not enter the name of an instrument that exists in your project, no cue is created.

    If multiple instruments of the same type exist in your project, music from the first player is input as the cue. For example, if you have Violin I and Violin II in your project and enter **violin** into the cues popover, music from the Violin I staff is shown in the cue.

RESULT

A cue is input in the selected staff, showing the music of the instrument selected in the cues popover.

If you are inputting cues in a full score layout in page view, the cue appears as a signpost by default, showing the name of the source instrument.

NOTE

You can choose to show cues in full score layouts. You can also see the music in the cue in the corresponding part layout, as cues are shown in part layouts by default.

RELATED LINKS
Cues on page 457
Hiding/Showing cues in layouts on page 469
Cue suggestions on page 218
Inputting cues using cue suggestions on page 220
Lengthening/Shortening cues on page 462
Moving cues on page 461

Cues panel

The Cues panel allows you to input cues and find suitable places to input cues.

You can open the Cues panel by clicking **Cues** in the Notations toolbox in Write mode.

There are two sections in the Cues panel:

Insert Cue

Contains the **Insert Cue** button which you can click to open the cues popover with the mouse.

Suggest Cues

Allows you to generate suggestions for cues based on how long players have been resting.

You can hide/show the panel whose icon is currently selected in the Notations toolbox in any of the following ways:

- Press **Ctrl/Cmd-9**.
- Click its disclosure arrow.
- Choose **Window** > **Show Right Panel**.

RELATED LINKS

Cue suggestions

The **Suggest Cues** section of the Cues panel helps you determine useful locations for cues in your project. Dorico identifies places in the current flow where players in the current layout have not played for a set span of time.

The **Suggest Cues** section of the Cues panel is divided into the following sections that help you find useful places to input cues:

Resting for

Allows you to specify the resting period for players after which you want to input cues.

The resting period is specified in absolute time rather than in bars or beats. This is because meters and tempos can change many times throughout a flow, and music can be partially or completely meterless, whereas one second always has the same duration. Dorico calculates time using metronome marks in the project.

Specifying an absolute time ensures consistency in the approach to finding places where cues might be appropriate.

Rehearsal marks

Allows you to consider/ignore rehearsal marks when determining the resting period.

Rehearsal marks often coincide with new sections or other landmarks in the music, which can be obvious to players without needing extra cues. By default, rehearsal marks are ignored as they do not always act as signposts for the musical structure.

Cues

Allows you to consider/ignore cues that already exist between notes played by the destination player when determining the resting period.

A cue that occurs immediately before an entry in the destination instrument is always ignored and is never included as a suggested location, even if you choose to consider cues.

However, orientation cues which serve to help the player keep their place during extended rests, but do not immediately precede an entry, reset the timer if you choose to consider cues.

Update

Allows you to recalculate cue suggestions based on your **Resting for** duration and inclusion choices for rehearsal marks and cues after you have changed values.

The names of the flow and layout that were active when you last updated the list of cue suggestions are shown below the **Update** button. This allows you to see at a glance to which flow and layout the suggestions shown in the table apply.

Cue suggestions table

The list of suggested cues is presented in a table. The table contains the following columns:

- **Instr.**: the destination instrument that has been resting for more than your minimum specified duration

- **Bar**: the bar containing the first entry of the destination instrument after its rest period

- **Sec.**: the length of time in seconds the destination instrument has been resting before the entry shown in the **Bar** column

You can click each column title to arrange the table according to the values in that column.

- **Instr.**: click to show instruments with suggested cues in the order in which they appear in the score

- **Bar**: click to show entries in ascending order, earlier bars down to later bars

- **Sec.**: click to the show the length of resting period in descending order, longest period down to shortest period

Click rows in the cue suggestions table to navigate directly to that location. By default, an area with an equivalent rhythmic duration of 5-10 seconds prior to the entry in the destination instrument is highlighted. The highlighted area is not a specific recommendation for cue length, but it can be a good indication depending on the musical context.

If you create a cue at a location suggested in the cue suggestions table, that suggestion is automatically removed from the list.

You can click **Ignore** in the action bar at the bottom of the table to hide suggestions where you do not think a cue is appropriate.

NOTE

If you later click **Update** and regenerate the list, hidden suggestions can reappear.

Highlight suggestions

Highlighted areas before entries in source instruments are shown **Highlight suggestions** is activated, and are hidden when it is deactivated.

Playing instruments list

Contains the instruments that are playing in the 5-10 seconds prior to the entry in the destination instrument currently selected in the cue suggestion table, to help you determine which instrument to use as the source instrument of cues.

Inputting cues using cue suggestions

You can use the **Suggest Cues** section of the Cues panel in Write mode to find suitable places to input cues. You can then input cues using the cues popover.

PROCEDURE

1. In Write mode, open the layout in the music area in which you want to find suitable locations for cues.

   For example, suitable locations for cues are suggested for all instruments when the full score layout is open in the music area, but only suitable locations for individual instruments are suggested when a single part layout is open.

2. Click **Cues** in the Notations toolbox.

   The Cues panel opens.

3. In the Cues panel, change **Resting for** in the **Suggest Cues** section to specify the resting period after which you want to input cues in any of the following ways:

   - Enter a value into the value field.

   - Click the arrows beside the value field.

4. Choose one of the following options for **Rehearsal marks**:

   - **Consider**

   - **Ignore**

5. Choose one of the following options for **Cues**:

   - **Consider**

   - **Ignore**

6. Click **Update**.

7. Click a row in the cue suggestion table to navigate directly to that position in the layout so you can check the context of the cue suggestion.

   Cue suggestions are highlighted for the equivalent rhythmic duration of 5-10 seconds. You can choose not to see highlighted areas by deactivating **Highlight suggestions**.

8. Select one of the following on the staff in which you want the cue to appear:

   - A note or rest at the position where you want the cue to start.

   - Multiple notes or rests spanning the duration you want the cue to last.

9. Open the cues popover in any of the following ways:

   - Press **Shift-U**.

   - Choose **Write** > **Create Cue**.

   - Click **Insert Cue** in the Cues panel.

10. Enter the first few letters into the popover of the instrument whose music you want to show in the cue.

    The candidate instrument menu appears below the popover. You can use the **Playing instruments** list to help select an appropriate source instrument for your cue.

11. Select the instrument whose music you want to show in the cue in any of the following ways:

    - Press **Up Arrow** and **Down Arrow** to highlight it in the candidate instrument menu, then press **Return**.

    - Click it in the candidate instrument menu.

- Enter the full name of the instrument into the cues popover, then press **Return** twice.

  > **NOTE**
  >
  > If you do not enter the name of an instrument that exists in your project, no cue is created.
  >
  > If multiple instruments of the same type exist in your project, music from the first player is input as the cue. For example, if you have Violin I and Violin II in your project and enter **violin** into the cues popover, music from the Violin I staff is shown in the cue.

RESULT

A cue is input in the selected staff, showing the music of the instrument selected in the cues popover.

If you are inputting cues in a full score layout in page view, the cue appears as a signpost by default, showing the name of the source instrument.

NOTE

You can show cues in full score layouts. You can also see the music in the cue in the corresponding part layout, as cues are shown in part layouts by default.

RELATED LINKS
Cues on page 457
Cue suggestions on page 218
Lengthening/Shortening cues on page 462
Moving cues on page 461
Switching between layouts on page 94

Splitting flows

You can split flows at specific rhythmic positions.

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.

RELATED LINKS
Flows on page 88
Adding flows on page 88
Deleting flows on page 91

Engrave mode

Engrave mode allows you to manipulate and modify every item in your project. You can determine how the pages of your project are formatted for printing or exporting.

Project window in Engrave mode

The project window in Engrave 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 format the pages, systems, and properties of individual notations in your score.

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

- Press **Ctrl/Cmd-3**.
- Click **Engrave** in the toolbar.
- Choose **Window** > **Engrave**.

The panels are located on the left, right, and bottom of the project window and can be shown or hidden.

Panels in Engrave mode

The following panels are available:

1 Formatting

Allows you to insert and align different kinds of frames in pages. You can also make changes to how a system is formatted on a page.

2 Pages

Allows you to specify how the notation is formatted on pages. The way this is done is based on the typical techniques as they are used in desktop publishing programs.

3 Properties

Contains quick access properties that allow you to make specific modifications to individual parts of notes and notations.

RELATED LINKS
Windows on page 38

Formatting panel

The Formatting panel in Engrave mode allows you to insert different kinds of frames into pages and to specify how these are aligned on a page. You can also make changes to how systems and frames are formatted on pages.

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

● Press **Ctrl/Cmd-7**.

● Click the disclosure arrow to the left of the music area.
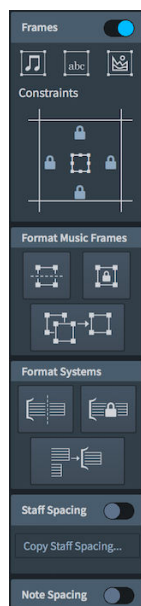
The Formatting panel is divided into the following sections:

Frames

The **Frames** section allows you to create new frames on a page and to specify the constraints between the frames and the page margins. Activate this section to make changes to frames.

Insert Music Frame

Allows you to insert a frame for which you can specify the layouts that you want to show.

> **NOTE**
>
> To specify which parts are visible in the default frame, you must edit the master pages of the used master page set.

Insert Text Frame

Allows you to insert a frame into which you can enter text that you can format according to your needs.

Insert Graphics Frame

Allows you to insert an frame that can contain an image or an illustration.

Constraints

Allows you to specify which sides of the frame you want to lock to the page margin.

Format Music Frames

The Format Music Frames section allows you to change how the music in the layout currently open in the music area is arranged into frames.

Insert Frame Break

Forces music from the selected item onwards onto the next frame, which is often on the next page. This allows you to control what music appears on each page.

Lock Frame

Fixes the formatting of the selected frames, even if you change the formatting of surrounding frames.

Make into Frame

Forces all music between the selected items into the same frame. You can use this option to force music onto a single page.

Format Systems

Insert System Break

Forces music from the selected item onwards onto the next system. Depending on your staff size and other settings, this may mean the music is forced onto the next page.

Lock System

Fixes the formatting of the selected systems, even if you change the formatting of surrounding musical material and other systems.

Make into System

Forces all music between the selected items into the same system.

RELATED LINKS

Pages panel

The pages panel in Engrave mode provides several sections that allow you to specify how the pages of your notation are formatted. The way this is done is based on the typical techniques as they are used in desktop publishing programs.

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

- Press **Ctrl/Cmd-9**.
- Click the disclosure arrow to the right of the music area.

 /
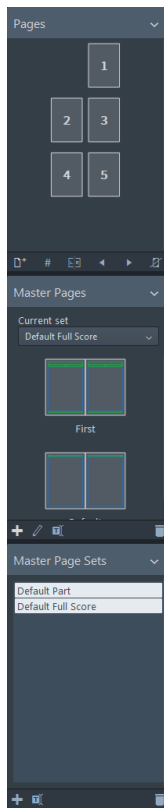
Pages panel in Engrave mode

The pages panel is divided into the following sections:

Pages

Pages display

Shows the pages in your layout with their page number. A highlighted page frame indicates a selected page. Markings in the top left and the bottom right corner of the pages indicate that a page has overrides. Additional frames at the top or left frames of the page indicate that master page changes have been applied.

Insert Pages

Allows you to insert pages into your layout before or after existing pages, based on a selected master page.

Insert Page Number Change

Allows you to change the page numbers for pages in your layout.

Insert Master Page Change

Allows you to assign a different master page to a selected page.

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Swap with Previous Page

◀

Moves a selected page to the position of the previous page.

Swap with Next Page

▶

Moves a selected page to the position of the next page.

Remove Overrides

Removes all overrides on a selected page.

Master Pages

Master Pages display

Shows the master page pairs that are used in your layout. A highlighted frame indicates the selected master page. If you select a page in the **Pages** display, the master pages display highlights the master page pair that is used for this page.

Current set

Shows the master page set that is in use and allows you to select a different master page set.

New Master Page

Allows you to add a new master page to a master page set.

Edit Master Page

Opens the master page editor in which you can change the master page formats. Click **Close Master Page Editor** to close the master page editor.

Rename Master Page

Allows you to rename a selected master page.

Delete Master Page

Deletes a selected master page.

Master Page Sets

Master Page Set list

Shows a list of available master page sets.

New Master Page Set

Creates a new master page set based on the master page set that is selected in the list. The new master page set is automatically added to the **Current set** menu in the **Master Pages** section.

Rename Master Page Set

Allows you to rename the selected master page set.

Delete Master Page Set

🗑

Deletes a selected master page set from the list.

Properties panel

The Properties panel in Engrave mode provides options that allow you to edit individual notes and notations. All the properties that are available in the Properties panel in Write mode are also available in Engrave mode, but additional properties in Engrave mode allow you to edit items in more detail.

You can hide/show the Properties panel in Write mode and Engrave mode 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**.

The Properties panel contains a section for each notation item. When you select a note or notation, or part of a note or notation, and open the Properties panel, the Properties panel displays the sections and all the respective options that you might require to edit the selected item.

NOTE

If you select multiple different types of notation items, only the sections that they have in common are displayed.

EXAMPLE

If you select a note or rest, the **Common** section and the **Notes and Rests** section are displayed. If you select a tied note with an articulation, the following groups are displayed:

- The **Common** group
- The **Notes and Rests** group
- The **Ties** group
- The **Articulations** group

RELATED LINKS
Changing the properties of individual items in Engrave mode on page 227

Changing the properties of individual items in Engrave mode

You can view and change the properties of notes and notations.

TIP

You can change the default appearance and position of all notes and notations project-wide in **Engraving Options**.

PROCEDURE

1. Select a note, notation, or individual parts of them in the music area.

2. Show the Properties panel 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. Change the properties that you want.

RESULT

The changes are immediately displayed in the music area.

NOTE

Properties are layout-specific. For example, if you change the placement of an item relative to the staff in a full score layout, this does not affect the placement of the item in the corresponding part layout.

RELATED LINKS
Engraving Options dialog on page 228
Properties panel on page 227

Selecting handles on items

In Engrave mode, you can select individual handles on items, for example, if you want to move the graphical end of a gradual dynamic without moving its start.

NOTE

These steps do not apply to frame, note spacing, or staff spacing handles.

PROCEDURE

1. Select a handle in any of the following ways:

- Select the whole item and press **Tab** until the handle you want is selected.
- Click the handle you want.

  TIP

  You can show handles on all items, not just selected items, by choosing **Engrave** > **Show Handles** > **Always**. This can make it easier to select individual handles on multiple items.

2. Optional: Select handles on other items as well by **Ctrl/Cmd**-clicking them.

NOTE

You cannot select subsequent handles on other items by selecting the items and pressing **Tab**.

Engraving Options dialog

The **Engraving Options** dialog provides multiple options that allow you to make project-wide changes to your project by changing the graphical appearance and position of items.

The changes that you can make may affect, for example, the following properties of notation items:

- Line thickness
- Distances
- Positions

NOTE

You can save all options that you set in **Engraving Options** as the default for new projects by clicking **Save as Default**.

TIP

If you want to make changes to individual notes and notations, you can use properties in the Properties panel.

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

- Press **Ctrl/Cmd-Shift-E** in any mode.
- Choose **Engrave** > **Engraving Options** in Engrave mode.
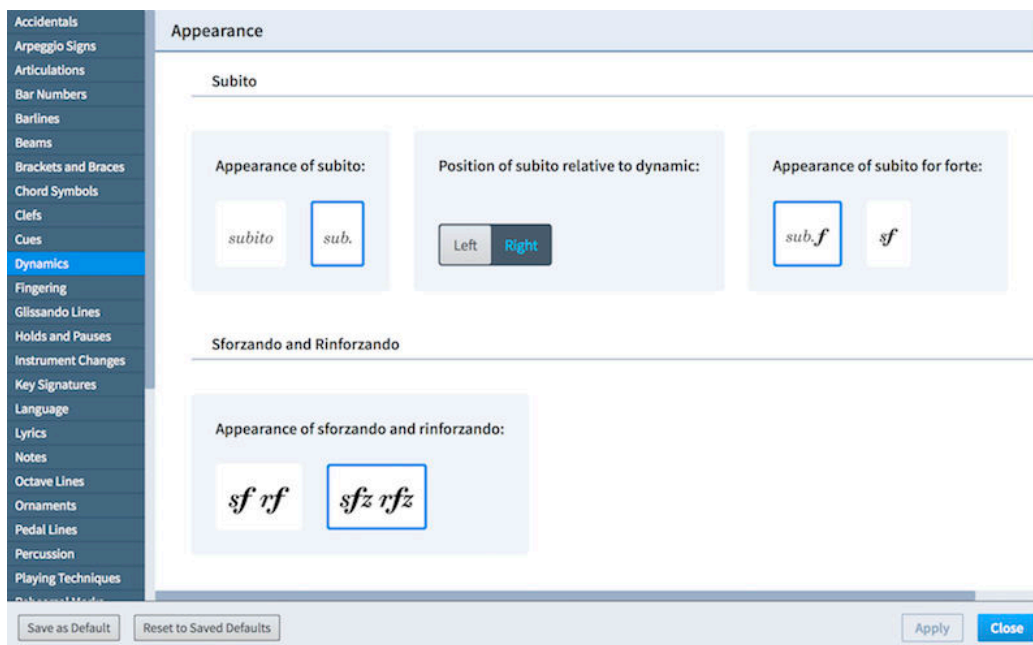
Engraving Options

The list on the left of the **Engraving Options** dialog contains the pages for each notation category. All the options available for the category selected in the list are shown in the main area of the dialog.

Pages with many options are divided into sections and subsections.

RELATED LINKS

Making project-wide changes

You can make project-wide changes to the appearance, placement, and default position of notes and notations in **Engraving Options**.

PROCEDURE

1. Open **Engraving Options** in any of the following ways:

   - Press **Ctrl/Cmd-Shift-E** in any mode.

   - Choose **Engrave** > **Engraving Options** in Engrave mode.

2. Click a page in the page list on the left of the dialog.

3. Look through the available options, and change the options you want.

4. Click **Apply**, then **Close**.

   NOTE

   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 to all music in your project, including in all layouts and flows.

Master pages

Master pages in Dorico allow the same formatting to be applied to different pages in different layouts.

NOTE

Page size and margins, page orientation, and staff size for full score and part layouts are specified in **Setup** > **Layout Options**.

All pages in your score and parts inherit their layout formats from master pages. Whenever you create or change anything on master pages, this is automatically reflected on the pages that use these master pages. For example, if you insert a new frame on a master page, a corresponding frame appears on all the pages that use that master frame.

In Dorico, master pages consist of page pairs. Every page pair has a left and a right master page, so that if a page in your project falls on a left page, the formatting of the left page of the master page pair is used, and if a page falls on a right page, the formatting of the right page of the master page pair is used.

Dorico provides default master pages with page pairs for first (**First**) and subsequent (**Default**) pages. This enables you to format first pages differently compared to subsequent pages. Page pairs are contained in master page sets for full score and part layouts. Master page sets are automatically applied to every layout that you create.

If you want to change the master page sets or to change the format of the master pages, you can do so in any of the following ways:

- Create new master pages and master page sets.

- Edit the default master pages in the master page sets using the master page editor.

- Override individual master pages.

RELATED LINKS
Master page sets on page 231

Master page sets

In Dorico, master pages are provided as parts of master page sets. Master page sets group master page formats together, so there is a master page for all possible situations in your project.

The default master page sets contain predefined master pages for first page pairs (**First**) and subsequent page pairs (**Default**). This ensures there is a master page format for the first page in each flow, whether that is on a right page or a left page, and a master page format for subsequent pages in each flow on both right and left pages.

For every new project, the following default master page sets are available:

- **Default Full Score** is the default master page set used for full score layouts.
- **Default Part** is the default master page set used for part layouts.

You do not need to create or customize master page sets initially, as the default sets are applied automatically when you create your score. If you find that you want or need to change the sets, you can do so in any of the following ways:

- Create new custom master page sets based on the default sets.
- Change the default sets according to your requirements for the current project.

RELATED LINKS
Creating master page sets on page 231

Creating master page sets

You can create new master page sets. They can be based on the sets provided by Dorico and on existing custom master page sets you have created.

PROCEDURE

1. In the **Master Page Sets** section of the Pages panel, click the master page set on which you want to base a new master page set.
2. Click **New Master Page Set**.

RESULT

A new master page set is created based on the selected default master page set. It appears immediately in the list of master page sets.

AFTER COMPLETING THIS TASK

You can rename your new master page set and add new master pages to it.

RELATED LINKS
Renaming master page sets on page 232
Adding master pages on page 233

Renaming master page sets

You can edit the names of master page sets that you have created. You cannot rename the default master page sets.

PROCEDURE

1. In the **Master Page Sets** section of the Pages panel, double-click the master page set that you want to rename.

    Alternatively, you can select the master page set and click **Rename Master Page Set**.

2. Enter the new name you want.

3. Press **Return**.

Deleting master page sets

You can delete master page sets that you no longer need, including the default master page sets.

PROCEDURE

1. In the **Master Page Sets** section of the Pages panel, click the master page set that you want to delete.

2. Click **Delete Master Page Set**.

Applying master page sets to layouts

You can apply a different master page set to each layout in your project.

PROCEDURE

1. In the music area, open the layout to which you want to apply a master page set.

2. In the **Master Pages** section of the Pages panel, select a master page set from the **Current set** menu.

RESULT

The selected master page set is applied to the layout.

AFTER COMPLETING THIS TASK

You can make further changes to the layout, such as assigning different master pages in the master page set to individual pages. You can also make individual master page overrides that only apply to pages in the current layout, for example, if you need the frame padding on the first page to be different to the master page setting.

RELATED LINKS
Assigning master pages to pages on page 242
Master page overrides on page 237
Overriding master pages on page 238

Master page types

If you add a new master page to a master page set, you must specify the type of master page that you want to add.

You can add the following types of master pages:

First

A page pair that is usually used for the first page of music in a layout. By default, **First** master pages can display the project title, composer, and lyricist in addition to the music.

NOTE

If you create no **First** page pair, the first page in your layout uses the **Default** page pair.

Default

A page pair that is usually used for pages after the first page in a layout. By default, Default master pages display the flow title and page number in addition to the music.

Every master page set must contain a single **Default** master page.

Custom

A page pair that can have any layout. Custom master pages allow you to create layouts that you want to apply to multiple pages but not all pages, for example, if you want to show an image at the same position on only the final pages in each part layout.

NOTE

If you insert a page to a layout using a custom master page, you create an override. This means that if you insert a page in the middle or at the end of your layout pages using a custom master page and then remove the override, that page is automatically assigned the **Default** master page.

RELATED LINKS
Adding master pages on page 233
Master page sets on page 231
Master page overrides on page 237

Adding master pages

You can add new master pages to master page sets. Each master page set can have multiple custom master pages, but only a single first master page and single default master page.

PROCEDURE

1. In the **Master Pages** section of the Pages panel, select the master page set to which you want to add new master pages from the **Current set** menu.

2. Click **New Master Page**.

   ➕

   The **New Master Page** dialog opens.

3. In the **New Master Page** dialog, enter a name for the new master page into the **Name** field.

4. Select the master page that you want to use as the basis from the **Based on** menu.

   NOTE

   Selecting **(None)** always creates a master page without any formatting but the page margins.

5. Choose one of the following master page types for your new master page:

   ● **First**

- **Default**
- **Custom**

NOTE

If you select **First** or **Default**, the new master page replaces that existing master page, as each master page set can only have a single first and default master page.

If you want to create a new master page without replacing any existing master pages, choose **Custom**.

RESULT

A new master page of the selected type is added to the selected master page set.

AFTER COMPLETING THIS TASK

You can apply your new master pages to individual pages in layouts that use the master page set to which they belong.

RELATED LINKS

Renaming master pages

You can change the names of master pages.

PROCEDURE

1. In the **Master Pages** section of the Pages panel, select the master page set containing the master page you want to rename from the **Current set** menu.
2. In the **Master Pages** section, click the master page pair that you want to rename.
3. Click **Rename Master Page**.

    The **Rename Master Page** dialog opens.
4. Enter the name you want in the **Name** field.
5. Click **OK** to save your changes and close the dialog.

Deleting master pages

You can delete master pages from master page sets.

NOTE

Master pages of the type **Default** cannot be deleted. Every master page set must contain at least a **Default** master page.

PROCEDURE

1. In the **Master Pages** section of the Pages panel, select the master page set from which you want to delete master pages from the **Current set** menu.
2. In the **Master Pages** section, click the master page pair that you want to delete.
3. Click **Delete Master Page**.

RESULT

The selected master page pair is deleted.

NOTE

You can undo this action immediately in any of the following ways:

- Press **Ctrl/Cmd-Z**.
- Choose **Edit** > **Undo**.

Master page editor

The master page editor allows you to view and change the format of the master pages.

You can open the master page editor in the following ways:

- Double-click a page pair in the **Master Pages** section of the Pages panel.
- Select a page pair in the **Master Pages** section of the Pages panel and click **Edit Master Page**.

You can change master pages in the master page editor in the following ways:

- Insert and adjust music frames, text frames, and graphics frames in relation to other frames and the page margins.
- Assign frames to frame chains.
- Specify the order in which frames display the notation.
- Assign flows and players to frames.
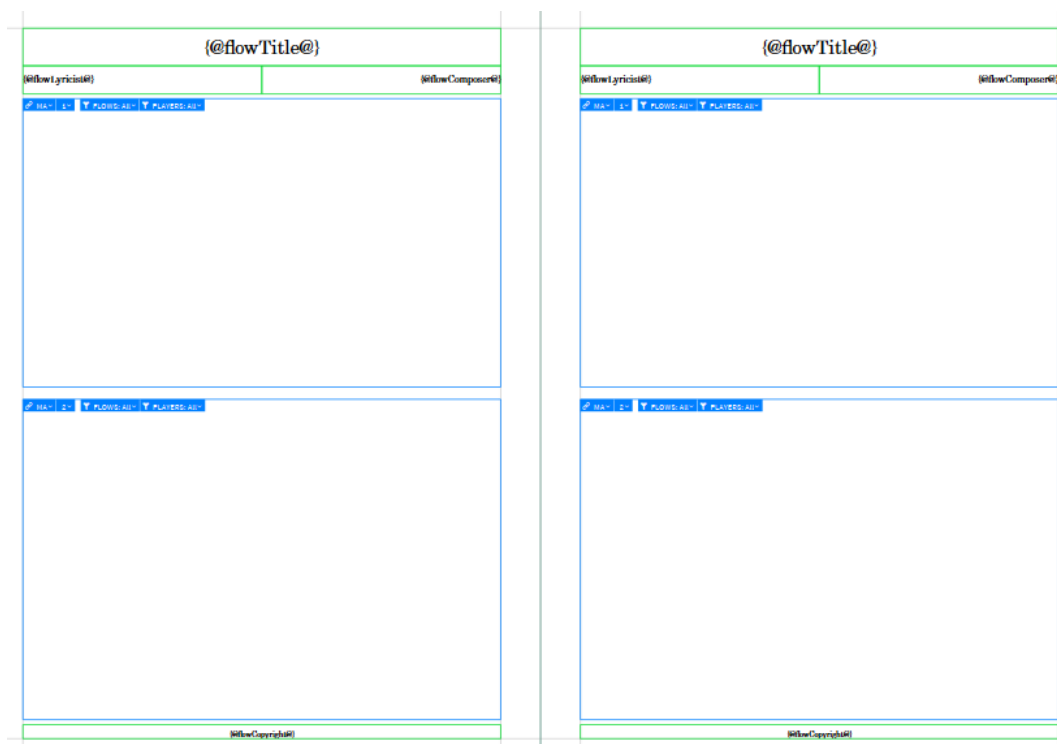
A pair of master pages open in the master page editor

Customizing master pages

You can customize master pages according to your needs in the master page editor. Changing a master page affects the appearance of all layouts that use that master page.

> NOTE
>
> If you want to edit the page size and margins, page orientation, and staff size for layouts, you must specify these on the **Page Setup** page in **Setup** > **Layout Options**.

PROCEDURE

1. In the Pages panel, double-click a master page pair in the **Master Pages** section.

   The master page editor opens in the music area.

2. In the master page editor, change the layout of one of the pages of the selected master page pair. For example, you can change the size and shape of frames.

3. Optional: If you want both the left and right pages to be the same, click one of the following **Copy Page Layout** buttons at the top of the music area, depending on which page you changed:

   - **Left to Right**

   - **Right to Left**

   > NOTE
   >
   > This copies the master page layout exactly from one page to the other, not as a mirror. For example, text frames for page numbers are not kept on the outside edge automatically.

4. Click **Close Master Page Editor** to save your changes.

RESULT

The selected master page pair is changed.

RELATED LINKS

Master page overrides

All pages of a project inherit their format from the master pages that are specified in the appropriate master page sets. In some cases, it is also possible to change the format of individual pages without affecting the underlying master pages or master page sets.

In Dorico, you can override the format of an individual page. For example, you might want to override the formats for one of the following reasons:

● To change the size of a music frame on an individual page.

● To insert an empty page.

● To change the page numbering.

● To include comments in the form of footnotes.

● To include small excerpts of music to show how a passage was reproduced in another source.

If you override the pages, they no longer automatically inherit changes that are made to the master pages. Pages that have been overridden shown with a marking on them in the **Pages** section of the Pages panel:

● Master page overrides: marking shown in top left corner.

● Page number changes: marking shown in bottom right corner.

To return the formatting of pages whose formats you have overridden to the master pages, you must remove the overrides that you made.

NOTE
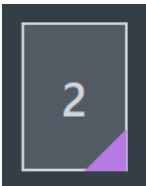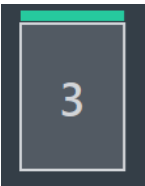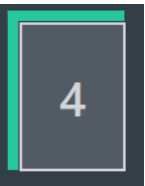
If you inserted a page in the middle or at the end of your layout using a custom master page and remove the override, that page is automatically assigned the **Default** master page of the master page set.

You can also change the master page used for individual pages. For example, you might want to change the master page used for pages in a part that has a few pages with more staves than usual. Or you might want to change the master page used for a score where the instrumentation is significantly different for one flow and you want the format of those pages to be different.

Pages whose master page has been changed are shown with a marking on them in the **Pages** section of the Pages panel.

● Master page changes on the current page only are shown with a marking along their top edge.

● Master page changes from the page onwards are shown with a marking along their left edge and top edge.

The table shows examples of how the different overrides you can make to individual pages in layouts are shown in the **Pages** section of the Pages panel in Engrave mode.

Master page override	Page number change	Master page change to single page only	Master page change from selected page onwards
1	2	3	4

Overriding master pages

You can override master page settings on individual pages in your layout.

PROCEDURE

- Override the master page settings in one of the following ways:
  - To edit the frames, activate **Frames** in the Formatting panel.

    NOTE

    If the **Filter by Flow** and the **Filter by Player** options cannot be edited, you must edit the respective master page.

  - To insert, swap, and delete pages, and to change the page numbers, use the options in the **Pages** section.

RESULT

As soon as a master page is overridden, the page icon in the **Pages** panel shows a marking in the top left corner if you have changed an aspect of the master page, or the bottom right corner if you have changed the page number.

Removing master page overrides

You can remove overrides that you have made to individual pages, which returns them to the master page format.

Any pages in your layout that contain overrides are shown with a colored triangle in their top left corner in the **Pages** section of the Pages panel.

Removing overrides from empty pages deletes them from the layout.

PROCEDURE

1. In the music area, open the layout whose master page overrides you want to remove.
2. Optional: If you want to remove overrides from individual pages, select those pages in the **Pages** section of the Pages panel in any of the following ways:
   - Click a single page.
   - **Ctrl/Cmd**-click multiple pages.
3. Remove master page overrides in one of the following ways:
   - To remove overrides from selected pages only, right-click in the **Pages** section of the Pages panel and choose **Remove Page Overrides** from the context menu.
   - To remove overrides from selected pages only, click **Remove Overrides** in the **Pages** section of the Pages panel.

   - To remove overrides from all pages, right-click in the **Pages** section of the Pages panel and choose **Remove All Page Overrides** from the context menu.

RESULT

Any overrides you made to the master page format are removed from either the selected pages only or from all pages in the layout currently open in the music area. Empty pages that are considered overrides are deleted.

If you removed overrides from selected pages only, any other pages with overrides in the layout are unaffected.

RELATED LINKS

Inserting pages

You can insert empty pages or pages that use a different master page into each layout in your project.

PROCEDURE

1. Open the **Insert Pages** dialog in any of the following ways:

   - In the **Pages** section of the Pages panel, right-click and choose **Insert Pages** from the context menu.
   - In the **Pages** section of the Pages panel, click a page and click **Insert Pages**.

     ⬚⁺

2. Enter a page number into the **Number of pages to insert** field.

3. Select where you want to insert pages. For example, select **After page** and enter 8 to insert pages after page 8.

4. Select the master page that you want to assign to the inserted pages from the **Use master page** menu.

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

Inserting page number changes

You can change the page numbers of pages in each layout in your project. Inserting page number changes allows you to change the page number shown, and also the page number style.

For example, you can use Roman numerals such as ii and iv for front matter pages, and numbers such as 1 and 3 for music pages.

NOTE

If you change the first page in the layout to an even number, it automatically becomes a left-hand page. This is because convention dictates that even numbered pages are always on the left-hand page, and odd numbered pages are always on the right-hand page. Similarly, if the first page in the layout is on the left-hand page, it cannot show as page 1, it can only show as page 2.

PROCEDURE

1. In the music area, open the layout whose page numbers you want to change.

2. In the **Pages** section of the Pages panel, select the page from which you want to change the page numbers.

3. Open the **Page Number Change** dialog in any of the following ways:

   - Right-click in the **Pages** section and choose **Insert Page Number Change** from the context menu.
   - Click **Insert Page Number Change**.

4. In the **Page Number Change** dialog, enter the number of the page from which you want the page number change to start in the **From page** field.

For example, if you want to change the page number of your current page 3, enter 3.

5. Enter the new page number that you want the selected page to have in the **First page number** field. For example, if you want to change your current page 3 to page 5, enter 5.

6. Select the numeral style you want from the following options for **Sequence type**:

- **Number**

- **Roman numeral**

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

RESULT

The page number of the selected page is changed. All subsequent pages are changed correspondingly until the next page number change or the end of the project, whichever comes first.

NOTE

You can change other aspects of the appearance of page numbers in the **Page Number Change** dialog. For example, you can show subordinate numbers as upper case letters or lower case letters.

RELATED LINKS

Page Number Change dialog

The **Page Number Change** dialog allows you to change the page numbers shown on existing pages in each layout. You can choose to show pages without page numbers or with different numbering.

For example, you can change the number type to one of the available types:

- **Roman numeral**: such as iii and iv

- **Number**: such as 5 and 19

You can also change the visibility of page numbers. For example, you can hide page numbers on introductory pages by setting their visibility to **Not on first page**.

You can open the **Page Number Change** dialog when a page is selected in the **Pages** section of the Pages panel in any of the following ways:

- Right-click in the **Pages** section and choose **Insert Page Number Change** from the context menu.

- Click **Insert Page Number Change**.

The **Page Number Change** dialog contains the following options:

From page

Allows you to select the page from which you want to change page numbers. The number indicates its position within the layout.

The **Displayed** option shows you the number that the selected page currently has, and how that number appears.

First page number

Allows you to specify the new page number you want for the selected page. Subsequent pages follow the new sequence until the next page number change or end of the project.

Sequence type

Allows you to select the type of number that the selected page and subsequent pages have.

Visibility

Allows you to specify if a page number is hidden or shown. You can additionally specify that the page number is also hidden on the page where the page number change occurs.

Subordinate number type

Allows you to add a subordinate number to the page number and to specify a type.

Subordinate number

Allows you to specify the number from which you want the subordinate numbers to start.

When you insert page number changes, a marking is shown in the bottom right corner of the page in the **Pages** section of the Pages panel. The new page number is also shown in each page in the **Pages** section of the Pages panel, in the appropriate numeral style.

RELATED LINKS
Inserting page number changes on page 239
Removing page number changes on page 241
Master page overrides on page 237
Page numbers on page 607

Removing page number changes

You can remove page number changes you have made to individual pages, which reverts pages to their default page numbers.

Any pages whose page number has been changed are shown with a colored triangle in their bottom right corner in the **Pages** section of the Pages panel.

PROCEDURE

1. In the music area, open the layout whose page number changes you want to remove.

2. Optional: If you want to remove page number changes from individual pages, select those pages in the **Pages** section of the Pages panel in any of the following ways:

    *   Click a single page.

    *   **Ctrl/Cmd**-click multiple pages.

3. Remove page number changes in one of the following ways:

    *   To remove page number changes from selected pages only, right-click in the **Pages** section of the Pages panel and choose **Remove Page Number Change(s)** from the context menu.

    *   To remove page number changes from all pages, right-click in the **Pages** section of the Pages panel and choose **Remove All Page Number Changes** from the context menu.

RESULT

Page number changes are removed from either the selected pages only or from all pages in the layout currently open in the music area.

If you removed page number changes from all pages, all pages are restored to the default page number sequence.

If you removed page number changes from selected pages only, the default page number is restored from the selected pages until the next page number change or the end of the project, whichever comes first. Any other pages with page number changes in the layout are unaffected.

RELATED LINKS
Page Number Change dialog on page 240
Inserting page number changes on page 239

Assigning master pages to pages

You can assign a different master page to each page in each layout in your project.

The selected master page set defines the master pages for every page in the layout. However, you can change the master page assignment for one or more pages.

PROCEDURE

1. In the **Pages** section of the Pages panel, click the page whose master page assignment you want to change.

2. Click **Insert Master Page Change**.

    The **Insert Master Page Change** dialog opens.

3. Optional: Change the start page for the master page change using the **From page** option.

4. Select the master page that you want to assign from the **Use master page** menu.

5. Choose one of the following options for **Range**:

    - **Current Page Only**

      Only the selected page is assigned a different master page.

    - **From this Page Onwards**

      The selected page and all subsequent pages are assigned a different master page.

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

Removing master page changes

You can remove master page changes you have assigned to individual pages, which reverts them to the overall master page format applied to the layout.

Any pages whose master page has been changed are shown with a marking along their top edge, or along their top and left edges, in the **Pages** section of the Pages panel.

PROCEDURE

1. In the music area, open the layout whose master page changes you want to remove.

2. Optional: If you want to remove master page changes from individual pages, select those pages in the **Pages** section of the Pages panel in any of the following ways:

    - Click a single page.

    - **Ctrl/Cmd**-click multiple pages.

3. Remove master page changes in one of the following ways:

- To remove master page changes from selected pages only, right-click in the **Pages** section of the Pages panel and choose **Remove Master Page Change(s)** from the context menu.

- To remove master page changes from all pages, right-click in the **Pages** section of the Pages panel and choose **Remove All Master Page Changes** from the context menu.

RESULT

All master page changes are removed from either the selected pages only or from all pages in the layout currently open in the music area. Pages return to the overall master page format applied to the layout.

If you removed master page changes from selected pages only, any other pages with master page changes in the layout are unaffected.

RELATED LINKS
Assigning master pages to pages on page 242
Master page overrides on page 237

Swapping pages

You can swap pages that have overrides with adjacent pages.

PROCEDURE

1. In the music area, open the layout in which you want to swap pages.
2. In the **Pages** section of the Pages panel, select a page with an override.

   NOTE

   A page with an override has a marking in the top left corner.

3. Swap the selected page with another page in any of the following ways:

   - Right-click in the **Pages** section and choose **Swap with Next Page** from the context menu.

   - Click **Swap with Next Page**.

     ▶

   - Choose **Swap with Previous Page** from the context menu.

   - Click **Swap with Previous Page**.

     ◀

RESULT

The selected page exchanges the position with the previous or next page within the sequence of pages in the layout.

RELATED LINKS
Master page overrides on page 237

Frames

Frames allow you to position your music, additional text, and graphics anywhere inside the margins of a page.

Frames are rectangular boxes that can be positioned inside the page margins that have been defined for a layout. In Engrave mode, you can see and adjust frames according to your needs. For every project that you create, Dorico provides the following 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

For every frame, you can specify constraints that define the relationship between the sides of the frame and the corresponding page margins.

RELATED LINKS

Inputting frames

You can input frames on pages manually, including on both individual pages and on master pages in the master page editor. You can input music frames, text frames, and graphics frames.

PROCEDURE

1. In Engrave mode, do one of the following:

   - In the music area, open the layout in which you want to insert frames.
   - In the master page editor, open the master page in which you want to insert frames.

2. In the Formatting panel, activate **Frames**.

3. Choose one of the following types of frames:

   - **Insert Music Frame**

   - **Insert Text Frame**

   - **Insert Graphics Frame**

4. Click and drag in the music area.
   You can draw a frame of any size and shape, as long as it fits within the page margins.

5. Release the mouse button.

RESULT

The type of frame you chose is input on the page.

You can change the size of the frame or define its constraints. If you inserted a music frame, you can determine which parts of your score you want to display in the frame. If you inserted a text frame, you can enter text. If you inserted a graphics frame, you can load a graphic file.

RELATED LINKS

Moving frames

You can move individual frames around pages, including master pages, after they have been inserted. However, you cannot move frames beyond page margins.

PROCEDURE

1. In Engrave mode, do one of the following:
   - In the music area, open the layout in which you want to move frames.
   - In the master page editor, open the master page in which you want to move frames.
2. In the Formatting panel, activate **Frames**.
3. Select the frames you want to move.
4. Move the frames in any of the following ways:
   - Press **Alt-Right Arrow** to move them to the right.
   - Press **Alt-Left Arrow** to move them to the left.
   - Press **Alt-Up Arrow** to move them upwards.
   - Press **Alt-Down Arrow** to move them downwards.

     TIP

     If you want to move items by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

   - Click and drag them in any direction.

RELATED LINKS

Changing the size/shape of frames

You can change the size and shape of individual frames on pages, including on master pages, after they have been inserted.

PROCEDURE

1. In Engrave mode, do one of the following:
   - Open the layout in which you want to change the size or shape of frames in the music area.
   - Open the master page in which you want to change the size or shape of frames in the master page editor.

2. In the Formatting panel, activate **Frames**.

3. Select the middle handle on an edge of the frame whose size or shape you want to change.

NOTE

You can only select a single handle on a single frame at a time.

4. Move the handle in any of the following ways:

- Press **Alt-Right Arrow** to move it to the right.
- Press **Alt-Left Arrow** to move it to the left.
- Press **Alt-Up Arrow** to move it upwards.
- Press **Alt-Down Arrow** to move it downwards.

TIP

If you want to move handles by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

- Click and drag the handle to the right/left or upwards/downwards.

NOTE

You can only move handles on the right/left edges of frames to the right/left. You can only move handles on the top/bottom edges of frames upwards/downwards. For example, if you want to make a frame wider, you can select the middle handle on the right edge of the frame and move it to the right.

5. Optional: Repeat steps 3 and 4 for any other edge of the frame you want to move to achieve the size and shape you want.

RELATED LINKS

Selecting frame handles

You can select an individual handle on a frame, and you can switch between having a handle selected and having the whole frame selected.

PROCEDURE

1. Select a frame handle in any of the following ways:

- Select any handle on the frame and press **Right Arrow**/**Left Arrow**/**Up Arrow**/**Down Arrow** to select other handles around the edge of the frame.
- Select the frame, press **Tab** to switch to having the handle in the top left corner selected, then press **Right Arrow**/**Left Arrow**/**Up Arrow**/**Down Arrow** to select other handles around the edge of the frame.
- Click a handle on the frame.

NOTE

You can only select a single handle on a single frame at a time.

2. Optional: Switch back to having the whole frame selected at any time by pressing **Tab**.

Copying frames

You can copy individual frames from one page to other pages in layouts, for example, if you want the same frame to appear on multiple pages at exactly the same position. You can also copy frames to the same page, for example, if you want to duplicate a frame on a page.

NOTE

This does not apply to frames on master pages. You can copy frames on master pages when customizing the master page.

PROCEDURE

1.   In the music area, open the layout in which you want to copy frames to other pages.

2.   In the Formatting panel, activate **Frames**.

3.   Select the frames you want to copy.

> TIP
>
> The frames can be on different pages.

4.   In the **Pages** section of the Pages panel, select the pages to which you want to copy the selected frames in any of the following ways:

- Click a single page.

- **Ctrl/Cmd**-click multiple pages.

5.   Right-click in the **Pages** section and choose **Copy Selected Frames to Selected Pages** from the context menu.

RESULT

All selected frames are coped to the selected pages at the same positions on the page. If you copied frames to their original page, they overlay their original exactly.

RELATED LINKS
Customizing master pages on page 236

Music frames

Music frames display the music in your project in a specified order. You can control which parts of the project are displayed using master page music frames and layout music frames.

Both types of music frames display the music and notations you have input into the project according to their music frame selectors, such as filtering only selected players or flows.

Master page music frames

Master page music frames exist only on master pages, meaning you can only input and edit master page music frames in the master page editor. They can only have master page frame chains assigned to them.

By default, the master pages in the master page sets provided by Dorico include master page music frames with a single master page frame chain assigned to them. This frame chain is set to display all players in all flows in each layout. These master pages are set to apply to all pages in all layouts in your project by default according to the layout type.

You can input multiple master page music frames on a single master page, and change their size and shape to whatever you want. If you want to connect separate master page music frames on the same page, you can assign the same frame chain to them.

Layout music frames

Layout music frames exist only on individual pages in layouts, meaning you can only input and edit layout music frames in individual layouts in the music area. Layout music frames can have both master page and layout frame chains assigned to them. However, assigning a master page frame chain to a layout frame does not affect the master page.

You can input multiple layout music frames on a single page, and change their size and shape to whatever you want. For example, layout music frames allow you to insert small musical excerpts from a different flow within footnotes or in an index.

If you want to connect separate layout music frames on the same page, you can assign the same frame chain to them.

IMPORTANT

Layout music frames are considered overrides to master pages. If you remove all overrides on layout pages, all your layout music frames are also removed.

Identifying master page music frames and layout music frames

To differentiate between master page music frames and layout music frames, you can check the following:

- On individual pages in layouts, master page music frames never allow you to change the selection of flows or players. Those music frame selectors are grayed out because they can only be edited on master pages in the master page editor.

- If you insert a layout music frame on a page, its **Frame Chain** selector by default shows a frame chain that starts with an "L". Master page music frames by default show a frame chain that starts with an "M".

RELATED LINKS

Music frame chains

A music frame chain is a collection of music frames that show the same selection of music in a predefined order, often in sequence. Music frame chains are automatically created when you create a music frame on a page, and can include any number of frames, including only a single music frame.

You can control the music shown in each music frame chain by player and by flow using music frame selectors.

In Dorico, there are different types of frame chains.

Master page frame chains

Master page frame chains can be created and fully edited only on master pages in the master page editor; you cannot change the flow and player filters for master page frame chains in individual layouts. Whenever you create a music frame on a master page, you automatically start a frame chain.

Frame chains that start with an "M", such as "MA", are master page frame chains. You can have multiple master page frame chains on each page, such as "MA" and "MH".

The default master pages contain a single frame chain that is set to display all flows and all players in the layout. Therefore, Dorico automatically creates enough pages and frames to display all flows in all the layouts that use those master pages.

NOTE

- To ensure that a score continues automatically on subsequent pages, the music frame must be created at least on the **First** and **Default** master pages.

- All frames in the same music frame chain must display the same flows and players. For example, you cannot have the first frame in a frame chain show just the violin but have the second frame show all players.

- Dorico shows flows in layouts as many times as you want, not only once. Therefore, if you want to change the formatting of some flows in a particular layout, such as showing them in layout frame chains instead of the master page frame chain, but do not want those flows to appear more than once, you must remove those flows from the **Filter by Flows** list on the master page frame chain. As this affects which flows are automatically displayed in all layouts that use the same master page, we recommend that in such cases you create a separate master page for the layout in which you want to change the formatting.

Layout frame chains

Layout frame chains can only be created and edited on pages in individual layouts. If you create a music frame and assign it to a layout frame chain in a layout, it is only displayed on that page in that layout and starts its own frame chain. If you want the music frame to be continued on subsequent pages, you must create music frames on all the pages in the layout on which you want the chain to appear and assign all of these frames to the same layout frame chain.

Frame chains that start with an "L", such as "LA", are layout frame chains. You can have multiple layout frame chains on each page, such as "LA" and "LB".

NOTE

- All frames in the same music frame chain must display the same flows and players. For example, you cannot have the first frame in a frame chain show just the violin but have the second frame show all players.

- Assigning flows to layout frame chains does not stop those flows also appearing in the master page frame chain, if the frame chain in the master page applied to the layout is set to include those flows; by default, master page frame chains are set to display all flows in the project.

RELATED LINKS
Music frames on page 247
Master pages on page 230
Master page editor on page 235
Layouts in Dorico on page 34
Music frame selectors on page 249

Music frame selectors

When **Frames** is activated in the Formatting panel, music frames show selectors that allow you to change the music displayed, for example, changing which flow is displayed in each frame chain.

Selectors on music frames allow you to control which flows and players are displayed in frame chains, and the order in which the selected music is shown in frames on the page. Frame chains can include any number of frames, including only a single music frame.

Every music frame shows the following selectors:
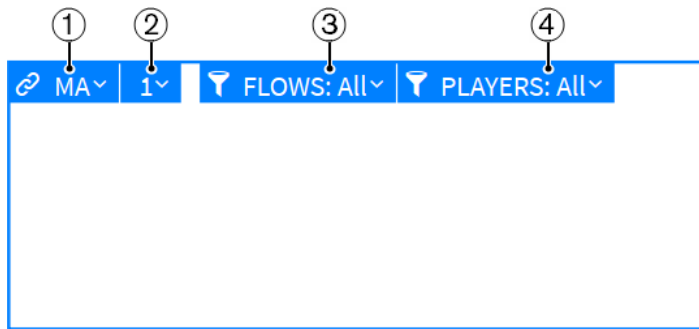
1   Frame Chain

Allows you to select which frame chain the music frame follows. Frames that start with an "M" have master page frame chains assigned to them; frames that start with an "L" have layout frame chains assigned to them.

The second letter allows you to identify different frame chains of the same type. It is automatically generated and reflects the order in which you created the frame chains, for example, "LA" is the first layout frame chain you create in the layout and "LB" is the second.

2   Frame Order

If you have two or more music frames in the same frame chain on the same page, you can use this option to specify in which order the music is flowed into the frames. For example, when the **Frame Order** is **1**, that frame is the first frame in the frame chain.

3   Filter by Flow

If you have several flows in your project, you can specify which flows you want to display in this frame chain. For example, you can show only a single flow, a selection of flows, or all flows.

4   Filter by Player

If you have several players in your project, you can specify which players you want to display in this frame chain. For example, you can show only a single player, multiple players, or all players.

NOTE

You can only edit the **Filter by Flow** and **Filter by Player** selectors of master page music frames on master pages in the master page editor.

If you click the frame, handles in each corner and in the middle of each side of the frame appear. You can use these handles to drag the frame into several directions and thus change the frame size. While you drag, numbers next to the handle indicate the horizontal and vertical values of the frame.

If you define constraints for the frame, you can also use the options in the **Frame** group of the Properties panel to specify the value of the frame.

RELATED LINKS
Assigning frame chains to music frames on page 251
Changing the order of music frames on page 252
Assigning flows to frame chains on page 252
Assigning players to frame chains on page 253
Music frames on page 247
Music frame chains on page 248
Frame constraints on page 261

Assigning frame chains to music frames

You can assign existing music frame chains to new music frames and change the frame chain of an existing music frame. This applies to both master page and layout music frames.

NOTE

New music frames on a page always start a new frame chain, regardless of their type.

PROCEDURE

1. Optional: If you want to assign music frame chains to frames on a master page, open the master page in the master page editor.

2. In the Formatting panel, activate **Frames**.

   Frames is automatically activated when you open the master page editor.

3. In the music frame whose frame chain you want to change, click **Frame Chain**.

   🔗 MA⌄

4. Select the frame chain that you want to assign to the music frame.

   NOTE

   - You cannot select layout frame chains for frames in the master page editor.

   - If you do not want to use any of the available frame chains, click **Unlink**.

5. Click outside of the selector.

   The selector closes.

RESULT

The selected frame chains is assigned to the music frame. All settings from the frame chain are applied to the frame, such as the players and flows displayed.

RELATED LINKS
Music frames on page 247
Music frame chains on page 248
Master page editor on page 235
Music frame selectors on page 249
Unlinking music frames from frame chains on page 251

Unlinking music frames from frame chains

You can unlink music frames from music frame chains, for example, if you want to change the music frame to a new frame chain without deleting it.

PROCEDURE

1. Optional: If you want to unlink frames from music frame chains on a master page, open the master page in the master page editor.

2. In the Formatting panel, activate **Frames**.

   Frames is automatically activated when you open the master page editor.

3. In the music frame you want to unlink, click **Frame Chain**.

   🔗 MA⌄

4. Click **Unlink**.

RESULT

The music frame is unlinked from its previous frame chain. A new frame chain is automatically created for the unlinked frame.

- Unlinking a layout music frame from a layout frame chain changes it to a new layout frame chain.
- Unlinking a layout music frame from a master page frame chain changes it to a new layout frame.
- Unlinking a master page music frame from a master page frame chain changes it to a new master page frame chain.

RELATED LINKS
Music frame chains on page 248
Music frame selectors on page 249
Assigning frame chains to music frames on page 251

Changing the order of music frames

If you have at least two music frames of the same type in the same frame chain on a page, you can change the order in which music is displayed across the frames.

PROCEDURE

1. Optional: If you want to change the order of music frames on a master page, open the master page in the master page editor.
2. In the Formatting panel, activate **Frames**.
   Frames is automatically activated when you open the master page editor.
3. In one of the music frames whose order you want to change, click **Frame Order**.

   `1⌄`

4. Select the ordinal number for this frame from the **Frame Order** menu.
5. Click outside of the selector.
   The selector closes.

RESULT

The position of the selected frame in the frame chain order is changed by exchanging its order number with the frame previously assigned that number. For example, changing the number of the second frame in a frame chain to **1** causes the frame originally number **1** to become number **2** in the frame chain order.

RELATED LINKS
Music frame chains on page 248
Music frame selectors on page 249

Assigning flows to frame chains
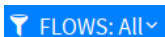
You can change which flows are shown in each frame chain, for example, if you want to exclude some flows from the master page frame chain because you want to display those flows in layout frame chains instead.

NOTE

- You can assign flows to both master page frame chains and layout frame chains. However, you can only change the flows assigned to layout frame chains in individual layouts, and you can only change the flows assigned to master page frame chains in the master page editor.

- Changing the assigned flows affects all frames in the frame chain.

PROCEDURE

1. Optional: If you want to change the flows assigned to music frame chains on a master page, open the master page in the master page editor.

2. In the Formatting panel, activate **Frames**.

   Frames is automatically activated when you open the master page editor.

3. In the music frame whose assigned flows you want to change, click **Flows**.

   ⛛ FLOWS: All⌄

4. Select the flows you want to be displayed in the frame chain from the **Filter by Flow** menu.

5. Click outside of the selector.

   The selector closes.

RESULT

The music frame shows the selected flows. If you changed the flows assigned to a master page music frame, the number of pages in the layouts to which the master page is applied automatically updates. For example, if you assigned an extra flow to the master page frame chain, enough extra pages and frames to display that flow are added to the corresponding layouts.

RELATED LINKS
Music frames on page 247
Music frame chains on page 248
Music frame selectors on page 249

Assigning players to frame chains

You can change which players are included in different frame chains, for example, if you are writing a piano duet and only want to show one piano on left pages and the other piano on right pages.

NOTE

- You can assign players to both master page frame chains and layout frame chains. However, you can only change the players assigned to layout frame chains in individual layouts, and you can only change the players assigned to master page frame chains in the master page editor.

- Changing the assigned players affects all frames in the frame chain.

PROCEDURE

1. Optional: If you want to change the players assigned to music frame chains on a master page, open the master page in the master page editor.

2. In the Formatting panel, activate **Frames**.

   Frames is automatically activated when you open the master page editor.

3. In the master page music frame, click **Players**.

   ⛛ PLAYERS: All⌄

4. Select the players you want to be displayed in the music frame from the **Filter by Player** menu.

5. Click outside of the selector.

   The selector closes.

RESULT

Which players are displayed in the frame chain is changed.

NOTE

The staff size is not changed automatically, meaning staves can overlap in small frames in the frame chain.

RELATED LINKS
Music frames on page 247
Music frame chains on page 248
Music frame selectors on page 249

Text frames

Text frames allow you to add text, including tokens, to your project, independently of rhythmic positions in the score. If you add a text frame, the formatting of your layout pages is changed.
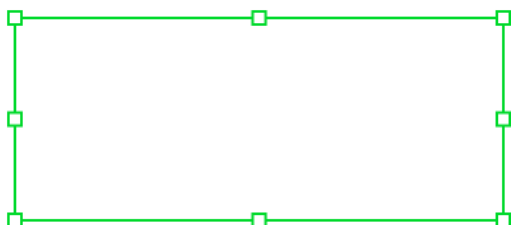
Text frame

RELATED LINKS
Inputting frames on page 244
Entering text in text frames on page 258
Text formatting on page 274
Changing the default horizontal alignment of different text styles project-wide on page 515
Changing the horizontal alignment of text in text frames on page 259

Text tokens

Text tokens, also known as "wildcards" or "text codes", 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.

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 the project-wide information on the **Project** page in the **Project Info** dialog, or to individual **Flow** pages in the **Project Info** dialog. Tokens can also refer to the current time and date and 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.

- Because flow tokens refer to the first flow on the page, if you want to use tokens that refer to flow information on pages that contain no music, such as title pages, you must specify the flow number. For example, if you use **{@flowtitle@}** on a title page containing no music frames, the token does not display any information, but **{@flow1title@}** displays the title of the first flow in your project.

Similarly, if there are multiple flows on a page, default flow tokens only refer to the first flow. For example, if you have two flows with two titles on the same page, the second title must use the token **{@flow2title@}**.

The following tokens are available in Dorico:

General tokens

Description	Token
Page number	{@page@}
Player list	{@playerlist@}
Player names	{@playernames@}
Layout name	{@layoutname@}

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@}
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@}

> TIP
>
> You can also specify the flow to which you want the token to refer. For example, **{@flow2title@}**.

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@}
Abbreviated weekday name (locale dependent)	Fri	{@projectdatedayshort@}
Day of month as decimal number, range 1-31	24	{@projectdatedaynum@}
ISO8601 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, hour in 12-hour clock range	11:10	{@projectdatetimeHHMMSS@}
Hour in 24-hour clock range	23	{@projectdatetimehour24@}
Hour in 12-hour clock range	11	{@projectdatetimehour12@}

Time/Date description	Time/Date example	Token
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@}
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@}
ISO8601 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, hour in 12-hour clock range	11:10	{@datetimeHHMMSS@}
Hour in 24-hour clock range	23	{@datetimehour24@}

Time/Date description	Time/Date example	Token
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

Entering text in text frames

You can enter text in text frames. You can format the text and insert separate paragraphs and line breaks.

PROCEDURE

1. Open the text frame into which you want to enter text in any of the following ways:

   - Activate **Frames** in the Formatting panel, select the text frame, and press **Return**.
   - Double-click within the text frame.

2. Enter the text you want.

3. Optional: Press **Return** to insert a new paragraph.

4. Optional: Press **Shift**-**Return** to insert a line break.

5. Optional: Format the text using the text editor options.

6. Close the text editor in any of the following ways:

   - Press **Esc** or **Ctrl/Cmd**-**Return**.
   - Click outside of the text editor.

RESULT

Text is entered into the text frame.

If you insert a new paragraph or line, the cursor jumps to the beginning of the new paragraph or line.

RELATED LINKS

Moving text manually

In Engrave mode, you can manually move text that you added with the text editor in Write mode.

NOTE

This does not apply to text in text frames.

PROCEDURE

1. Select the texts that you want to move.

2. Move the texts in any of the following ways:

- Press **Alt-Right Arrow** to move them to the right.

- Press **Alt-Left Arrow** to move them to the left.

- Press **Alt-Up Arrow** to move them upwards.

- Press **Alt-Down Arrow** to move them downwards.

   TIP

   If you want to move items by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

- Click and drag them in any direction.

RESULT

The selected texts are moved to new positions.

TIP

Offset in the **Common** group of the Properties panel is activated automatically when you move text.

- **Offset X** moves text horizontally.

- **Offset Y** moves text vertically.

You can also use this property to move text by changing the values in the value fields.

Deactivating the property resets the selected items to their default position.

RELATED LINKS
Text editor options in Engrave mode on page 281
Moving frames on page 245

Changing the horizontal alignment of text in text frames

You can change the horizontal alignment of any text style in text frames, independently of the paragraph style for that text.

If you change the alignment of text in text frames on master pages, the horizontal alignment of text is changed on all pages that use those master page formats.

NOTE

Changes to text in text frames on master pages cannot be reset.

If you change the alignment of text in text frames on individual pages, this change is independent of the paragraph style for that text and also independent of the master page format. You can later remove any overrides made on individual pages and revert them to the master page format.

NOTE

Removing overrides removes all changes made to individual pages, not just changes to the alignment of text in text frames.

PROCEDURE

1. Optional: If you want to change the horizontal alignment of text on a master page, open the master page editor.

2. Open the text editor for text frame in which you want to change the horizontal alignment of text in any of the following ways:

- Activate **Frames** in the Formatting panel, select the text frame, and press **Return**.
- Double-click within the text frame.

3. Select the text in the text frame whose horizontal alignment you want to change.

TIP

You can apply different paragraph styles to separate paragraphs in the same text frame.

4. Choose one of the following horizontal alignments in the text editor:

- **Align Left**
- **Align Center**
- **Align Right**
- **Justify**

5. Close the text editor in any of the following ways:

- Press **Esc** or **Ctrl/Cmd-Return**.
- Click outside of the text editor.

RESULT

The horizontal alignment of the selected text is changed.

NOTE

You can change the horizontal alignment of text styles project-wide in the **Paragraph Styles** dialog.

RELATED LINKS

Resetting changes to text in text frames on individual pages

If you override the paragraph style of text within text frames on individual pages, any changes you later make to the paragraph style are not applied to the overridden text.

You can reset the changes you made to revert individual pages back to the master page format. However, this removes all changes made to those pages.

NOTE

You cannot reset changes made to text in text frames on master pages.

RELATED LINKS

Graphics frames

Graphics frames allow you to load images or illustrations into your score in a variety of formats.

You can load graphic files of the following formats:

- `.jpg` or `.jpeg`
- `.png`

- .svg
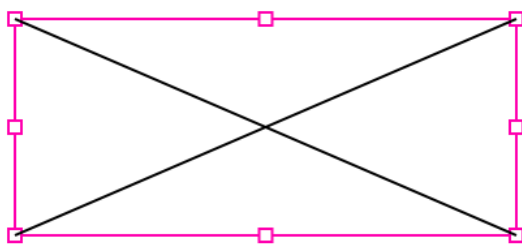
Graphics frame

Loading images into graphics frames

You can load images from your computer or server into your score.

PREREQUISITE

You have added a graphics frame, either to a master page or an individual layout.

PROCEDURE

1. Double-click in the graphics frame.

   The File Explorer/macOS Finder dialog opens.

2. In the File Explorer/macOS Finder dialog, locate and select the file you want to load into the graphics frame.

3. Click **Open**.

RESULT

The selected image is loaded into the frame.

Frame constraints

In Dorico, constraints define the relationship between each of the four sides of a frame and the corresponding page margins.

Frame constraints lock each side of frames to the corresponding page margin, meaning you can change the page size, or the area that is defined by the page margin, while keeping the frame in proportion. For example, a music frame that fills the entire height and width of a page has constraints on all four sides. All sides have an inset of zero, which means that the edges of the frames are in line with the page margins. If you change the size of the page, the frame size changes accordingly so that it always fills the page, whatever the current page size.

NOTE

Page size and margins are set for each layout in **Setup** > **Layout Options**.

If you remove a constraint from one side of a frame, that unlocks that side of the frame from the page margin, meaning you can determine a fixed width/height that prevents that side of the frame from adjusting, even if the page size changes.

EXAMPLE

If you have set a frame for a header, you might want the left and right sides to be locked to the left and right margins of the page. For the top side of the frame, you might want to lock it to the top margin, but want to keep the height of the header fixed. In this case, you can remove the lock to the bottom margin and specify a fixed height by moving the side of the frame, or by entering a value in one of the value fields in the Properties panel.

In the **Frames** section of the formatting panel, you can define the constraints for all types of frames that are available in Dorico. All new frames have active constraints on all sides by default. You can unlock two sides of a frame to specify a fixed width or height. For example, if you remove the lock to the top margin, you can also remove the lock to the right/left margin.

RELATED LINKS
Defining frame constraints on page 262
Layout Options dialog on page 62

Defining frame constraints

You can determine on which sides of frames you want to apply constraints.

PROCEDURE

1. Optional: If you want to define frame constraints on a master page, open the master page in the master page editor.
2. In the Formatting panel, activate **Frames**.
3. In the music area, select the frame for which you want to edit the constraints.
4. In the **Frames** section of the Formatting panel, click the constraint that corresponds to the side of the frame that you want to change.

    Locked constraint   **Unlocked constraint**

5. Change the constraint in any of the following ways:

    - Move the unlocked side to the required position.
    - In the **Frames** group of the Properties panel, enter a fixed value for **Height** or **Width**.

RELATED LINKS
Frame constraints on page 261
Formatting panel on page 223

Page layouts

In Dorico, the layout of pages is determined by their margins, the master page applied to them, any casting off values applied to them, system and frame breaks, and frame padding.

Casting off, meaning 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 allow you to adjust layouts on a local level, by determining where individual system and frame breaks occur.

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 in millimeters on each edge of each page, and choose one of the following styles of 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 inside/outside edges of pages.

Music frames in the default master pages have padding that ensures 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 padding of all music frames in each layout in **Layout Options**, and change the padding of individual music frames in Engrave mode using properties in the Properties panel.

Frame constraints are used to lock the edges of frames to edges of pages. This allows a single master page to be applied to layouts with different paper sizes and remain consistently proportioned.

RELATED LINKS
Frame constraints on page 261
Master pages on page 230
Master page editor on page 235
Casting off on page 268
Changing page margins on page 263
Changing the padding in music frames individually on page 266
Layouts on page 91
Flows on page 88
Players on page 65

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. In Setup mode, choose **Setup** > **Layout Options**.

   The **Layout Options** dialog opens.

2. In the **Layouts** list, select the layouts in which you want to change the page margins in one of the following ways:

   - Click **Select All**.

   - Click **Select All Full Score Layouts**.

   - Click **Select All Part Layouts**.

   - Click **Select All Custom Score Layouts**.

   - **Ctrl/Cmd**-click individual layouts.

   - **Shift**-click adjacent layouts.

   By default, the layout currently open in the music area is selected when you open the dialog.

3. Select **Page Setup** from the **Category** menu.

4. In the **Page Margins** section, choose one of the following options for **Page margins**:

   - **Same**

- **Different**
- **Mirrored**

5. Optional: Change the margin values in any of the following ways:

   - Enter values into the value fields.
   - Click the arrows beside the value fields.

6. Click **Apply**, then **Close**.

RESULT

The page margins in the selected layouts are changed. Any frames in the selected layouts with fixed constraints are automatically moved or resized as required.

RELATED LINKS
Frame constraints on page 261

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. In Setup mode, choose **Setup** > **Layout Options**.
   The **Layout Options** dialog opens.

2. In the **Layouts** list, select the layouts in which you want to change the page size and/or orientation in one of the following ways:

   - Click **Select All**.
   - Click **Select All Full Score Layouts**.
   - Click **Select All Part Layouts**.
   - Click **Select All Custom Score Layouts**.
   - Ctrl/Cmd-click individual layouts.
   - Shift-click adjacent layouts.

   By default, the layout currently open in the music area is selected when you open the dialog.

3. Select **Page Setup** from the **Category** menu.

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 in any of the following ways:

   - Enter values into the value fields.
   - Click the arrows beside 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 attempts to preserve your original print options.

Allowing multiple flows on single pages

In part layouts, new flows start on a new page by default, even if the previous flow does not fill its last page. You can allow new flows to be shown on the same page as previous flows if there is space, for example, to reduce the number of pages requires for parts in works with multiple movements.

PROCEDURE

1.   In Setup mode, choose **Setup** > **Layout Options**.

     The **Layout Options** dialog opens.

2.   In the **Layouts** list, select the layouts in which you want to allow multiple flows to be shown on each page in one of the following ways:

     - Click **Select All**.

     - Click **Select All Full Score Layouts**.

     - Click **Select All Part Layouts**.

     - Click **Select All Custom Score Layouts**.

     - **Ctrl/Cmd**-click individual layouts.

     - **Shift**-click adjacent layouts.

     By default, the layout currently open in the music area is selected when you open the dialog.

3.   Select **Page Setup** from the **Category** menu.

4.   In the **Flows** section, choose **Allow on existing page** for **New flows**.

5.   Click **Apply**, then **Close**.

RESULT

Flows in the selected layouts continue immediately after each other, including within the same music frame if there is sufficient space.

NOTE

Music frames are not automatically split to divide flows into separate music frames. You must insert frame breaks manually to divide flows into separate music frames. You must also manually insert text frames with tokens for the title of each flow, such as {@flow2title@}.

RELATED LINKS

Changing the music frame margins in layouts

You can change the margins in all music frames in individual layouts, for example, if you want more padding at the top of music frames in part layouts containing lots of notes above the staff.

PROCEDURE

1. In Setup mode, choose **Setup** > **Layout Options**.

   The **Layout Options** dialog opens.

2. In the **Layouts** list, select the layouts in which you want to change the music frame margins in one of the following ways:

   - Click **Select All**.
   - Click **Select All Full Score Layouts**.
   - Click **Select All Part Layouts**.
   - Click **Select All Custom Score Layouts**.
   - Ctrl/Cmd-click individual layouts.
   - Shift-click adjacent layouts.

   By default, the layout currently open in the music area is selected when you open the dialog.

3. Select **Page Setup** from the **Category** menu.

4. In the **Music Frame Margins** section, change the values for **Top** and/or **Bottom** in any of the following ways:

   - Enter values into the value fields.
   - Click the arrows beside the value fields.

5. Click **Apply**, then **Close**.

RESULT

The margins within all music frames in the selected layouts is changed.

RELATED LINKS
Page layouts on page 262

Changing the padding in music frames individually

You can change the padding at the top/bottom of individual music frames, independently of your setting for music frame margins for the layout.

PROCEDURE

1. In Engrave mode, activate **Frames** in the Formatting panel.

2. Select the music frames whose padding you want to change.

3. In the Properties panel, activate the following properties, individually or together, in the **Music** group:

   - **Top padding**
   - **Bottom padding**

4. Change the values in the value fields in any of the following ways:

   - Enter values into the value fields.
   - Click the arrows beside the value fields.

For example, entering 0 for **Top padding** aligns the top staff line of the top staff in the frame with the top of the music frame.

RESULT

The padding at the top/bottom of the selected music frames is changed. This only applies to the layout currently open in the music area.

Deactivating the properties returns the selected music frames to your settings for music frame margins for the layout.

RELATED LINKS
Changing the music frame margins in layouts on page 266

Changing the justification of final systems

By default in Dorico, the final systems in flows only justify to the full width of the page when they are more than half full. You can change this setting in each layout independently.

PROCEDURE

1.   In Setup mode, choose **Setup** > **Layout Options**.
     The **Layout Options** dialog opens.

2.   In the **Layouts** list, select the layouts in which you want to change the justification of the final systems in flows in one of the following ways:

     ●   Click **Select All**.

     ●   Click **Select All Full Score Layouts**.

     ●   Click **Select All Part Layouts**.

     ●   Click **Select All Custom Score Layouts**.

     ●   **Ctrl/Cmd**-click individual layouts.

     ●   **Shift**-click adjacent layouts.

     By default, the layout currently open in the music area is selected when you open the dialog.

3.   Select **Note Spacing** from the **Category** menu.

4.   Optional: If you want the final systems in flows to justify fully always, deactivate **Only justify final system in flow when more than [X] % full**.

5.   Optional: 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 [X] % full** in any of the following ways:

     ●   Enter a value into the value field.

     ●   Click the arrows beside the value field.

6.   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 independently.

RELATED LINKS
Changing the start/end position of systems on page 293

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. In Setup mode, choose **Setup** > **Layout Options**.
    The **Layout Options** dialog opens.

2. In the **Layouts** list, select the layouts in which you want to hide/show empty staves in one of the following ways:

    - Click **Select All**.
    - Click **Select All Full Score Layouts**.
    - Click **Select All Part Layouts**.
    - Click **Select All Custom Score Layouts**.
    - **Ctrl/Cmd**-click individual layouts.
    - **Shift**-click adjacent layouts.

    By default, the layout currently open in the music area is selected when you open the dialog.

3. Select **Vertical Spacing** from the **Category** menu.

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 beside 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.

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, you can fix both the number of bars per system and the number of systems per music frame for each layout independently.

RELATED LINKS

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. In Setup mode, choose **Setup** > **Layout Options**.

The **Layout Options** dialog opens.

2. In the **Layouts** list, select the layouts in which you want to fix the number of bars per system in one of the following ways:

- Click **Select All**.

- Click **Select All Full Score Layouts**.

- Click **Select All Part Layouts**.

- Click **Select All Custom Score Layouts**.

- **Ctrl/Cmd**-click individual layouts.

- **Shift**-click adjacent layouts.

By default, the layout currently open in the music area is selected when you open the dialog.

3. Select **Staves and Systems** from the **Category** menu.

4. In the **Casting Off** section, activate **Fixed number of bars per system**.

5. Change the number of bars you want in each system in any of the following ways:

- Enter a value into the value field.

- Click the arrows beside the value field.

6. Click **Apply**, then **Close**.

RESULT

The number of bars automatically contained in each system in the selected layouts is changed.

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. In Setup mode, choose **Setup** > **Layout Options**.

The **Layout Options** dialog opens.

2. In the **Layouts** list, select the layouts in which you want to fix the number of systems per frame in one of the following ways:

- Click **Select All**.

- Click **Select All Full Score Layouts**.

- Click **Select All Part Layouts**.

- Click **Select All Custom Score Layouts**.

- **Ctrl/Cmd**-click individual layouts.

- **Shift**-click adjacent layouts.

By default, the layout currently open in the music area is selected when you open the dialog.

3. Select **Staves and Systems** from the **Category** menu.

4.   In the **Casting Off** section, activate **Fixed number of systems per page**.

5.   Change the number of systems you want in each frame in any of the following ways:

- Enter a value into the value field.

- Click the arrows beside 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, 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.

NOTE

Frame breaks at the start of frames that were created using **Make into Frame** have **Wait for next frame break** activated in the **Format** group of the Properties panel by default. When this property is activated, Dorico creates a frame containing all material between that frame break and the next frame break. If you later delete subsequent frame breaks, this creates very full frames with tightly spaced, or overlapping, systems. For example, if you delete all subsequent frame breaks, all music until the end of the flow is forced into a single frame.

TIP

You can also control the content of music frames by fixing the number of systems per music frame in each layout.

RELATED LINKS

Inserting frame breaks

You can insert frame breaks that allow you to create page turns in particular places in your music.

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 the notes are moved to the start of the next music frame.

2.   Insert a frame break in any of the following ways:

- Press **Shift-F**.

- Choose **Engrave** > **Format Music Frames** > **Frame Break**.

- Click **Insert Frame Break** in the **Format Music Frames** section of the Formatting panel.

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.

RELATED LINKS

Making selections into frames

You can make frames that contain all musical material between two selected rhythmic positions.

PROCEDURE

1. Select an item at the rhythmic position that you want to be the start of the frame.

   NOTE

   We recommend that you select noteheads or barlines. Selecting other items, such as slurs, can cause frame breaks to be inserted earlier/later than you might have intended.

2. **Ctrl/Cmd**-click one of the following:

   - A notehead that you want to be at the end of the frame
   - An item that you want to be at the start of the next frame

3. In the Formatting panel, click **Make into Frame** in the **Format Music Frames** section.

RESULT

A fixed frame is created by inserting frame breaks at the start/end of your selection. The frame contains all musical material between the two selected items.

- If you selected items, such as barlines or slurs, the beginning your first selected item is positioned at the start of the frame and the end of your last selected item is positioned at the start of the next frame.
- If you selected noteheads, the last selected notehead is also included in the frame, rather than being positioned at the start of the next frame.
- If you selected ties, all musical material between the first and last notes tie chains is included in the frame, regardless of where in the tie chains you made selections.

NOTE

The frame break inserted at the start of the selection has **Wait for next frame break** activated in the **Format** group of the Properties panel by default. Because this property tells Dorico to include all music in the frame until the next frame break, if you later delete subsequent frame breaks, this can create very full frames with tightly spaced, or overlapping, systems.

Deactivating **Wait for next frame break** allows Dorico to cast off subsequent music as normal.

Hiding/Showing frame break signposts

You can hide/show frame break signposts at any time.

PROCEDURE

● Choose **View** > **Signposts** > **Frame Breaks**.

RESULT

Frame break signposts are shown when a tick appears beside **Frame Breaks** in this menu, and hidden when no tick appears beside **Frame Breaks**.

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. Delete the frame breaks in any of the following ways:

   ● Press **Backspace** or **Delete**.

   ● Choose **Edit** > **Delete**. You can also choose this option from the context menu.

RELATED LINKS

System breaks

System breaks are where musical material must be split across multiple systems or pages in order to fit on the required paper. Dorico 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.

NOTE

System breaks at the start of systems that were created using **Make into System** have **Wait for next system break** activated in the **Format** group of the Properties panel by default. When this property is activated, Dorico creates a system containing all material between that system break and the next system break or the end of the flow, whichever comes first. If you later delete subsequent system breaks, this creates very full, tightly spaced systems. For example, if you delete all subsequent system breaks, all music until the end of the flow is forced into a single system.

TIP

You can also control the content of systems by fixing the number of bars per system in each layout.

RELATED LINKS

Inserting system breaks

You can insert system breaks at any rhythmic position.

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. Insert a system break in any of the following ways:

    *   Press **Shift-S**.

    *   Choose **Engrave** > **Format Systems** > **System Break**.

    *   Click **Insert System Break** in the **Format Systems** section of the Formatting panel.

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.

RELATED LINKS
System breaks on page 272

Making selections into systems

You can make systems that contain all musical material between two selected rhythmic positions.

PROCEDURE

1. Select an item at the rhythmic position that you want to be the start of the system.

    NOTE

    We recommend that you select noteheads or barlines. Selecting other items, such as slurs, can cause system breaks to be inserted earlier/later than you might have intended.

2. **Ctrl/Cmd**-click one of the following:

    *   A notehead that you want to be at the end of the system

    *   An item that you want to be at the start of the next system

3. In the Formatting panel, click **Make into System** in the **Format Systems** section.

RESULT

A fixed system is created by inserting system breaks at the start/end of your selection. The system contains all musical material between the two selected items.

*   If you selected items, such as barlines or slurs, the start of your first selected item is positioned at the start of the system and the end of your last selected item is positioned at the start of the next system.

*   If you selected noteheads, the last selected notehead is also included in the system, rather than being positioned at the start of the next system.

*   If you selected ties, all musical material between the first and last notes tie chains is included in the system, regardless of where in the tie chains you made selections.

NOTE

The system break inserted at the start of the selection has **Wait for next system break** activated in the **Format** group of the Properties panel by default. Because this property tells Dorico to include all music in the system until the next system break or the end of the flow, if you later delete subsequent system breaks, this can create very full, tightly spaced systems.

Deactivating **Wait for next system break** allows Dorico to cast off subsequent music as normal.

Hiding/Showing system break signposts

You can hide/show system break signposts at any time.

PROCEDURE

● Choose **View** > **Signposts** > **System Breaks**.

RESULT

System break signposts are shown when a tick appears beside **System Breaks** in this menu, and hidden when no tick appears beside **System Breaks**.

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. Delete the system breaks in any of the following ways:

● Press **Backspace** or **Delete**.

● Choose **Edit** > **Delete**. You can also choose this option from the context menu.

RELATED LINKS

Text formatting

Dorico combines different settings for the appearance of text, meaning that you can format fonts and texts in different places depending on their function.

For example, you can change the font family used for all text in your project in the **Edit Font Styles** dialog, and then make specific changes for when that font is used for titles in the **Paragraph Styles** dialog.

Paragraph styles apply to whole text frames or all text within a single text object. Character styles apply to individual selections, meaning you can apply different character styles to each word within the same text frame.

Font styles apply to items that use text but are not text frames or text objects, such as tempo marks and dynamics.

RELATED LINKS

Edit Font Styles dialog

In the **Edit Font Styles** dialog, you can change certain aspects of fonts used for items that you cannot edit using the text editor, such as changing the font size of bar numbers.

● You can open the **Edit Font Styles** dialog in Engrave mode by choosing **Engrave** > **Font Styles**.

The **Edit Font Styles** dialog contains fonts that are used in Dorico that you cannot edit directly in the music area, unlike text in text frames, which you can edit using the text editor.
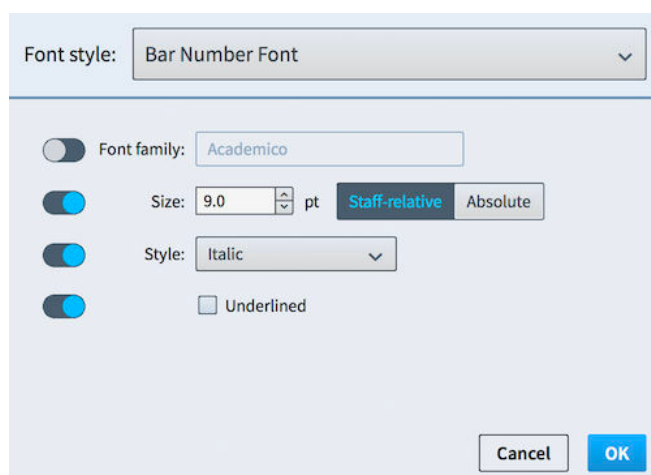
Edit Font Styles dialog

Font style

Allows you to select different font styles in order to change aspects of the font.

Font family

Sets the overall font style.

Size

Sets the size of the font.

Staff-relative/Absolute

Allows you to choose whether the size of the font changes according to the staff size of the layout, or whether it is always the set size.

Style

Sets the appearance of the font from the following options:

● **Regular**

● **Italic**

● **Bold**

● **Bold Italic**

Underlined

Fonts appear underlined when **Underlined** and the corresponding checkbox are both activated.

NOTE

● These options must be activated before you can change them.

- Changes made to font styles apply project-wide, including in part layouts.

Music Fonts dialog

In the **Music Fonts** dialog, you can change the font used for notations and glyphs project-wide. However, any font you use for notations and glyphs must be SMuFL-compliant.

- You can open the **Music Fonts** dialog in Engrave mode by choosing **Engrave** > **Music Fonts**.
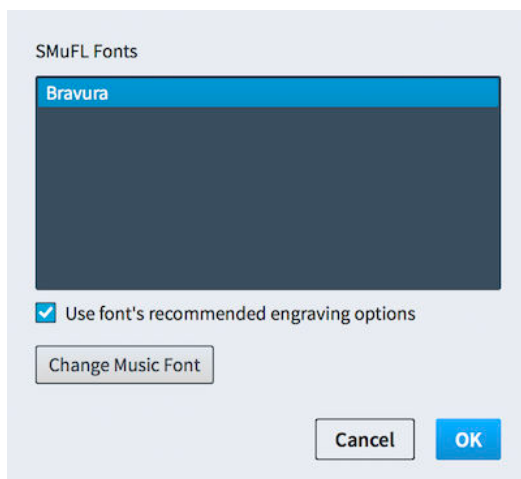
Music Fonts dialog

The dialog contains all available SMuFL fonts you have installed on your computer that have the appropriate metadata for Dorico to recognize them.

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. You can change the fonts used for these items individually in the **Edit Font Styles** dialog.

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.

RELATED LINKS
Edit Font Styles dialog on page 275

Paragraph Styles dialog

In the **Paragraph Styles** dialog, you can change paragraph styles for text and create new styles. You can later use different paragraph styles in different places in your project by choosing them in the text editor.

For example, you can customize the paragraph style for layout names and then apply your layout name paragraph style to every text frame in which you show layout names. This allows you to keep the presentation of different types consistent across your project.

- You can open the **Paragraph Styles** dialog in Engrave mode by choosing **Engrave** > **Paragraph Styles**.
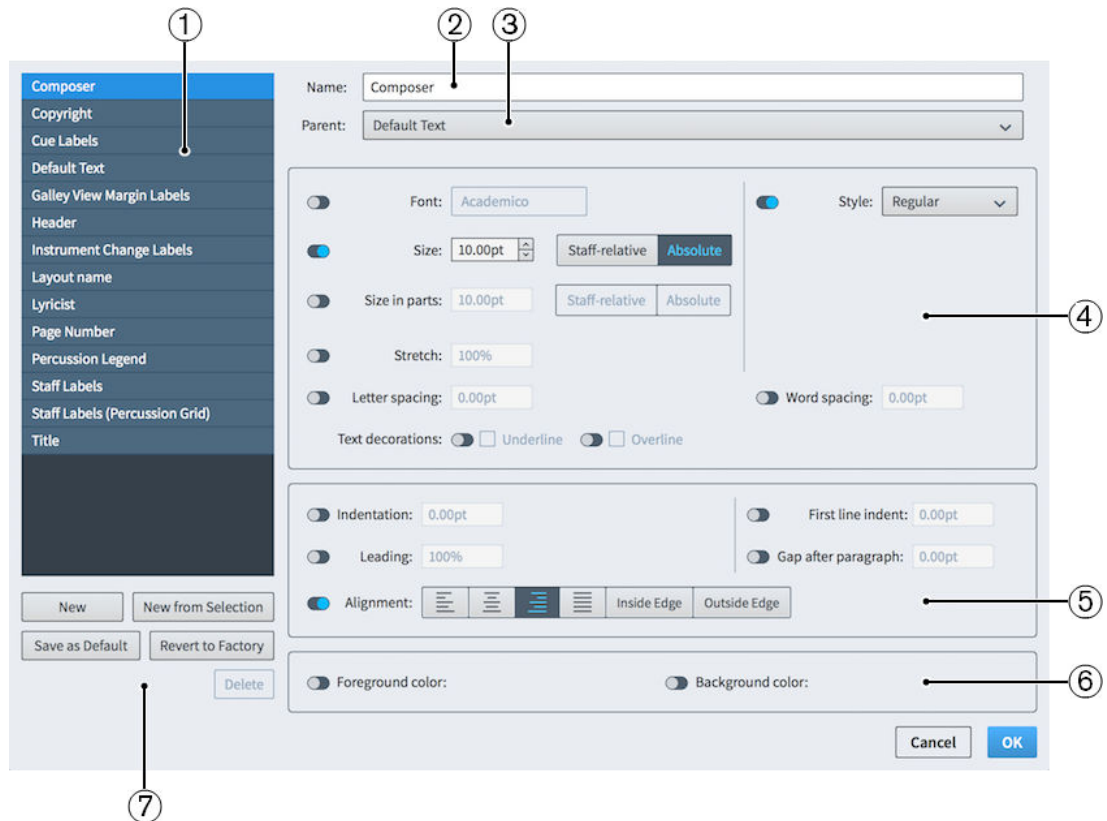
Paragraph Styles dialog

The **Paragraph Styles** dialog contains the following sections and options:

1   List of paragraph styles currently available.

2   **Name**

Allows you to enter a name for new paragraph styles or edit the name of existing paragraph styles.

3   **Parent**

Allows you to choose a parent paragraph style from which the selected paragraph style inherits settings.

4   Font appearance options

Allow you to change parameters of the appearance of the paragraph style font, such as changing the font, making the font bold, changing the size of the font, and changing the letter or word spacing. You can also make the font in paragraph styles appear underlined or overlined.

5   Paragraph layout options

Allow you to change the layout of the paragraph style, such as indenting the first line in each paragraph and changing the alignment of text.

6   Color options

Allow you to change the foreground and background colors of the paragraph style.

7   Controls

Allow you to make changes to the collection of paragraph styles. The following controls are available:

● **New**

Allows you to create a new paragraph style with default values.

● **New from Selection**

Creates a new style based on the selected one. Initially no values are overridden but you can change options for your new style.

- **Save as Default**

  Copies the selected style to your library so that it is available in other projects.

- **Revert to Factory**

  Allows you to undo your local changes to predefined paragraph styles and revert the style to its original settings.

- **Delete**

  Deletes the selected style.

  NOTE

  You cannot delete predefined paragraph styles or any paragraph style that is currently used in your project.

Creating paragraph styles

You can create new paragraph styles that you can use in your project, for example, to format text consistently in multiple text frames.

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Paragraph Styles**.

   The **Paragraph Styles** dialog opens.

2. At the bottom of the paragraph style list, click **New**.

3. Enter a name for the style in the **Name** field.

4. Optional: Select one of the available styles from the **Parent** menu.

   If you select a parent style, an activated slider is shown beside all the options that the new style can inherit from the parent style. You can deactivate these if you want.

5. Change the options you want for the new style.

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

Creating paragraph styles based on other styles

You can create paragraph styles that are based on other styles.

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Paragraph Styles**.

   The **Paragraph Styles** dialog opens.

2. In the paragraph style list, select the style on which you want to base a new paragraph style.

3. Click **New From Selection**.

4. Enter a name for the new style in the **Name** field.

5. Optional: Select a different style from the **Parent** menu.

   All options from parent style are set automatically for the new style. All options show deactivated sliders, which means that they are inherited from the parent style.

6. Activate each option that you want to override and make your changes.

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

Deleting paragraph styles

You can delete paragraph styles you have created. However, you cannot delete any of the default paragraph styles.

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Paragraph Styles**.
The **Paragraph Styles** dialog opens.

2. In the paragraph style list, select the style that you want to delete.

NOTE

You cannot delete any of the default paragraph styles.

3. Click **Delete**.

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

Character Styles dialog

In the **Character Styles** dialog, you can change character styles and create new styles. You can later apply character styles to individual letters or words in different places in your project by choosing them in the text editor.

For example, you can create a custom character style with wide letter spacing for specific words and then apply that character style to selected words that you want to have wider letter spacing. Unlike paragraph styles, character styles do not have to apply to whole text frames or text objects.

● You can open the **Character Styles** dialog in Engrave mode by choosing **Engrave** > **Character Styles**.
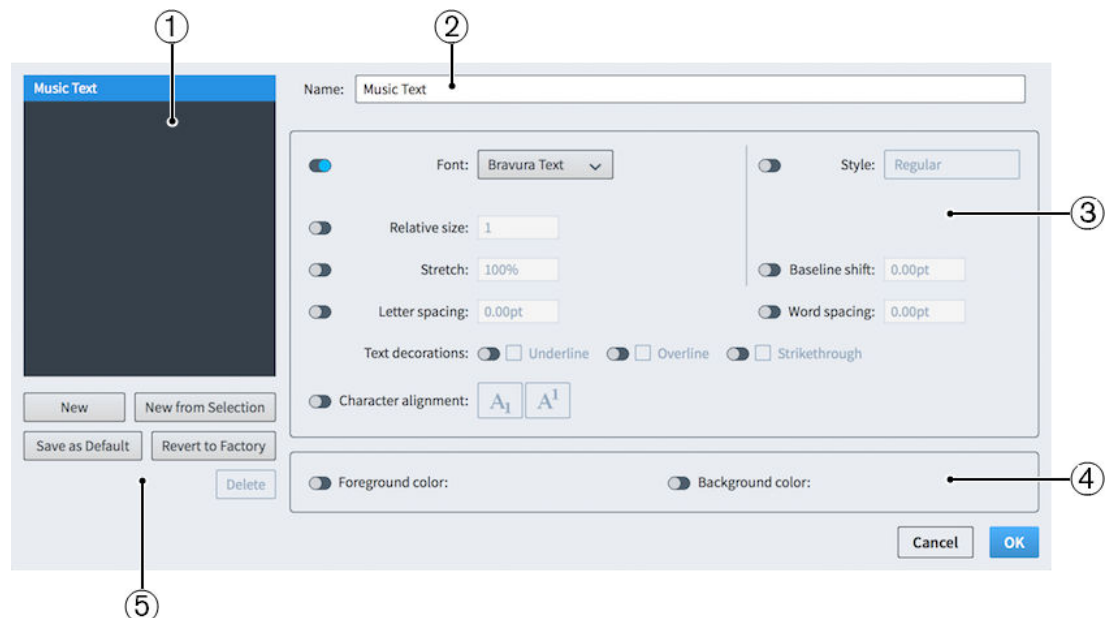
Character Styles dialog

The **Paragraph Styles** dialog contains the following sections and options:

1 List of character styles currently available.

2 **Name**

Allows you to enter a name for new character styles or edit the name of existing paragraph styles.

3 Character style options

Allow you to change parameters of the character style, such as changing the font, making the font bold, changing the size of the font, and changing the letter or word spacing. You can also make the font in paragraph styles appear underlined or overlined, and change the vertical alignment of characters.

4 Color options

Allow you to change the foreground and background colors of the character style.

5 Controls

Allow you to make changes to the collection of character styles. The following controls are available:

- **New**

  Allows you to create a new character style with default values.

- **New from Selection**

  Creates a new style based on the selected one. Initially no values are overridden but you can change options for your new style.

- **Save as Default**

  Copies the selected style to your library so that it is available in other projects.

- **Revert to Factory**

  Allows you to undo your local changes to predefined character styles and revert the style to its original settings.

- **Delete**

  Deletes the selected style.

  NOTE

  You cannot delete predefined character styles or any character style that is currently used in your project.

Creating character styles

You can create new character styles.

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Character Styles**.
The **Character Styles** dialog opens.

2. Create a new character style in the **Character Styles** dialog in any of the following ways:

- Click **New**.
- Select a style in the styles list and click **New From Selection**.

  NOTE

  This copies all the options from the selected style.

3. Enter a name for the style in the **Name** field.

4. Activate each option that you want to change and make your changes.

IMPORTANT

Only activated options have an effect on the text. If you deactivate options, their settings are deleted.

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

Deleting character styles

You can delete character styles.

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Character Styles**.
The **Character Styles** dialog opens.

2. Select the style that you want to delete in the styles list.

3. Click **Delete**.

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

Text editor options in Engrave mode

The text editor allows you to add and format text.

The text editor opens in the following circumstances:

● You add or change text that is attached to a staff.

● You enter text within a text frame.
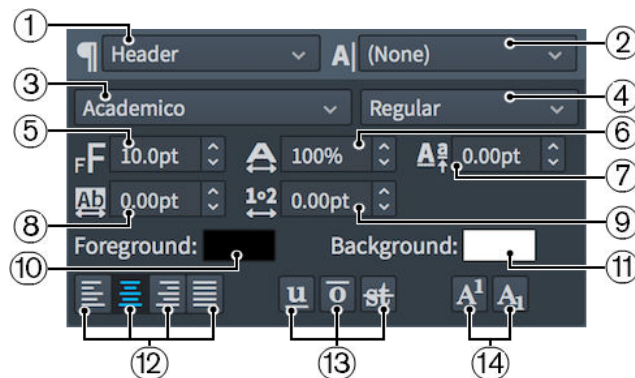
Text editor pop-up in Engrave mode

The text editor provides the following options:

1 **Paragraph Style**

Determines the appearance and alignment of the text for a whole paragraph.

NOTE

Text that is attached to a staff is always treated as a single paragraph.

2 **Character Style**

Determines the appearance of selected text.

NOTE

If you use one of the defined character styles in the text editor, the appearance that is defined by the selected paragraph style is overridden.

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.

5 Font Size

Allows you to change the size of selected text.

6 Font Stretch

Allows you to make selected text wider or narrower.

7 Baseline Shift

Allows you to gradually shift the baseline of selected text 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 Foreground Color

Allows you to change the foreground color of selected text.

11 Background Color

Allows you to change the background color of selected text.

12 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:

- **Alignment Left**
- **Alignment Center**
- **Alignment Right**
- **Justify**

13 Line Types

Allows you to show any of the following types of lines, in any combination, on selected text:

- **Underline**
- **Overline**
- **Strikethrough**

14 Script Types

Allows you to position selected text in one of the following positions relative to the text on the baseline:

- **Superscript**
- **Subscript**

RELATED LINKS

Changing the paragraph style of text

You can change the paragraph style that is applied to text added to staves and within individual text frames, including on master pages. For example, if you want to use one paragraph style for page numbers in full score layouts and another for page numbers in part layouts.

PREREQUISITE

You have created a new paragraph style if you want to use a different paragraph style to the ones provided by default.

PROCEDURE

1.   Optional: If you want to change the paragraph style of text on a master page, open the master page editor.

2.   Open the text editor for the text/text frame in which you want to change the paragraph style in any of the following ways:

   ●   Activate **Frames** in the Formatting panel, select the text frame, and press **Return**.

   ●   Double-click within the text frame.

3.   Select the text whose paragraph style you want to change.

   TIP

   You can apply different paragraph styles to separate paragraphs in the same text frame.

4.   In the text editor pop-up, select a paragraph style.

5.   Close the text editor in any of the following ways:

   ●   Press **Esc** or **Ctrl/Cmd-Return**.

   ●   Click outside of the text editor.

RESULT

The paragraph style of the selected paragraphs is changed. For example, if you select a single word, the whole paragraph containing that word is changed.

RELATED LINKS
Text editor options in Engrave mode on page 281
Paragraph Styles dialog on page 276
Creating paragraph styles on page 278

Changing the placement of text relative to the staff

You can position added text above or below the staves. Text is automatically positioned to ensure that it does not collide with other objects.

PREREQUISITE

The text editor is closed.

PROCEDURE

1.   Select the text whose placement relative to the staff you want to change. You can do this in Write mode and Engrave mode.

2.   In the Properties panel, choose one of the following options for **Position** in the **Text** group:

   ●   **Above**

   ●   **Below**

RESULT

The selected texts appear above/below the staff.

AFTER COMPLETING THIS TASK

If you need to move the text to a different graphical position, you can drag the text manually in Engrave mode.

Note spacing

The positions of notes relative to each other, and the automatic gaps between notes, are known as note spacing.

You can change note spacing in your project in the following ways:

- Change the default note spacing project-wide in each layout in **Layout Options**.

- Change the note spacing from a specified point in individual frame chains in individual layouts.

- Change the note spacing at individual rhythmic positions and for individual notes.

Note spacing changes project-wide

You can change the default note spacing values for each layout independently on the **Note Spacing** page in **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.

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** at the bottom of the **Layouts** panel in Setup mode.

    ⚙

- Right-click an instrumental part or a full score in the **Layouts** panel and choose **Layout Options** from the context menu.

Note spacing changes from specific points in layouts

In Engrave mode, you can open the **Note Spacing Change** dialog and change or reset values affecting the spacing and scaling of notes.

Changes you make in the **Note Spacing Change** dialog only apply to the selected layout, and to the frame chain containing the item selected when you made the note spacing change. The preview in the dialog updates in real time as you change values, allowing you to see the effect the changes will have in your project.

Signposts are shown at rhythmic positions where you have made changes to note spacing using the **Note Spacing Change** dialog.

Note spacing at individual rhythmic positions and of individual notes

You can make individual spacing adjustments and move individual notes graphically when **Note Spacing** is activated in the Formatting panel on the left of the window in Engrave mode. When **Note Spacing** is activated, dashed lines representing spacing columns and handles for each spacing-significant item appear.
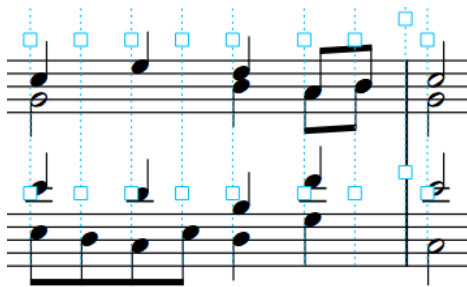
Handles and dashed lines are shown when **Note Spacing** is activated.

Each rhythmic position that contains a significant item, such as notes, grace notes, rests, clefs, key signatures, and time signatures, can be adjusted using the square note spacing handles. Note spacing handles allow you to adjust the spacing of the selected rhythmic position, which changes the position of everything at that rhythmic position.

Selecting square note spacing handles above items, such as noteheads, causes a circular handle to appear. Circular handles allow you to adjust the graphical position of that individual item, independently of its rhythmic position.

Additionally, larger square system handles are shown at the start/end of each system when **Note Spacing** is activated, allowing you to adjust the start/end horizontal position of individual systems. System handles are positioned on the top left and bottom right corners of each system.

When note spacing handles have been moved, their color changes.

NOTE

When **Note Spacing** is activated, you cannot make any selections or make other types of edits to items in the current layout. To resume normal selection and editing, deactivate **Note Spacing** or return to Write mode.

RELATED LINKS

Note Spacing page in Layout Options

On the **Note Spacing** page in **Layout Options**, you can change the default values for note spacing project-wide 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 opening **Layout Options** and selecting **Note Spacing** from the **Category** menu.

Options on the **Note Spacing** page in **Layout Options**

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.

The note spacing value for each duration is shown in the preview, which is updated as you change values. Increasing the value increases note spacing, decreasing the value decreases note spacing.

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.

Only justify final system in flow when more than [X] % 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

Note Spacing Change dialog

You can use the **Note Spacing Change** dialog to change or reset values affecting the spacing and scaling of notes from specific points in layouts, including the scale factor for grace notes and cues.

● You can open the **Note Spacing Change** dialog in Engrave mode by choosing **Engrave** > **Note Spacing Change**.
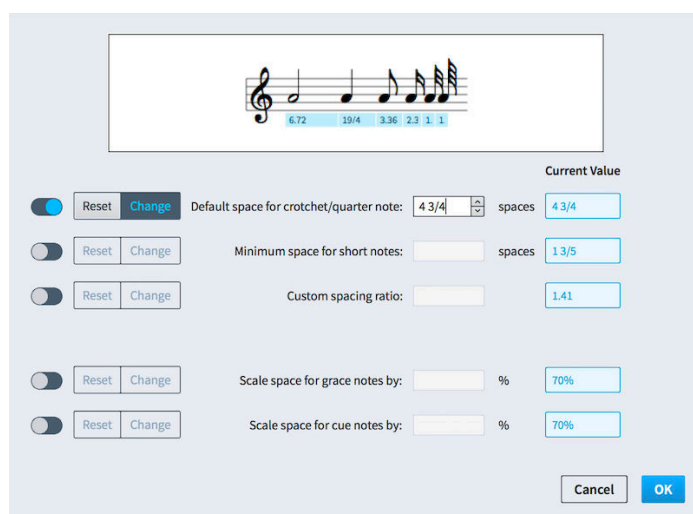
Note Spacing Change dialog

The **Note Spacing Change** dialog 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.

The note spacing value for each duration is shown in the preview, which is updated as you change values. Increasing the value increases note spacing, decreasing the value decreases note spacing.

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.

Each option has an activation switch, meaning you can only change values for options that you have chosen to change.

You can then choose one of the following options for what sort of note spacing change you want to make:

Reset

Resets note spacing to your project-wide setting for note spacing in the layout, as set on the **Note Spacing** page in **Layout Options**.

Change

Changes note spacing in the layout to the values set.

RELATED LINKS
Note spacing on page 284

System fullness indicator

The system fullness indicator is a highlighted region in the right page margin that is shown when **Note Spacing** is activated. The system fullness indicator tells you how full the system is, using both colors and percentages to indicate the fullness of the system.

The following colors are used in the system fullness indicator:

- Green: the system is comfortably full. Notes have enough horizontal space to be legible but are not too far apart. Systems that are 60-100% full are considered comfortably full.

- Purple: the system is under-full, meaning notes might appear overly stretched. Systems that are less than 60% full are considered under-full.

- Red: the system is over-full, meaning notes might appear squashed with not enough horizontal space between them. Systems that are more than 100% full are considered over-full.

The fullness of systems is also expressed using a percentage. The percentage indicated is calculated by dividing the number of spaces occupied in the system by the total number of available spaces in the system, which is measured from the start of the rhythmic space to the right of the initial clef/time signature/key signature up to the final barline in the system.

Both the color of the system fullness indicator and the fullness percentage are updated in real time as you adjust note spacing in the system.

System comfortably full	**System under-full**	**System over-full**
83.4% 67.9/81.5	47.6% 38.8/81.5	131.0% 106.7/81.5
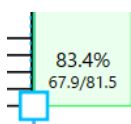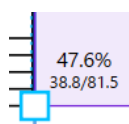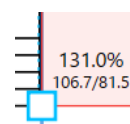
RELATED LINKS
Adjusting note spacing at individual rhythmic positions on page 291

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.

PROCEDURE

1. In Setup mode, choose **Setup** > **Layout Options**.

   The **Layout Options** dialog opens.

2. In the **Layouts** list, select the layouts in which you want to change note spacing in one of the following ways:

   - Click **Select All**.
   - Click **Select All Full Score Layouts**.
   - Click **Select All Part Layouts**.
   - Click **Select All Custom Score Layouts**.
   - **Ctrl/Cmd**-click individual layouts.
   - **Shift**-click adjacent layouts.

   By default, the layout currently open in the music area is selected when you open the dialog.

3. Select **Note Spacing** from the **Category** menu.

4. Change the values for the options you want to change in any of the following ways:

   - Enter values into the value fields.
   - Click the arrows beside the value fields.

5. Click **Apply**, then **Close**.

RESULT

The default note spacing is changed project-wide in the selected layouts.

RELATED LINKS

Note Spacing page in Layout Options on page 285

Changing note spacing from specific points

You can change note spacing values from a specified point onwards in the layout currently open in the music area, including changing the scale factor for grace notes and cues.

PROCEDURE

1. In the music area, open the layout in which you want to change note spacing.

2. Select an item at the rhythmic position from which you want to change note spacing, and in the frame chain to which you want the changes to apply.

3. Choose **Engrave** > **Note Spacing Change**.

   The **Note Spacing Change** dialog opens.

4. Activate the note spacing options you want to change.

5. Choose **Change** for each activated option.

6. Change the value in the value field for each note spacing option you want to change in any of the following ways:

   - Enter values into the value fields.
   - Click the arrows beside the value fields.

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

RESULT

Note spacing is changed from the selected rhythmic position onwards. This applies to the frame chain containing the selected item and the layout currently open in the music area.

A signpost is shown at the position of the note spacing change.

RELATED LINKS
Note spacing on page 284
Note Spacing Change dialog on page 287

Resetting note spacing from specific points

You can reset note spacing values after previously changing them in the layout using the **Note Spacing Change** dialog. This applies from a specified point onwards in the layout currently open in the music area.

PROCEDURE

1. In the music area, open the layout in which you want to reset note spacing from a specific point.

2. Select an item at the rhythmic position from which you want to reset note spacing, and in the frame chain to which you want the changes to apply.

3. Choose **Engrave** > **Note Spacing Change** to open the **Note Spacing Change** dialog.

4. Activate the note spacing options you want to reset.

5. Choose **Reset** for each activated option.

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

RESULT

Note spacing is reset to your project-wide settings for the activated options from the selected rhythmic position onwards. This applies to the frame chain containing the selected item and the layout currently open in the music area.

A signpost is shown at the position of the note spacing change.

RELATED LINKS
Note spacing on page 284
Note Spacing Change dialog on page 287

Deleting note spacing changes at specific points

You can delete note spacing changes you have made using the **Note Spacing Change** dialog.

PROCEDURE

1. Select the signpost of the note spacing change you want to delete.

2. Delete the note spacing change in any of the following ways:

- Press **Backspace** or **Delete**.
- Choose **Edit** > **Delete**. You can also choose this option from the context menu.

RESULT

The note spacing change is deleted. Note spacing returns to your project-wide settings for the layout until the next existing note spacing change or until the end of the project, whichever first.

Adjusting note spacing at individual rhythmic positions

You can make adjustments to the note spacing at individual rhythmic positions independently of your project-wide settings.

NOTE

- Moving notes far away from their intended rhythmic positions can be misleading for players reading the music.

- When **Note Spacing** is activated, you cannot make select or edit anything other than note spacing handles. To resume normal selection and editing, deactivate **Note Spacing** or return to Write mode.

PROCEDURE

1. In the Formatting panel, activate **Note Spacing**.

2. Select a square handle on the dashed line at each rhythmic position whose spacing you want to adjust.

3. Move the selected handles in any of the following ways:

   - Press **Alt-Right Arrow** to move them to the right.

     This increases the space to the left of the rhythmic position of each selected handle.

   - Press **Alt-Left Arrow** to move them to the left.

     This decreases the space to the left of the rhythmic position of each selected handle.

     TIP

     If you want to move handles by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

   NOTE

   You cannot move note spacing handles with the mouse, you can only move them using the keyboard.

RESULT

The selected note spacing handles are moved, which increases/decreases the spacing to the left of their original rhythmic position. This also affects the spacing of each selected rhythmic position on all staves in the system.

System breaks are automatically inserted at the start/end of the system in which you adjusted note spacing.

NOTE

You cannot select/delete system break signposts when **Note Spacing** is activated.

EXAMPLE
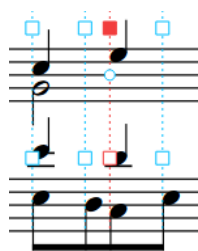
Moving note spacing handles to the left reduces spacing to the left of the rhythmic position
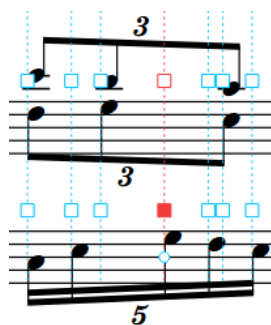
Moving note spacing handles to the right increases spacing to the left of the rhythmic position

RELATED LINKS

Adjusting the spacing of individual notes/items independently of their rhythmic positions

You can change the graphical position of individual notes and some other items, such as key signatures, time signatures, and clefs, independently of their rhythmic positions.

PROCEDURE

1. In the Formatting panel, activate **Note Spacing**.

2. Select the square handle at the rhythmic position of the note/item you want to move graphically.

    A circular handle appears beside the note/item.

3. Select the circular handle beside the note/item in any of the following ways:

    ●   Press **Tab** to switch between having the square and circular handle selected.

    ●   Click the circular handle.

4. Move the handle in any of the following ways:

    ●   Press **Alt-Right Arrow** to move it to the right.

    ●   Press **Alt-Left Arrow** to move it to the left.

TIP

If you want to move handles by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

NOTE

You cannot move note spacing handles with the mouse, you can only move them using the keyboard.

RESULT

The graphical position of the selected note/item is changed without changing the note spacing of its rhythmic position.

EXAMPLE

Changing the start/end position of systems

You can change the start/end horizontal position of each system individually, for example, if you want to indent a single system.

NOTE

- If you want to change the start position of systems because you want to increase the space before staff labels, you can change the minimum indent for systems with staff labels project-wide for each layout independently on the **Staves and Systems** page in **Setup** > **Layout Options**.

- If you want to change the end position of systems because they do not fill the entire width of the page, you can change the minimum fullness for justification on the **Note Spacing** page in **Layout Options**.

- If you want to change the width of all systems on a page by the same amount, you can change the width of the music frame.

PROCEDURE

1. In the Formatting panel, activate **Note Spacing**.

2. Select the system handle at the start/end of each system whose start/end position you want to change.

3. Move the system handles in any of the following ways:

   - Press **Alt-Right Arrow** to move them to the right.

- Press **Alt-Left Arrow** to move them to the left.

> TIP
>
> If you want to move handles by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

> NOTE
>
> You cannot move note spacing handles with the mouse, you can only move them using the keyboard.

RESULT

The start/end position of the selected systems is changed. Notes on the selected systems appear more/less tightly spaced, depending on whether moving the system handles made their system narrower/wider.

RELATED LINKS
Changing the justification of final systems on page 267
System indents on page 709
Changing the first system indent on page 709
Changing the minimum indent for systems with staff labels on page 695

Removing individual changes to note spacing

You can remove changes you have made to the note spacing at individual rhythmic positions and reset note spacing handles to their original default positions.

PROCEDURE

1. In the Formatting panel, activate **Note Spacing**.

2. Select the note spacing handles you want to restore to their original positions.

3. Reset their positions in any of the following ways:

   - Press **Backspace** or **Delete**.
   - Choose **Edit** > **Delete**. You can also choose this option from the context menu.

RELATED LINKS
Note spacing on page 284

Staff spacing

The positions of staves relative to each other, and the automatic gaps between staves, are known as staff spacing.

You can change staff spacing in your project in the following ways:

- Change the default staff spacing project-wide in each layout in **Layout Options**.
- Change the staff spacing between individual staves.

Staff spacing changes project-wide

You can change the default values between staves for each layout independently on the **Vertical Spacing** page in **Layout Options**.

The options available include changing the default ideal gap between individual staves, between staves and bracketed groups, between staves in a braced group, such as for piano or harp, and

between separate systems. You can also change how full pages must be before systems are automatically justified across the full height of the page, and change when empty staves are hidden.

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** at the bottom of the **Layouts** panel in Setup mode.

  ⚙

- Right-click an instrumental part or a full score in the **Layouts** panel and choose **Layout Options** from the context menu.

Individual staff spacing changes

You can make adjustments to the vertical position of individual staves when **Staff Spacing** is activated in the Formatting panel on the left of the window in Engrave mode. When **Staff Spacing** is activated, the following handles are shown:

- A smaller square staff spacing handle on the bottom left corner of each staff.
- A larger square system spacing handle on the top left corner of the top staff in each system.
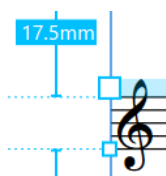
System spacing handle and staff spacing handle in Engrave mode when **Staff Spacing** is activated

Staff spacing handles allow you to adjust the vertical position of the selected staves. The gap between staves in millimeters is shown, and you can click these numbers to change the gaps between staves by a specific measurement. System handles allow you to adjust the vertical position of whole systems.

When staff spacing handles have been moved, their color changes. If you move system handles, both the square handle and the highlighted strip at the top of the system change color.

You can copy manual changes you have made to the staff spacing on individual pages to other pages in the layout.

NOTE

When **Staff Spacing** is activated, you cannot make any selections or make other types of edits to items in the current layout. To resume normal selection and editing, deactivate **Staff Spacing** or return to Write mode.

RELATED LINKS

Moving individual staves/systems vertically

You can change the spacing of individual staves by changing the vertical position of individual staves and systems independently of your project-wide settings.

PROCEDURE

1. In the Formatting panel, activate **Staff Spacing**.

    NOTE

    When using the mouse, you can only move one staff/system at a time.

2. Select one of the following on each staff/system you want to move vertically:

    - Staff spacing handle

    - System spacing handle

    TIP

    You can switch between having a staff or system spacing handle selected by pressing **Tab**.

3. Move the selected staves/systems in any of the following ways:

    - Press **Alt-Up Arrow** to move them upwards.
    - Press **Alt-Down Arrow** to move them downwards.

      TIP

      If you want to move handles by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Up Arrow**.

    - Click and drag a single staff/system spacing handle upwards/downwards.

RESULT

The vertical position of the selected staves/systems is changed. The color of the handles is changed to indicate that you have moved them.

EXAMPLE
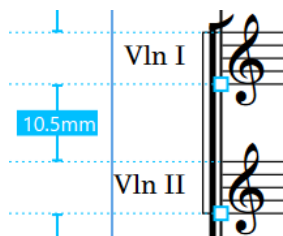
Staff spacing handles at their default positions
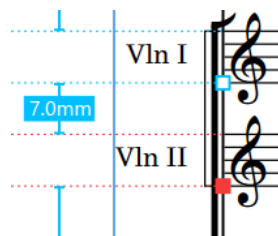
The second staff has been moved upwards

RELATED LINKS
Staff spacing on page 294

Removing individual changes to staff spacing

You can remove changes you have made to the staff/system spacing and reset staff/system spacing handles to their original default positions.

PROCEDURE

1. In the Formatting panel, activate **Staff Spacing**.
2. Select the staff/system handles you want to restore to their original positions.
3. Reset their positions in any of the following ways:
   - Press **Backspace** or **Delete**.
   - Choose **Edit** > **Delete**. You can also choose this option from the context menu.

Moving multiple systems equally

You can move multiple systems at the same time so that the gaps between each system remain equal. This is also known as "concertina dragging".

NOTE

You can only move multiple systems closer together, you cannot use this method to make them further apart.

PROCEDURE

1. In the Formatting panel, activate **Staff Spacing**.
2. Select the system handle on the system below which you want to move systems closer together.
   -
3. **Alt**-click and drag the system handle downwards.

RESULT

All systems below the selected system, until the bottom of the music frame, are moved closer together. The gaps between each system remain equal.

RELATED LINKS
Staff spacing on page 294

Copying staff spacing changes to other pages

You can copy manual staff spacing changes you have made on individual pages to other pages in the layout.

PROCEDURE

1. In the music area, open the layout in which you want to copy staff spacing from one page to other pages.
2. In the Formatting panel, activate **Staff Spacing**.
3. Click **Copy Staff Spacing**.
   The **Copy Staff Spacing** dialog opens.

4. Change **From page** in any of the following ways:

   ● Enter a value into the value field.

   ● Click the arrows beside the value field.

5. Change **To page start** in any of the following ways:

   ● Enter a value into the value field.

   ● Click the arrows beside the value field.

6. Change **To page end** in any of the following ways:

   ● Enter a value into the value field.

   ● Click the arrows beside the value field.

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

RELATED LINKS

Copy Staff Spacing dialog

In the **Copy Staff Spacing** dialog, you can choose pages whose individual staff spacing changes you want to copy. You can specify the pages in the layout to which you want to copy the staff spacing changes.

● You can open the **Copy Staff Spacing** dialog in Engrave mode by activating **Staff Spacing** in the Formatting panel and clicking **Copy Staff Spacing**.

The **Copy Staff Spacing** dialog contains the following options:

From page

Allows you to change the page whose staff spacing you want to copy by specifying the page number.

To page start

Sets the first page in the layout to which staff spacing changes are copied.

To page end

Sets the last page in the layout to which staff spacing changes are copied.

For example, if you wanted to copy staff spacing changes you made on the first page to the next three pages, meaning pages two, three, and four, but not to page five and onwards, you would set **To page start** to 2 and **To page end** to 4.

Each option shows the displayed page number beside the value field, so that if you have changed the displayed page number of pages within the layout you can still be sure of the page to which you are copying staff spacing changes.

RELATED LINKS

Play mode

Play mode allows you to set up your project for playback. You can assign VST instruments, adjust the mix, and change 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**.
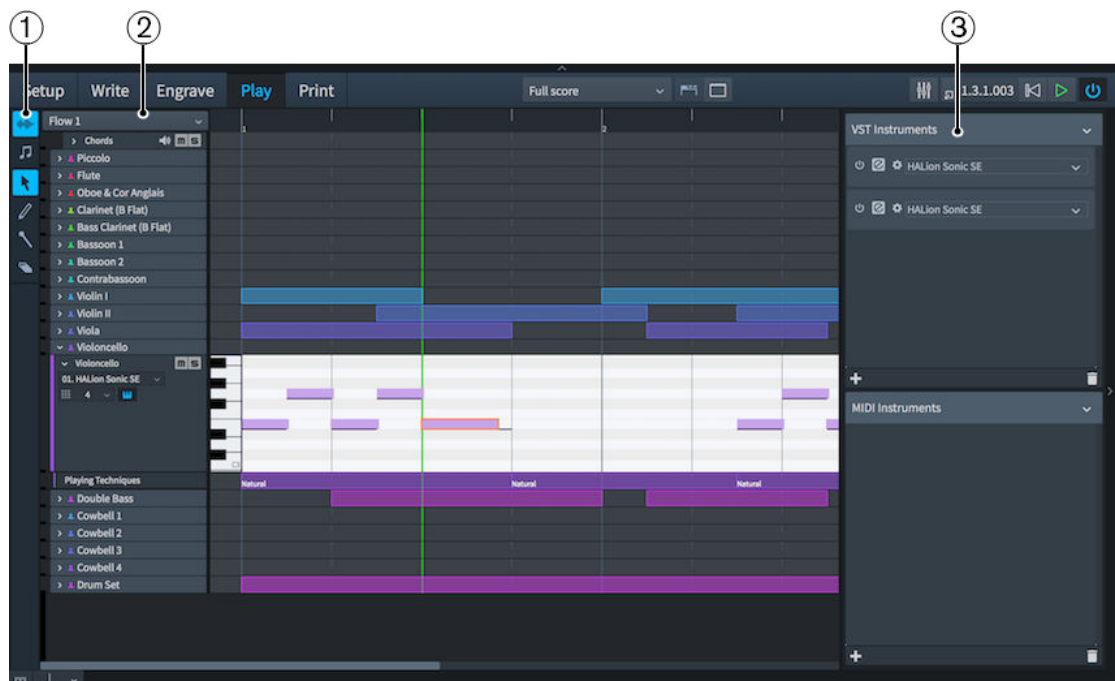
Toolbox and panels in Play mode

There is no Properties panel in Play mode.

The following toolboxes, panels, and areas are available:

1   Play toolbox

Contains tools that allow you to select and edit note events in the event display.

2 Tracks

Shows tracks for each instrument being played in the selected flow. You can open different flows in the event display by selecting the one you want to open from the menu at the top of the tracks.

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.

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 notes in the piano roll editor. Select **Object Selection** to deselect **Erase**.

You can also select **Object Selection** by pressing **S**.

Draw

Allows you to add and edit notes. 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 value.

You can also select **Draw** by pressing **D**.

Draw Percussion

Allows you to add notes to percussion staves in the piano roll 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**.

Tracks

In Play mode, every instrument in your score is represented by an instrument track, and each player is represented by a player track. There is also a chord symbols track which you can assign to a VST or MIDI instrument in order to hear chords in playback.

The name of each player track uses the layout name given to that player in Setup mode.

Each track has two layers of disclosure arrows:

- Clicking the first disclosure arrow reveals the instruments the player holds.
- Clicking the disclosure arrow on each instrument shows the instrument track header and piano roll editor or drum editor, as appropriate for that instrument.

Player tracks   **Expanded player track showing instrument tracks**   **Expanded instrument track**
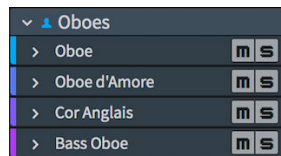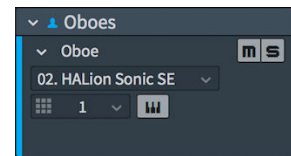
Instrument track headers

Each instrument in your project has its own instrument track header, including when a single player holds multiple instruments.
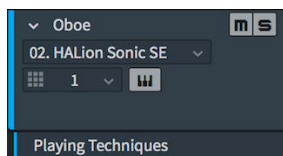
Example instrument track header including Playing Techniques track header

Each instrument track header contains the following controls:

VST or MIDI Instrument menu

Allows you to select an instance of a VST or MIDI instrument to use for the instrument track.

Slot menu

Allows you to select the slot in the selected VST or MIDI instrument that you want to use for the instrument track.

NOTE

The same menu selects a channel for MIDI instruments.

Mute

Mutes the track so it is not included in playback.

Solo

Solos the track so that it is the only track included in playback. All other tracks are muted.

NOTE

You can have multiple tracks soloed simultaneously.

Edit Instrument

Opens the corresponding VST instrument dialog, allowing you to edit settings for the slot or channel.

Chords track

A chords track is included in every project. You can use this track to hear in playback any chords that you input into the score as chord symbols.
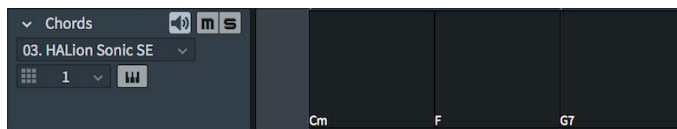
Example chords track

NOTE

You must assign a VST or MIDI instrument and a slot for the chords track in order for it to playback sounds.

You can use an existing slot containing a sound already loaded in the project, or you can use a new slot with a new sound loaded just for chords.

NOTE

If you assign an empty slot to your chords track and later add more instruments to your project, the sounds for the new instruments overwrite the slot.

RELATED LINKS
VST and MIDI Instruments panel on page 309
Loading VST and MIDI instruments manually on page 311

Playing techniques tracks

Each instrument track has its own playing techniques track below the piano roll editor.
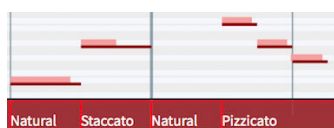
Example playing techniques track below note events

This track displays where you have input playing techniques, so you can see where playing technique changes occur. You can hover your mouse-pointer over individual playing technique regions on the track 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

- Unpitched percussion instruments do not have playing technique tracks.
- You cannot change playing techniques using this track.

Expanding/Collapsing instrument and player tracks

You can expand/collapse instrument tracks in Play mode individually, or expand/collapse all player tracks in the current flow.

PROCEDURE

- Expand/Collapse tracks in one of the following ways:
    - Click individual disclosure arrows to expand or collapse the corresponding player track or instrument track.
    - **Ctrl/Cmd**-click any player track disclosure arrow to expand/collapse all player tracks.

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, pitched instruments are displayed in an individual piano roll editor for their instrument track.

Pitched instruments are positioned in the piano roll editor according to their pitch, which is demonstrated by a piano keyboard on the left edge of the piano roll editor.
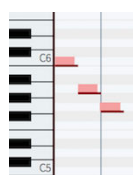
Each instrument is automatically assigned a color when you add them in Setup mode, so that you can tell them apart more easily in Play mode.

You can edit notes in the piano roll editor, including moving and transposing them.

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.

RELATED LINKS

Inputting notes in the piano roll editor

You can input notes into your project in the piano roll editor.

PROCEDURE

1.   Expand the instrument track of the instruments into which you want to input notes.

2.   Select **Draw** in any of the following ways:

   ●   Press **D**.

   ●   Click **Draw** in the Play toolbox.

3.   In the piano roll, click and drag horizontally for the required duration at the pitch position you want.

RESULT

Notes are input at the pitches indicated by the piano keyboard on the left of the piano roll.

You can later 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
Expanding/Collapsing instrument and player tracks on page 303
Lengthening/Shortening notes in the piano roll editor on page 304
Changing the duration of notes on page 125

Lengthening/Shortening notes in the piano roll editor

You can change the duration of notes from within the piano roll editor in Play mode. This automatically changes the notated duration of the notes in the score.

PREREQUISITE

Object Selection is selected in the Play toolbox.

PROCEDURE

1.   In the piano roll editor, select the note events you want to lengthen/shorten.

2.   Lengthen/Shorten the notes in any of the following ways:

   ●   Press **Shift-Alt-Right Arrow** to lengthen notes by the current rhythmic grid value.

   ●   Press **Shift-Alt-Left Arrow** to shorten notes by the current rhythmic grid value.

   ●   Press **Ctrl/Cmd-Shift-Alt-Right Arrow** to double the length of notes.

   ●   Press **Ctrl/Cmd-Shift-Alt-Left Arrow** to halve the length of notes.

   ●   Click and drag the right end of one of the selected notes to the length you want.

   NOTE

   You can only change the notated duration of notes with the mouse when **Notated Durations** is selected in the Play toolbox. When **Played Durations** is selected, you can click and drag notes to change their played duration.

RESULT
The notes are lengthened/shortened.

Moving notes in the piano roll editor

You can move notes rhythmically within the piano roll editor.

PREREQUISITE

Object Selection is selected in the Play toolbox.

PROCEDURE

1. In the piano roll editor, select the notes you want to move rhythmically.

2. Move the selected notes according to the current rhythmic grid value in any of the following ways:

   - Press **Alt-Right Arrow** to move them to the right.

   - Press **Alt-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 according to the current rhythmic grid value. If you selected multiple notes, they are moved together as a block.

NOTE

- This also affects how the selected notes are notated in full score layouts and any relevant part layouts.

- When using the keyboard, you can transpose and move notes without deselecting them between each action. When using the mouse, you cannot move and transpose notes in the same gesture, instead you must complete one action and release the mouse before completing the other action.

Transposing notes in the piano roll editor

You can transpose notes in the piano roll editor by moving them vertically to other pitch positions.

PREREQUISITE

Object Selection is selected in the Play toolbox.

PROCEDURE

1. In the piano roll editor, select the notes you want to transpose.

2. Transpose the notes in any of the following ways:

   - Press **Alt-Up Arrow** to move notes up one staff position, for example, from B to C.

   - Press **Alt-Down Arrow** to move notes down one staff position, for example, from C to B.

   - Press **Shift-Alt-Up Arrow** to transpose notes up a single octave division. For example, a semitone in 12-EDO or a quarter tone in 24-EDO.

- Press **Shift-Alt-Down Arrow** to transpose notes down a single octave division. For example, a semitone in 12-EDO or a quarter tone in 24-EDO.

- Press **Ctrl/Cmd-Alt-Up Arrow** to transpose notes up an octave.

- Press **Ctrl/Cmd-Alt-Down Arrow** to transpose notes down an octave.

- 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 the score and relevant part layouts.

- When using the keyboard, you can transpose and move notes without deselecting them between each action. When using the mouse, you cannot move and transpose notes in the same gesture, instead you must complete one action and release the mouse before completing the other action.

RELATED LINKS
Moving notes in the piano roll editor on page 305
Equal Division of the Octave (EDO) on page 536
Play toolbox on page 300

Deleting notes in the piano roll editor

You can delete notes in the piano roll editor in Play mode. This also removes the notes from the score and relevant part layouts.

PROCEDURE

1. Select **Erase** in any of the following ways:

   - Press **E**.

   - Click **Erase** in the Play toolbox.

2. Delete notes in any of the following ways:

   - Click individual notes.

   - Make a marquee selection to delete multiple notes at once.

RESULT

The notes you click or include in a marquee selection are deleted.

NOTE

You can also delete notes by selecting **Object Selection** in the Play toolbox, then selecting the notes you want to delete in the piano roll editor and pressing **Backspace** or **Delete**, or choosing **Edit** > **Delete**.

Zooming in/out of the piano roll editor

You can change the zoom level in the piano roll editor to focus on a larger/smaller section of the flow.

PROCEDURE

- Change the zoom in any of the following ways:

- Press **Z** to make notes appear wider.
- Press **X** to make notes appear narrower.
- **Shift**-click and drag upwards on the piano keyboard on the left to make notes appear taller.
- **Shift**-click and drag downwards on the piano keyboard on the left to make notes appear shorter.
- Spread two fingers outwards on a touchpad to make notes appear wider and taller.
- Pinch two fingers together on a touchpad to make notes appear narrower and shorter.
- Click and drag upwards along the playhead in the ruler to make notes appear narrower.
- Click and drag downwards along the playhead in the ruler to make notes appear wider.

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.
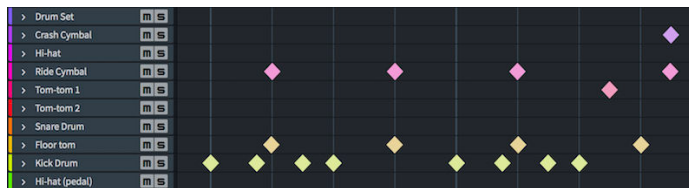
Drum editor

Unpitched percussion instruments have individual track headers that you can expand if you want to make changes to the track, 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 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
Tracks on page 301
Expanding/Collapsing instrument and player tracks on page 303

Inputting notes in the drum editor

You can input notes into your project in the drum editor.

PROCEDURE

1. Expand the player tracks containing the unpitched percussion instruments into which you want to input notes.

You do not have to expand individual unpitched percussion tracks to input notes in them.

2. Click **Draw Percussion** in the Play toolbox.

3. In the drum editor, click in the unpitched percussion tracks at the positions where you want to input notes.

RESULT

Each time you click on a track, you input a note in the corresponding instrument. The current rhythmic grid value determines the duration of the notes.

NOTE

- 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.

- You can also use the **Draw** tool in the drum editor just like in the piano roll editor. However, if using the **Draw** tool, you must click and drag notes to input them instead of just clicking at a position.

RELATED LINKS
Drum editor on page 307
Inputting notes in the piano roll editor on page 304

VST and MIDI Instruments panel

You can select VST and MIDI instruments in the VST and MIDI instruments panel in Play mode and edit their settings.
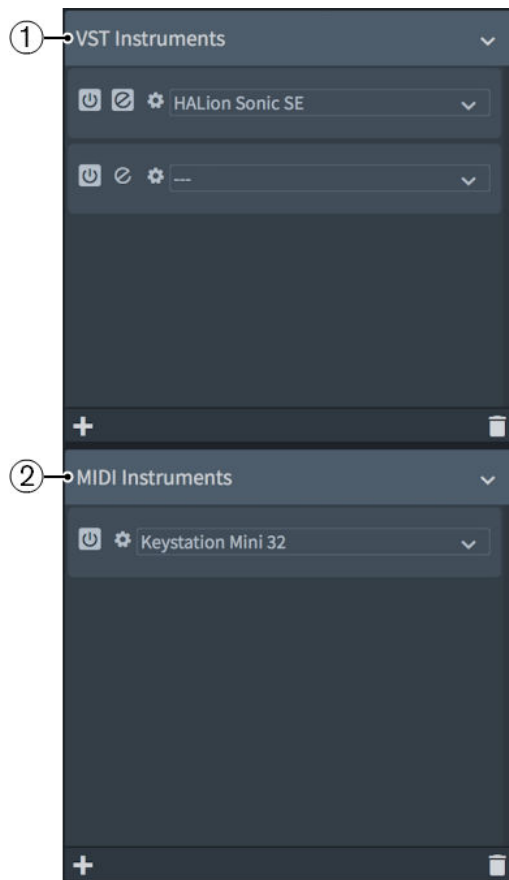
VST and MIDI Instruments panel

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 rack slots in which you can select VST instruments to use for playback.

NOTE

Dorico only shows VST 3 instruments by default. If you want VST 2 instruments to be available in the **VST Instruments** section of the VST and MIDI Instruments panel, you must whitelist them. Only Kontakt is available by default.

When you add instruments in your project, Dorico automatically creates a playback template containing instances of HALion Sonic SE with sounds chosen from the HALion Sonic SE and HALion Symphonic Orchestra libraries. Dorico also sets up expression maps and percussion maps as required.

If you change any of these default settings, Dorico no longer makes automatic changes. For example, you must then load sounds for new instruments manually as Dorico no longer loads them automatically. Additionally, the HALion plug-in does not communicate changes in the plug-

in to Dorico, meaning Dorico still tries to play back the music in your project using the expression map for the original sounds.

You must change the expression map manually for each plug-in you change.

Therefore, we recommend that you do one of the following if you want to update the sounds used for playback after making changes:

- Choose **Play** > **Load Sounds for Unassigned Instruments** to change the default settings and then add new instruments to your project. This automatically loads sounds for instruments in your project without assigned sounds.

- Choose **Play** > **Apply Default Playback Template** to clear the rack and reset sounds to the default sounds originally loaded for each instrument.

You can add new slots for VST instruments and delete VST instruments by clicking the respective button in the action bar.

- **Add**

  ➕

  Adds a new slot for a VST instrument in the **VST Instruments** section of the VST and MIDI Instruments panel.

- **Delete**

  🗑

  Deletes the selected VST instrument from the **VST Instruments** section of the VST and MIDI Instruments panel.

MIDI Instruments

The **MIDI Instruments** section of the panel contains rack slots in which you can select MIDI devices to use for output during playback.

NOTE

For your MIDI device to be available for selection, you must plug it into your computer before starting Dorico. If you plug it in after starting Dorico, you must restart the program.

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 Audio MIDI Setup. For example, this allows you to use MIDI from one application in another application.

You can add new slots for MIDI instruments and delete MIDI instruments by clicking the respective button in the action bar.

- **Add**

  ➕

  Adds a new slot for a MIDI instrument in the **MIDI Instruments** section of the VST and MIDI Instruments panel.

- **Delete**

  🗑

  Deletes the selected MIDI instrument from the **MIDI Instruments** section of the VST and MIDI Instruments panel.

RELATED LINKS
Loading VST and MIDI instruments manually on page 311

Loading VST and MIDI instruments manually

Dorico automatically loads enough VST slots for all the samples required for your project. However, you can also load VST and MIDI instruments manually, either into new slots or into existing slots to replace existing VST and MIDI instruments.

PREREQUISITE

You have any VST instruments you want to use saved on your computer.

In order for MIDI instruments to be available to load, you must plug them into your computer before starting Dorico. If you plug them in after starting Dorico, you must restart the program.

PROCEDURE

1. Optional: In the VST and MIDI Instruments panel, click **Add**.

   A new VST or MIDI instrument slot loads in the corresponding section.

2. In the slot in which you want to load a VST or MIDI instrument, select an instrument from the menu.

Whitelisting VST instruments

You must whitelist any VST 2 instruments you want to use in Dorico. Because whitelisting works like a preference, you must only whitelist plug-ins once for them to be available in any project.

PREREQUISITE

You have quit Dorico and all other programs.

A default `vst2whitelist.txt` file is included with your Dorico installation, which lists VST 2.x plug-ins that Steinberg has qualified for use with Dorico.

You can create a second `vst2whitelist.txt` file in a user-specific location that is not overwritten if you subsequently update or reinstall Dorico.

When Dorico starts up, it reads both the default whitelist file and your user-specific whitelist file to build up the list of whitelisted plug-ins.

PROCEDURE

1. Open a new text document in a plain text editor, such as Notepad.

2. Enter the file names of the VST plug-ins you want to whitelist without their file extension (`.dll` on Windows and `.vst` on macOS).

   Each plug-in must have its own line in the text file.

3. Save your own `vst2whitelist.txt` file in one of the following places, depending on your operating system:

   - `C:\Users\username\AppData\Roaming\Steinberg\VSTAudioEngine_64` (Windows)

   - `/Users/username/Library/Preferences/VSTAudioEngine` (macOS)

4. Delete the following files from the folder:

   - `Vst2xPlugin Blacklist VSTAudioEngine.xml`

   - `Vst2xPlugin Infos VSTAudioEngine.xml`

   - `Vst2xPlugin SearchPaths VSTAudioEngine.xml`

RESULT

When you next start Dorico, it considers your whitelisted VST plug-in entries, making them available for use in the program.

Playback Options dialog

The **Playback Options** dialog provides options that allow you to make project-wide changes to how the music you have written sounds when played back. These options affect playback, regardless of expression maps and patches.

In the **Playback Options** dialog, you can change how dynamics, pedal lines, and different notations are interpreted during playback.

For example, you can change how much louder notes on the first beat in each bar are compared to other notes in the bar, change how long each pedal retake lasts, and how much different articulations, such as staccatissimo and tenuto, affect the duration of notes.

NOTE

You can save all options that you set in **Playback Options** as the default for new projects by clicking **Save as Default**.

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

- Press **Ctrl/Cmd-Shift-P** in any mode.
- Choose **Play** > **Playback Options** in Play mode.
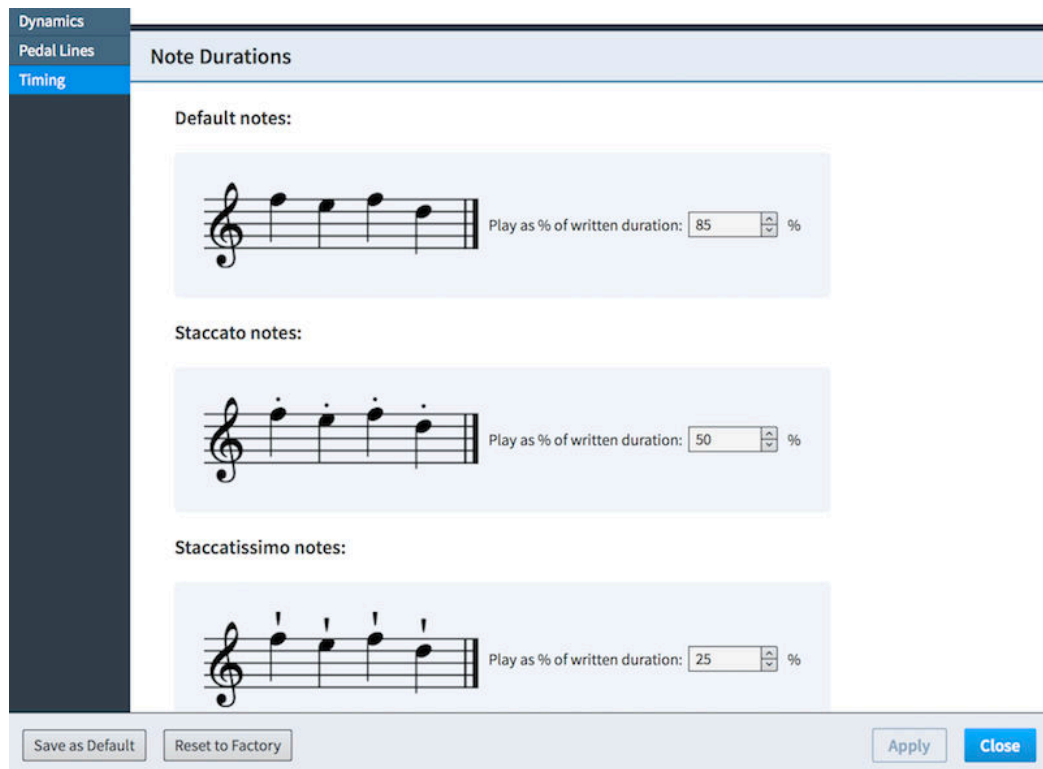
Playback Options

The list on the left of the **Playback Options** dialog contains the available pages. All the options available for the category selected in the page list are shown in the main area of the dialog.

Pages with many options are divided into sections.

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 is shown at all times in Play mode, but you can also see it in other modes during playback. You can also choose to show the playhead when playback is stopped in other modes in the **Play** section of the **General** page in **Preferences**.
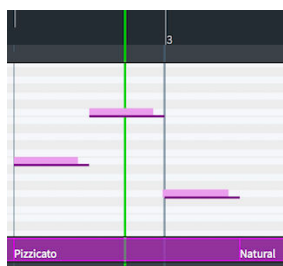
The playhead in Play mode

Dorico automatically keeps the playhead in view during playback by moving it along with the music, but you can also move the playhead manually. Dorico 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.

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.

NOTE

The playhead is only shown during playback by default. You can choose to show the playhead at all times in the **Play** section of the **General** page in **Preferences**.

PROCEDURE

- Move the playhead in any of the following ways:

  - Press **+** (plus) on a numeric keypad to navigate forwards.

  - Press **-** (minus) on a numeric keypad to navigate backwards.

  - Press **.** (period) on a numeric keypad to go back to the start of the flow.

  - 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

Playing back music

You can listen to the music you have written in playback from the beginning of your project or from a specific point.

TIP

You can also use the following key commands to play back your music in any mode.

PROCEDURE

1. Start playback in one of the following ways:

   - Play back all instruments from the selection by selecting a single note and pressing **P**.

   - Play back all instruments from the selection by selecting a single note and choosing **Play** > **Play From Selection**.

   - Play back only a single staff by selecting multiple items on the staff and pressing **P**.

     NOTE

     This does not affect which channels are soloed or muted in Play mode.

   - Play back multiple staves by selecting items on multiple staves and pressing **P**.

     NOTE

     This does not affect which channels are soloed or muted in Play mode.

   - Continue playback from the playhead position by pressing **Space**.

   - Play back from the last playback start position by pressing **Shift-Space**, even if you have since deselected the item at that position.

   - Play back from the start of the flow by pressing **Shift-Alt-Space**.

   - Click **Play from Playhead** 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. Stop playback in any of the following ways:

- Press **Space** or **P**.
- Press **0** on a numeric keypad.
- Click **Stop** in the transport window.

RELATED LINKS
Moving the playhead on page 313
Muting/Soloing tracks on page 315

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. Expand the player tracks you want to mute/solo.
2. Click the corresponding button in each track header.

   - **Mute**

     m

   - **Solo**

     s

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.

TIP

You can also play back only certain tracks/staves by selecting notes/items on each track/staff you want to hear.

RELATED LINKS
Playing back music on page 314
Expanding/Collapsing instrument and player tracks on page 303

Mixer

The Mixer allows you to control the sounds produced in playback, both for the master output and on each individual channel.
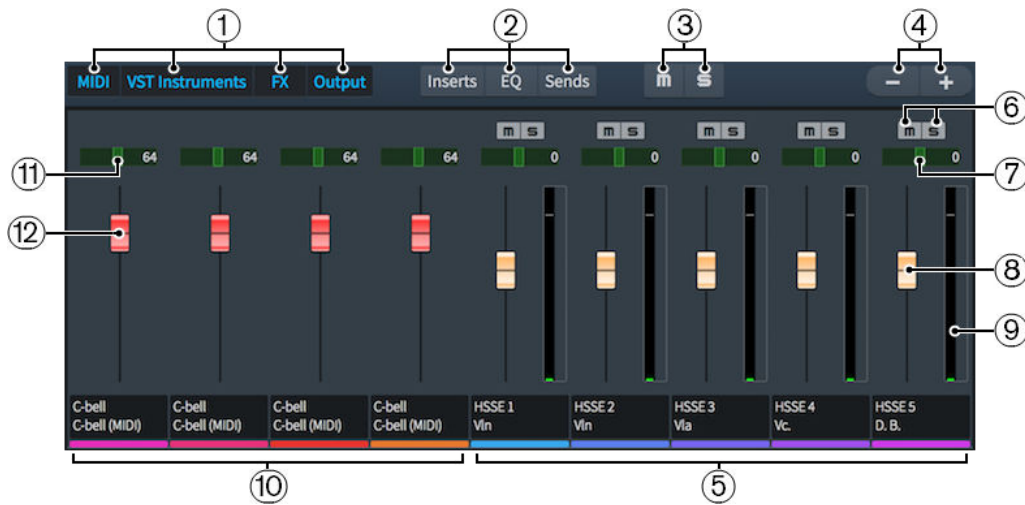
1 Channel types

Allows 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.

In addition to your instrument channels, there is a single FX Send channel and an Output channel. These channels allow you to add effects, such as reverb, to your project, and to control the master output volume.

> NOTE
>
> The FX channel has Reverence loaded automatically by default.

6 **Mute/Solo**

Allows you to mute/solo individual tracks.

> NOTE
>
> These buttons have the same functionality as the **Mute/Solo** buttons in the track headers in Play mode. For example, if you mute a track in the Mixer, the **Mute** button in the corresponding track header is also enabled.

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.

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

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:

EQ
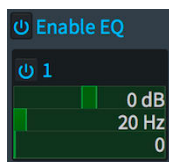
Each channel has four bands of EQ.

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.

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.

Sends
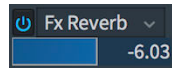
Each channel has four slots for sends. By default, the first slot for each channel sends
to the FX channel, which has reverb loaded on it.

RELATED LINKS

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**.

  TIP

  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. It contains more precise
versions of the transport functions available in the toolbar and additional transport functions.

You can open the **Transport** window in any of the following ways:

● Press **F2**.

● Click **Show Transport Bar** in the toolbar.
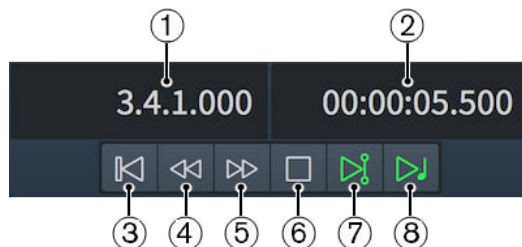
Transport window

The **Transport** window contains the following information and functions:

1   Bars/Beats display

Shows the position of the playhead in the score relative to bars and beats. The display
shows the units in the following order: bars, beats, 16th notes, 120ths of a 16th note.

2   Time display

Shows the position of the playhead in units of time in the following order: hours, minutes, seconds, milliseconds.

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

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.

NOTE

If you select items on multiple staves, or multiple items on a single staff, only the selected staves are played back.

RELATED LINKS
Basic transport options on page 40

Expression maps

Expression maps tell Dorico 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. This is because loud sounds often require stronger attacks, and quiet sounds often require softer attacks, which changes the character of the start of the sounds as well as its volume.

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 also uses expression maps to specify the 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 supports the following ways of sending information to VST instruments:

●   Key switches

●   Controllers

NOTE

Program changes are not currently supported.

You can edit individual expression maps and import/export expression maps in the **Expression Maps** dialog.

RELATED LINKS
Percussion maps on page 329

Expression Maps dialog

In the **Expression Maps** dialog, you can 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**.

NOTE

● Although the format of expression maps in Dorico is similar to Cubase, Dorico does not handle expression maps in exactly the same ways as Cubase. For example, Dorico allows you to use more playing techniques, but Cubase can reproduce more combinations of multiple playing techniques.

● During playback, Dorico does not currently support all fields in the **Expression Maps** dialog. This is planned for future versions.
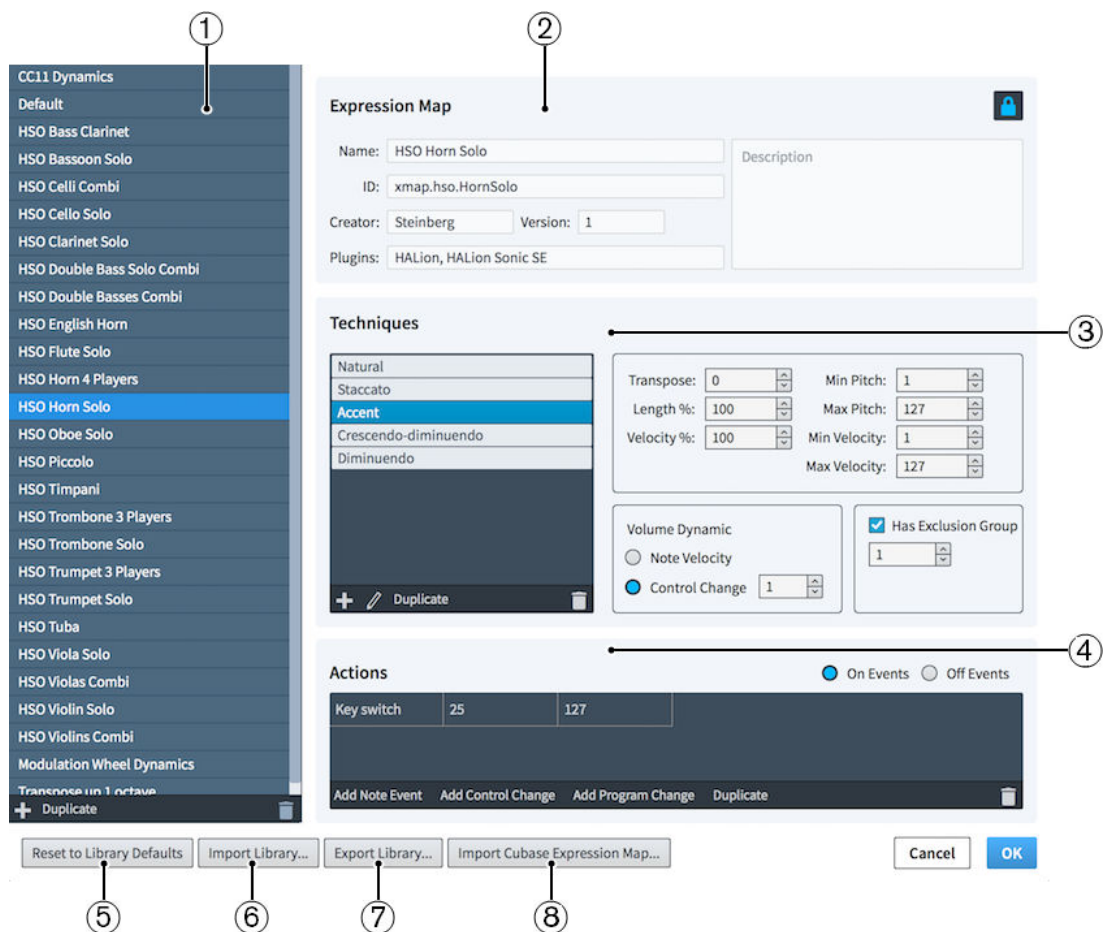
Expression Maps dialog

The **Expression Maps** dialog contains the following sections and options:

1 Expression Maps list

Contains the expression maps currently available in your project.

You can add and delete expression maps using the following buttons in the action bar at the bottom of the Expression Maps list:

- **Add Expression Map**

  ➕

  Allows you to add a new expression map that contains no existing settings.

- **Duplicate**

  Creates a copy of an existing expression map that you can then edit separately from the original.

- **Delete Expression Map**

  🗑

  Allows you to delete the selected expression maps.

  > NOTE
  >
  > You can only delete custom expression maps. You cannot delete any default expression maps.

2 **Expression Map** 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 later versions of an expression map so you can identify the most recent version.

- **Plugins**

  Allows you to list the names of plug-ins to which the expression map applies, with each name separated by a comma.

  > NOTE
  >
  > You can leave this field blank.

> NOTE
>
> All fields in the **Expression Map** section are locked by the **Lock Info** button at the top right. You must click this button in order to change the information in the fields.

3 **Techniques** section

The **Techniques** section contains the following groups:

- Techniques list

  Contains a list of techniques for the expression map currently selected.

> NOTE
>
> Most instruments have a "natural" technique, which is the most common way of playing the instrument. Dorico requires every instrument to have a defined natural technique.

- Dynamics

  Allows you to choose whether the volume dynamic for the selected technique is controlled by its **Note Velocity** or a **Control Change**.

  > NOTE
  >
  > **Control Change** requires you to 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.

- Technique controls

  Contains controls that affect the technique selected in the Techniques list, such as **Velocity**.

- Exclusion Groups

  Allows you to specify techniques that are mutually exclusive. For example, players cannot be muted and non-muted at the same time. Putting techniques into the same exclusion group means only one can be used at a time.

> NOTE
>
> Although settings are imported into the Technique controls and Exclusion Groups from Cubase, Dorico does not currently implement all the information. This is planned for future versions.

In simple cases, techniques in the Techniques list are individual techniques, such as **Staccato** or **Accent**. However, it is possible to combine multiple techniques for plug-ins that have separate samples for different combinations of techniques. For example, **Staccato + Accent** might require a separate set of switches to **Staccato** and **Accent** individually.

Selecting a technique in the Techniques list makes it available for editing in the **Actions** section. All the controls in this panel apply to the current technique.

You can add new techniques, edit existing techniques, and delete techniques using the following buttons in the Techniques list action bar:

- **Add Technique**

  Allows you to add a new technique or combination of techniques to the expression map from the available techniques in the **Technique Combinations** dialog.

- **Edit Technique**

  Allows you to edit the combination of techniques used in the selected technique in the **Technique Combinations** dialog.

  > NOTE
  >
  > You can also edit existing techniques by double-clicking them in the Techniques list.

- **Duplicate**

  Creates a copy of an existing technique that you can then edit separately from the original.

- **Delete Technique**

  🗑

  Allows you to delete the selected technique.

  > NOTE
  >
  > You can only select one technique at a time in the Techniques list.

4   **Actions** section

Allows you to determine how the switch required to execute each technique is controlled. This section also contains the details of existing actions required to produce the selected playing technique.

Actions can be any of the following types:

- Key switch
- Control change
- Program change

> NOTE
>
> Depending on your plug-in, multiple types of actions can be required to change individual techniques.

In the **Actions** section, actions are displayed in a table with three columns.

Key switch	60	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 so do not use this column.

You can add new actions of each type and duplicate existing actions using the corresponding button in the action bar.

You can delete actions by selecting them individually and clicking **Delete Action** in the action bar.

🗑

The **Actions** section 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 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.

5   **Reset to Library Defaults**

Allows you to revert any changes you have made to the expression maps from the Default Library.

6   **Export Library**

Allows you to select multiple expression maps and export them into a .doricolib file, which you can import into other projects and share with other users.

7 **Import Library**

Allows you to import expression maps from `.doricolib` files.

8 **Import Cubase Expression Map**

Allows you to import an expression map in Cubase format.

NOTE

It is not currently possible to import all combinations of techniques. Cubase expression maps in Dorico often require some editing to function correctly.

However, switch data is preserved.

RELATED LINKS

Technique Combinations dialog

You can create combinations of techniques in the **Technique Combinations** dialog. You can later assign actions to these combinations to create specific sounds in playback.

You can open the **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 technique in the Techniques list and click **Edit Technique**.

● In the **Expression Maps** dialog, double-click an existing technique in the Techniques list.
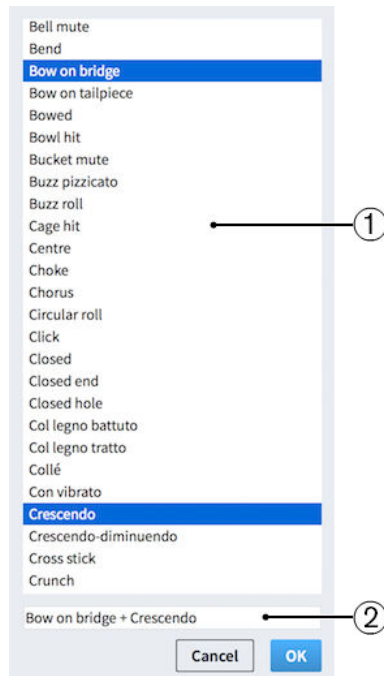
Technique Combinations dialog

1 Techniques list

Allows you to select techniques to include in a new technique or to replace existing techniques.

You can select multiple techniques to combine by **Ctrl/Cmd**-clicking each technique.

2 Name

Displays the name of the selected technique. If you select multiple techniques, each name is automatically separated by a + symbol.

You cannot change the name of techniques.

RELATED LINKS
Expression Maps dialog on page 320

Creating new expression maps

You can create new expression maps from scratch and you can duplicate existing expression maps and edit the settings.

PROCEDURE

1. Choose **Play** > **Expression Maps**.
The **Expression Maps** dialog opens.

2. Create a new expression map in one of the following ways:

- Click **Add Expression Map** to create an empty expression map.

  +

- In the list on the left of the dialog, select an existing expression map on which you want to base a new map and click **Duplicate**.

3. Click **Lock Info** to unlock the fields in the **Expression Map** section.

Locked

Unlocked

4. In the **Expression Map** section, enter information for your expression map in the relevant fields.

5. Optional: In the Techniques list, add a new technique in one of the following ways:

- Click **Add Technique**.

  +

- Select an existing technique and click **Duplicate**.

6. Optional: Open the **Technique Combinations** dialog to change the technique combination for a technique in any of the following ways:

- Double-click the technique.

- Select the technique and click **Edit Technique**.

  ✎

7. Optional: In the **Technique Combinations** dialog, select the techniques you want to combine.

TIP

You can select multiple techniques, but you can also only select a single technique.

8. Optional: Click **OK**.
The **Technique Combinations** dialog closes. Your selected technique combination is available in the Techniques list.

9. Optional: Repeat steps 6, 7, and 8 for any other techniques whose combination you want to change.

10. In the Techniques list, select a technique.

11. In the **Techniques** section, change any of the options relevant to the selected technique.

For example, choose whether the volume of the selected technique is controlled by its **Note Velocity** or a **Control Change**.

12. In the **Actions** section, add an action for the currently selected 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**.

13. Choose the type of event from one of the following options:

- **On Event**
- **Off Event**

14. Optional: Repeat steps 12 and 13 for each action you require for each technique.

15. Optional: If you want to change the values for actions, highlight the value in the field you want to change in any of the following ways:

- Double-click the value you want to change.
- Select the value you want to change and press **Return**.

16. Optional: Change the values in the action value fields in any of the following ways:

- Enter values into the value fields.
- Click the arrows beside the value fields.

17. Optional: Repeat steps 15 and 16 for all the action fields you want to change.

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

RELATED LINKS
Expression Maps dialog on page 320
Endpoint Setup dialog on page 327
Technique Combinations dialog on page 324

Exporting expression maps

You can export expression maps so you can use them in other projects.

PROCEDURE

1. Choose **Play** > **Expression Maps**.
The **Expression Maps** dialog opens.

2. Click **Export Library**.
The File Explorer/macOS Finder dialog opens.

3. In the File Explorer/macOS Finder dialog, specify a name and location for the library file.

4. Click **Save**.

RESULT

The expression map is exported and saved in the selected location.

Importing expression maps

You can import expression maps into projects.

1.   Choose **Play** > **Expression Maps**.

The **Expression Maps** dialog opens.

2.   Click **Import Library**.

The File Explorer/macOS Finder dialog opens.

3.   In the File Explorer/macOS Finder dialog, 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.

Endpoint Setup dialog

The **Endpoint Setup** dialog links expression maps to the relevant endpoint, which is a combination of the VST instrument and its channel.

●   You can open the **Endpoint Setup** dialog by clicking the cog button beside each plug-in in the VST and MIDI Instruments panel.
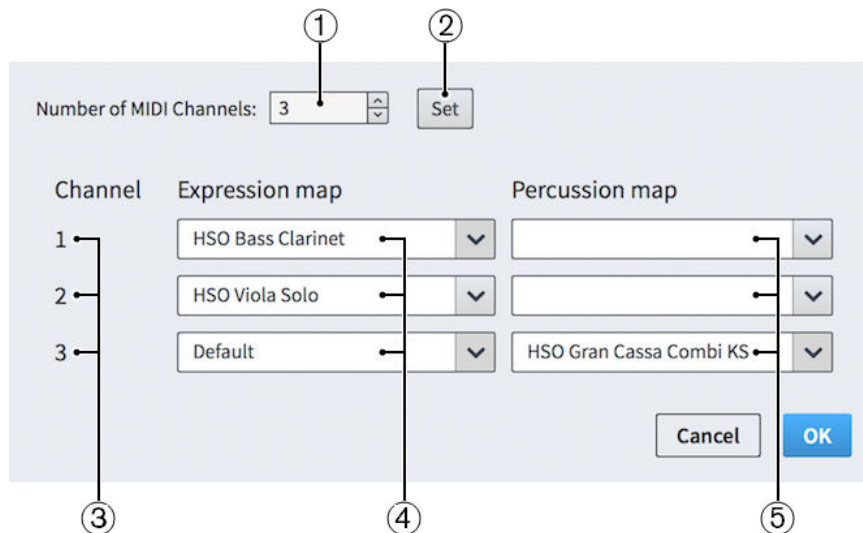
The dialog contains a list of the current channels used by this plugin, and the expression map used on each channel.

1   Number of MIDI Channels

Displays the number of MIDI channels currently used by the corresponding plug-in.

Allows you to 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.

2   Set

Sets the plug-in to have the number of MIDI channels specified in the **Number of MIDI Channels** field.

3   Channel

Displays the channel number of the expression map and percussion map on that line.

4   **Expression map**

Displays the expression map currently loaded in each channel of the plug-in.

You can select other expression maps from each channel menu.

5   **Percussion map**

Displays the percussion map currently loaded in each channel of the plug-in.

You can select other percussion maps from each channel menu.

In addition to the HALion Symphonic Orchestra expression maps, there are four other expression maps:

● **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 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 which play an octave lower than written so that they can be played without needing a full range keyboard.

TIP

You can also create your own custom expression maps in the **Expression Maps** dialog.

Each instrument in your project is connected to a specific endpoint, so assigning an expression map to each endpoint allows Dorico to translate playing technique changes and note articulations into the key switches and controller switches required to reflect those sounds in playback.

If you are using the Default Playback Template with HALion Sonic SE or HALion Symphonic Orchestra, endpoints and expression maps are set up automatically. However, if you want to load other plug-ins or change the patches within HALion Sonic SE, then you must use the **Endpoint Setup** dialog.

For example, if you have a project that uses the Default Playback Template and you change one of the sounds in HALion Sonic SE, such as changing Clarinet Combi in HALion Symphonic Orchestra to GM Clarinet, this plays back incorrectly because the HALion Symphonic Orchestra patch uses a modulation wheel to control volume dynamics, but the GM patch uses note velocity. In playback, notes consequently have no dynamics and too much vibrato. You can correct this in the **Endpoint Setup** dialog by changing the expression map for that channel from the HALion Symphonic Orchestra Clarinet to **Default**, which uses note velocity for dynamics instead of a modulation wheel.

RELATED LINKS

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, sample 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 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 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. They are automatically chosen when you add percussion instruments to your project.

You can define custom percussion maps for third-party sound libraries or MIDI devices in the **Percussion Maps** dialog, in order to obtain correct playback.

RELATED LINKS

Percussion Maps dialog

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.

- You can open the **Percussion Maps** dialog in Play mode by choosing **Play** > **Percussion Maps**.
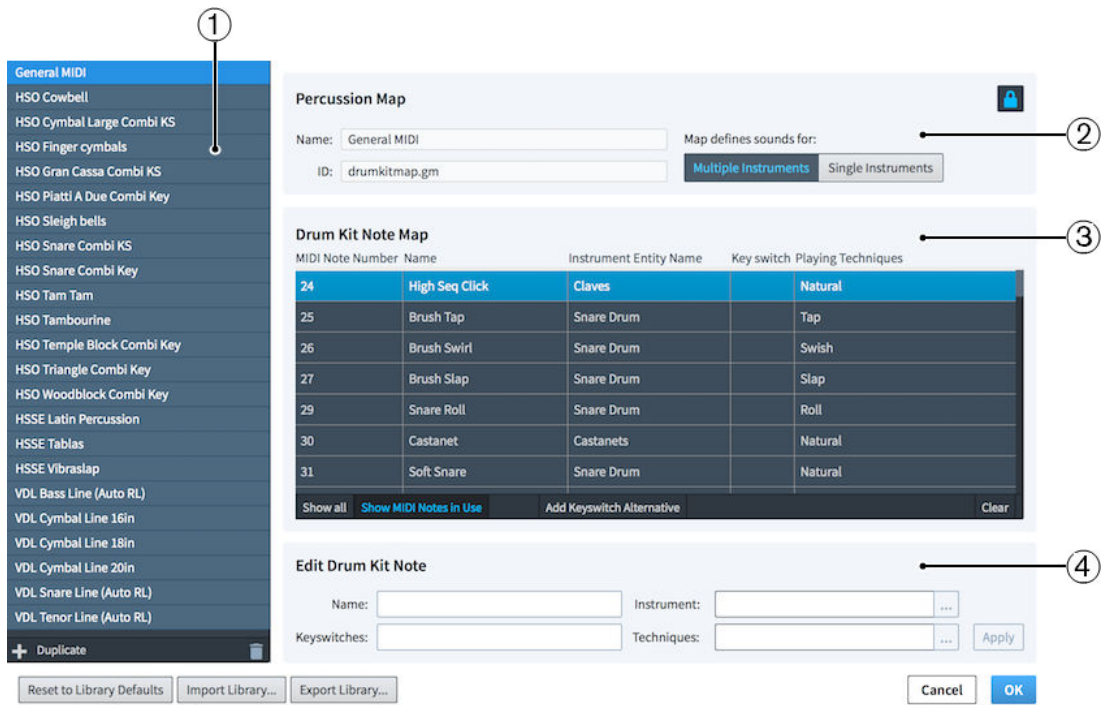
Percussion Maps dialog

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**

  ![+]

  Allows you to add a new percussion map that contains no existing settings.

- **Duplicate**

  Creates a copy of an existing percussion map that you can then edit separately from the original.

- **Delete Percussion Map**

  ![trash]

  Allows you to delete the selected percussion maps.

  NOTE

  You can only delete custom percussion maps. You cannot delete any default percussion maps.

2   **Percussion Map** section

Allows you to specify the following identifying information for the selected percussion map:

- **Name**

  Allows you to specify the display **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**.

The **Endpoint Setup** dialog is where you set which percussion map Dorico 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.

- **Singe Instruments**

  Choose this if the patch for which you are creating a map contains only a single percussion instrument, perhaps with multiple playing techniques for that instrument. For example, a snare drumline patch in Virtual Drumline or another specialist sample library.

  This can also be useful when your VST instrument has several patches that have the same 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.

3 **Drum Kit Note Map** section

Lists all MIDI notes from 0 to 127. You can specify which combination of unpitched instrument and playing technique is produced by each note.

4 **Edit Drum Kit Note** section

Allows you to specify data in the following fields for the MIDI note selected in the **Drum Kit Note Map** section:

- **Name**

  The display name for the specific combination of instrument and technique. You may choose to input whatever name is used in the manufacturer's documentation for your VST instrument or MIDI output device.

- **Instrument**

  Select an instrument for the MIDI note selected in the **Drum Kit Note Map** section from a list of all the unpitched percussion instruments you can create in Dorico.

- **Techniques**

  Select a playing technique to apply to the instrument selected in the **Instrument** field from a list of all the playing techniques you can create in Dorico.

- **Keyswitches**

  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 playing techniques.

Key switches are not compulsory.

Defining custom percussion maps

You must define custom percussion maps in order to obtain correct playback when using third-party sound libraries or MIDI devices. You can create new, empty percussion maps, or create custom percussion maps based on existing maps that you have duplicated.

PROCEDURE

1. Choose **Play** > **Percussion Maps**.

   The **Percussion Maps** dialog opens.

2. Create a new custom percussion map in any of the following ways:

   - Click **Add Percussion Map** to create an empty map.

   - In the list on the left of the dialog, select an existing percussion map on which you want to base a new custom map and click **Duplicate**.

3. Click **Lock Info** to unlock fields in the **Percussion Map** section.

   Locked

   Unlocked

4. In the **Percussion Map** section, enter the display name you want for the percussion map in the **Name** field.

   This name appears in the **Endpoint Setup** dialog.

5. In the **Percussion Map** section, 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. In the **Percussion Map** section, 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** section, click the following button beside the **Instrument** field.

   A dialog containing a list of instruments opens.

10. Select the instrument that corresponds to the sound produced by the selected MIDI note from the list.

11. Click **OK**.

12. In the **Edit Drum Kit Note** section, click the following button beside the **Techniques** field.

    A dialog containing a list of playing techniques opens.

13. Select the appropriate playing techniques for the sound produced by the selected MIDI note from the list.

    For example, **Ctrl/Cmd**-click **Buzz roll** and **Rim**.

14. Click **OK**.

15. In the **Edit Drum Kit Note** section, enter the display name you want for this combination of instrument and playing technique in the **Name** field.

16. In the **Edit Drum Kit Note** section, specify the MIDI note number of the key switch if this sound requires one in the **Keyswitches** field.

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.

NOTE

Once you have created a percussion map, you must apply it to the VST instrument or MIDI device that provides the patch corresponding to each percussion map.

AFTER COMPLETING THIS TASK

You can export the percussion map if you want to use it in other projects.

RELATED LINKS
Percussion Maps dialog on page 329
Percussion maps on page 329
Linking percussion maps to VST instruments and MIDI devices on page 334
Exporting percussion maps on page 333
Endpoint Setup dialog on page 327

Exporting percussion maps

You can export percussion maps so you can use them in other projects.

PROCEDURE

1. Choose **Play** > **Percussion Maps**.
The **Percussion Maps** dialog opens.

2. Click **Export Library**.
The File Explorer/macOS Finder dialog opens.

3. In the File Explorer/macOS Finder dialog, specify a name and location for the library file.

4. Click **Save**.

RESULT

The percussion map is exported and saved in the selected location.

Importing percussion maps

You can import percussion maps into projects.

PROCEDURE

1. Choose **Play** > **Percussion Maps**.
The **Percussion Maps** dialog opens.

2. Click **Import Library**.
The File Explorer/macOS Finder dialog opens.

3. In the File Explorer/macOS Finder dialog, 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.

Linking percussion maps to VST instruments and MIDI devices

Once you have created a percussion map, you must apply it to the VST instrument or MIDI device that provides the patch corresponding to each percussion map.

PROCEDURE

1. In Play mode, click the following button for the VST instrument or MIDI device to which you want to link a percussion map.

⚙

2. In the **Endpoint Setup** dialog that opens, select a percussion map in the **Percussion map** column for the channel in which your percussion patch has been loaded.

TIP

You can check into which channel your percussion patch is loaded in the **VST Instrument Window**, which you open by clicking the following button.

ⓔ

RESULT

The selected percussion map is linked to the percussion patch loaded into the corresponding channel.

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 **Edit Percussion Playing Techniques** dialog in any of the following ways:

- For an individual percussion instrument: Expand the card of the player holding the instrument in the **Players** panel in Setup mode, 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: Open the **Edit Percussion Kit** dialog by clicking the arrow in the kit instrument label in the **Players** panel in Setup mode, 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 **Playing technique** field.

…

5. Select the playing technique you want from the list in the dialog that opens.

You can select multiple playing techniques by holding down **Ctrl/Cmd** and clicking the 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 a 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

Creating new playing technique-specific noteheads for unpitched percussion instruments on page 792

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, 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
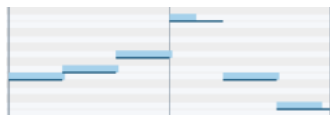
Changing the played duration of notes

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.

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 cursor 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

Removing changes to the played duration of notes

You can remove all changes made to the played duration of individual notes, for example, if you change your mind about playback overrides you have made and want to revert those notes 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

Note velocity is not currently displayed in Dorico, but note velocities are imported from MIDI files. If you want dynamics you input in Write mode to take effect in playback, you must remove playback overrides.

PROCEDURE

1. In the piano roll editor or drum editor, select the notes whose played durations you want to reset.

2. Choose **Play** > **Reset Playback Overrides**.

RESULT

All overrides to the default played duration of the selected notes are removed.

NOTE

The played duration of the selected notes 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.

Print mode

Print mode allows you to print your layouts or to export them as graphic files, such as PDF and SVG.

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**.
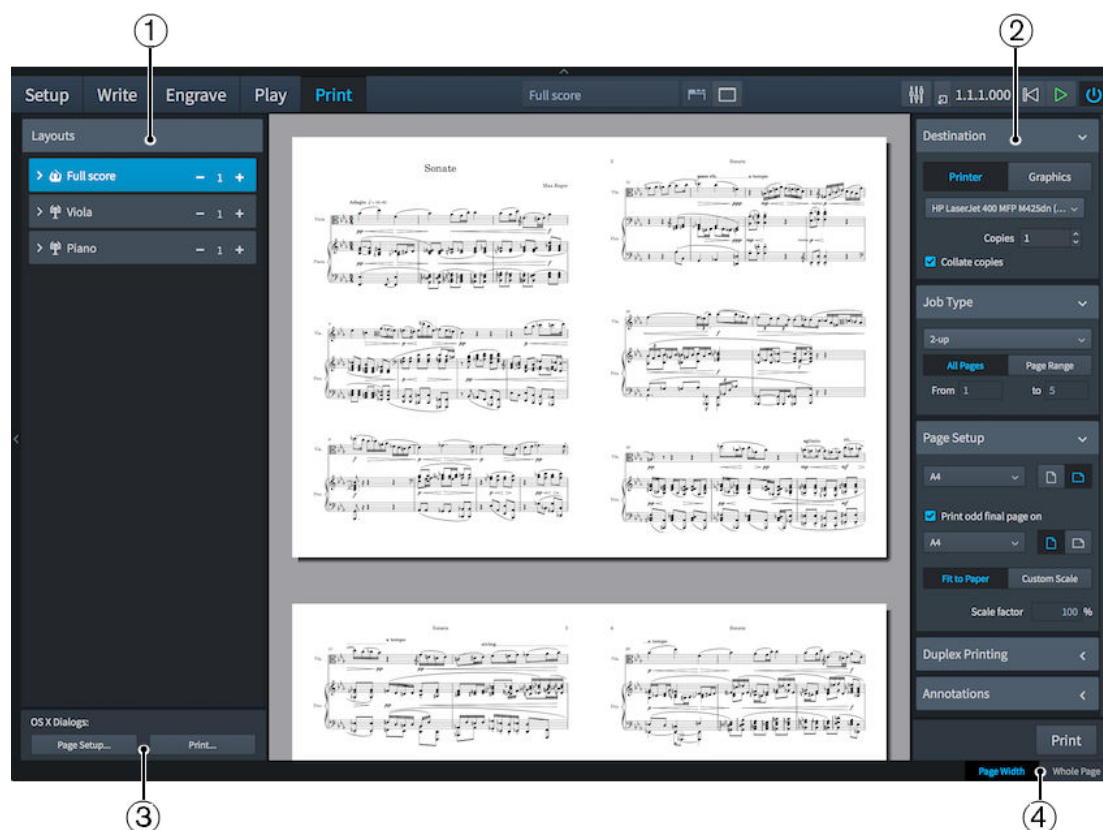
Panels and sections in Print mode

The following panels and sections are available:

1   **Layouts** panel

Shows a list of all layouts in your project and allows you to select what to print or export.

NOTE

The **Select Layout** menu 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   macOS: **OS X Dialogs** section

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**

  The whole page is shown in the print preview area.

RELATED LINKS
Toolbar on page 39
Print preview area on page 43

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.
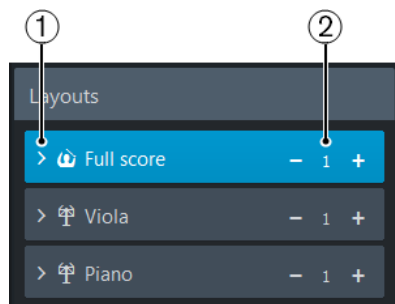
1   Allows you to expand each layout to see its page size and its number of pages. This helps you determine what kind of job type to use for each layout.

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.

2   Shows the number of copies to be printed.

The selected layouts are printed/exported when you click **Print** or **Export**.

NOTE

If you have selected some layouts set to print and some set to export graphics, the button reads **Print and Export**.

Print Options panel

The Print Options panel contains options for printing or exporting your layouts.
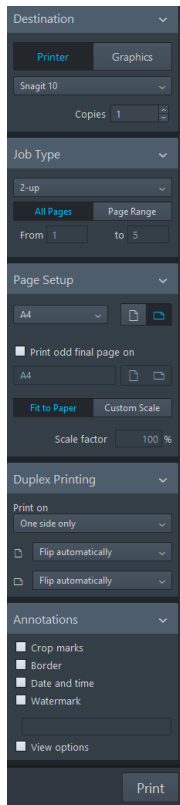
All the options that you set in the Print Options panel are saved with your project. The options are divided into the following sections:

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 and directory of the saved file.

Depending on the destination that you choose, the button at the bottom of the panel switches to either **Print** or **Export**.

NOTE

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 bureaux, 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

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 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 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 **Select Layout** menu 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. Optional: Change the number of copies in any of the following ways:

   - Click **-** or **+** in each layout card.
   - In the Print Options panel, enter the number of copies into the **Copies** field in the **Destination** section.

     NOTE

     Changing the **Copies** value changes the number of copies for all selected layouts.

3. Optional: Activate/Deactivate **Collate copies**.
4. In the Print Options panel, choose **Printer** in the **Destination** section.

5. Optional: Select a printer from the menu.

6. In the **Job Type** section, select the page arrangement you want from the menu.

7. In the **Job Type** section, choose the pages you want to print from the following options:

- **All Pages**

- **Page Range**

8. Optional: If you selected **Page Range**, enter the first/last pages of the range into the **From**/**to** fields.

9. In the **Page Setup** section, select a paper size from the menu.

10. Choose the paper orientation you want.

11. Optional: If you selected **Spreads** or **2-up** for the job type, activate/deactivate **Print odd final page on**.

12. Select a paper size for the odd final page.

13. Choose a paper orientation for the odd final page.

14. Choose one of the following size options:

- **Fit to Paper**

- **Custom Scale**

15. Optional: If you selected **Custom Scale**, enter the scale factor you want into the **Scale factor** field.

16. In the **Duplex Printing** section, select one of the printing options from the **Print on** menu.

17. Optional: If you selected a duplex printing option, use the lower menus to select how the printed image is flipped when printing on the reverse side of the paper.

18. In the **Annotations** section, activate each annotation you want to add to the selected layouts.

19. Click **Print**.

RESULT

The selected layouts are printed according to the print settings you have applied.

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**, and your existing print settings are applied, even if your selection contains layouts with different print settings.

RELATED LINKS

Specifying macOS-specific printing options (macOS only)

Dorico 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 print options are always saved with your project.

PROCEDURE

1.   In the **Layouts** panel, click **Page Setup** in the **OS X Dialogs** section.
      The macOS **Page Setup** dialog opens.

2.   In the **Page Setup** dialog, set the paper size.

3.   Click **OK**.

4.   In the **OS X Dialogs** section, click **Print**.
      The macOS **Print** dialog opens.

5.   In the **Print** dialog, set up the printing options you want.

Exporting layouts as graphic files

You can export individual layouts as a variety of graphic files, such as PDF or PNG.

PREREQUISITE

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.   Select a graphics file format from the menu.

4.   Optional: If you selected **PNG** or **TIFF**, select a resolution from the **Resolution** menu.

      TIP

      You cannot change the resolution if you select **PDF** or **SVG**. However, if you select **PNG** or **TIFF**, change the resolution, and then select **PDF** or **SVG**, the resolution you selected still applies.

5.   Choose a color mode.

      ●   **Mono** exports the graphic in black and white.

      ●   **Color** exports the graphic in full color.

      NOTE

      If you export a graphic file with a resolution of 72 dpi, it is recommended that you select **Color**. If you select **Mono**, staff lines may disappear.

6.   Click **Export**.

RESULT

The selected layouts are exported as the selected graphics format. They are saved in the folder set in the **Destination folder** field.

Specifying an export path for graphic files

You can specify a path to a folder in which exported graphic files are saved and add information to each exported file.

Dorico by default exports graphic files into the same folder as your project file. If you have not saved your project yet, graphic files are saved in the default user folder of your operating system. You can save the exported graphics in a different folder.

PROCEDURE

1. In the **Destination** section, click **Choose Folder** next to the **Destination folder** field.

    ...

    The File Explorer/macOS Finder dialog opens.

2. In the File Explorer/macOS Finder dialog, locate and select the destination folder you want.

3. Click **Open**.

    The new path is inserted in the **Destination folder** field.

4. Optional: Activate **Include date in file name** to include the date and time of export in the file names.

    NOTE

    Date and time are included in the ISO 8602 format, for example, 2016-05-01-143723.

RESULT

Exported files are saved in the selected destination as follows:
<project name> <layout name> <date and time>.<file extension>.
Example: `MyProject Soprano 2016-05-01-143723.pdf`

Monochrome and color graphics processing

Dorico 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 graphic files and print them with your own printer, you can leave **Color** selected in the **Destination** section.

However, if you export graphic 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 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 specifies colors using the RGB color model, rather than the CMYK color model which 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 graphic files that are exported from Dorico in another graphics application to convert the colors from RGB to CMYK.

RELATED LINKS

Embedding of fonts in PDF and SVG files

How fonts are handled in PDF and SVG (Scalable Vector Graphics) files mainly depends on the fonts that you use in the project.

PDF Files

The music and text fonts that are supplied with Dorico, these and their sub-sets 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 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. It depends on the browser or the rendering software, and on the fonts that are installed on the computer, how the SVG file appears.

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 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 Steinberg Help Center.

Printers

You can print layouts from Dorico 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 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 capability.

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.

Page arrangements for printing/exporting

Dorico 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 switches the orientation for you. 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 following value fields available:

- **From**

  Allows you to set the first page in the range you want to print/export.

- **to**

  Allows you to set the last page in the range you want to print/export.

RELATED LINKS

Booklet printing

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 reorders 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 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.

RELATED LINKS

Page size options

You can set pages to have different sizes in each layout independently.

- **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.

Paper orientations

Paper can have one of two possible orientations: landscape or portrait.

Instrumental parts are most often printed using a 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 a portrait orientation, as this allows more staves to fit on the page than when using a landscape orientation. However, full scores for small ensembles might use a landscape orientation as not as many staves must 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, you can set the orientation for each layout independently. You can also separately set the orientation of the odd final page in layouts using the **Spreads** and **2-up** page arrangements.

RELATED LINKS

Printing/Exporting a page range

By default, Dorico prints/exports all pages of the selected layouts. However, 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 **Job Type** section, select **Page Range**.
2. Specify the first and last page of the range in the **From** and **to** fields.
3. Click **Print/Export/Print and Export**.

Duplex printing

Dorico allows duplex printing, which means that you can print on both sides of each sheet of paper.

If your printer supports automatic duplex printing, Dorico can use this capability. If your printer can only print on one side of each sheet of paper, you can still use the duplex printing function.

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 capability. 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. Then click **OK** to continue printing the inward pages.

NOTE

Both sides manually only works when the **Job Type** is set to **Booklet**. Therefore, we recommend that you select **Both sides automatically** when printing **Spreads** or **2-up** job types.

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 lower 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** allows the printer to use its 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 to correct this.
- **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** allows the printer to use its 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 to correct this.
- **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.

RELATED LINKS

Handling page sizes and paper sizes

Dorico handles page sizes and paper sizes differently.

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. This has no effect on your layout's page size and therefore, does not affect the way the music is laid out.

If you do not select a specific paper size, Dorico 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 the 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 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 automatically scales the image to fit the paper. You can change this setting by specifying a custom scale factor in the **Page Setup** section.

Page setup

You can specify different paper sizes and orientation settings for each layout you want to print/ export.

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.

You can also 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.

NOTE

This setting is useful if your layout has an odd number of pages and you choose to print on A3 paper in landscape orientation. 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. This setting allows you to print the odd final page on A4 paper in portrait orientation.

Fit to Paper

Scales the layout to fit the paper.

Custom Scale

Allows you to define a different scale for the layout by entering a percentage value into the **Scale factor** field.

RELATED LINKS
Page arrangements for printing/exporting on page 346

Graphics file formats

Dorico 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.

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.

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 graphic files on page 343

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, you can export PNG and TIFF files with one of four different image resolutions. The image resolution is measured in dots per inch, or "dpi".

- **72**
- **150**
- **300**
- **600**

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 or 600 dpi, a high-resolution image is saved that you can include as an illustration in a word processing or in a desktop publishing document.

RELATED LINKS
Exporting layouts as graphic files on page 343

Annotations

When printing/exporting your layouts for publication, you can include typical annotations. Publishers and printing bureaux can use these to identify and register the printed image correctly or to embed the exported graphic file into a desktop publishing application.

You can also allow Dorico 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 Text** field at the bottom of the section, you can enter the text that you want to show on each page.

View options

Adds all active view options, such as signposts and note colors, to the printout or exported graphic.

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, both for individual items and by changing project-wide 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 can outline project-wide changes you can make in **Engrave** > **Engraving Options**, such as changing spacing gaps or the project-wide appearance of pedal lines, or the individual changes you can make to items, which often involve using properties in the Properties panel.

You can find basic input methods for notations in the Write mode chapter.

RELATED LINKS

Accidentals

Accidentals show that the pitch of a note has been altered so that it does not conform to the current prevailing key signature.

In music that has no key signatures, some or all notes might require accidentals, depending on the notation convention in use.

Dorico provides comprehensive duration rules that determine when accidentals are shown, and also allows you to control how accidentals are arranged in complex chords.

RELATED LINKS

Changing accidentals

You can change the accidentals of notes after they have been input.

PROCEDURE
1. In Write mode, select the notes whose accidentals you want to change.
2. Change the accidentals in one of the following ways:

    - Press **0** to change the accidentals to a natural.
    - Press **-** to change the accidentals to a flat.
    - Press **=** to change the accidentals to a sharp.
    - Click the type of accidental that you want in the Notes panel.

RESULT

All selected notes are changed to have the accidental you selected, even if notes in your selection originally had different accidentals.

RELATED LINKS

Deleting accidentals

You can delete accidentals according to their type.

PROCEDURE
1. In Write mode, select the note whose accidental you want to delete.
2. Deactivate the accidental 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.

> NOTE
>
> If a note of the same pitch appears with an accidental earlier in the bar, but that accidental has not been deleted, any subsequent notes of the same pitch assume that accidental even if it does not appear by every notehead.

RELATED LINKS

Deleting accidentals from multiple notes

Deleting accidentals from multiple notes works in a similar way to deleting an accidental from an individual note, but more information is required for a selection that includes different types of accidentals.

PROCEDURE

1. In Write mode, select the group of notes whose accidentals you want to delete.
   - If the notes are adjacent, select the first note of the group, then **Shift**-click the last note of the group.
   - If the notes are separated by other notes, **Ctrl/Cmd**-click each note from which you want to remove an accidental individually.
2. Optional: For a selection including just one type of accidental, deactivate that accidental in one of the following ways:
   - Press **0** to delete naturals.
   - Press **-** to delete flats.
   - Press **=** to delete sharps.
   - Click the accidental in the Notes panel.
3. Optional: For a selection including multiple types of accidentals, click **Natural** in the Notes panel, or press **0**.

> NOTE
>
> Re-inputting an accidental over a selection of notes, where multiple accidentals are being used, adds the accidental you choose 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 more, all accidentals are deleted.
>
> Therefore, to delete accidentals from a selection with multiple accidentals, we recommend that you input a natural by clicking **Natural** in the Notes panel, or by pressing **0**.

Showing accidentals in parentheses

You can show individual accidentals in parentheses, and also hide/show accidentals individually. For example, you can show an accidental in parentheses on subsequent notes in tie chains that cross system/frame breaks.

PROCEDURE

1. Select the notes whose accidental appearance you want to change, or beside which you want to show cautionary accidentals. You can do this in Write mode and Engrave mode.

> **NOTE**
>
> You can only select individual noteheads within tie chains in Engrave mode.

2. In the Properties panel, activate **Accidental** in the **Notes and Rests** group.

3. Select one of the following options from the menu:

   - **Show**
   - **Hide**
   - **Parenthesize**

   > **NOTE**
   >
   > Hiding accidentals does not affect the pitch of notes in playback.

RESULT

Accidentals on the selected notes are shown, hidden, or shown in parentheses.

> **NOTE**
>
> If you are hiding/showing many accidentals, it might be easier to change the accidental duration rule for the project.

RELATED LINKS
Accidental duration rules on page 360

Project-wide engraving options for accidentals

You can find options for the project-wide appearance and position of accidentals on the **Accidentals** page in **Engraving Options**.

The options on the **Accidentals** page allow you to change the order of accidentals in chords and the precise positioning of accidentals relative to noteheads and parentheses.

There are musical examples for many options to demonstrate how they affect the appearance of your music.

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

- Press **Ctrl/Cmd-Shift-E** in any mode.
- Choose **Engrave** > **Engraving Options** in Engrave mode.

You can then click **Accidentals** in the page list on the left of the dialog.

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, this is notated with a split stem, sometimes known as a "cherry stalk" or a "tree", which allows both notes to appear with their corresponding accidental directly beside them.

You can also have 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.

EXAMPLE

A single stem altered unison

A split stem altered unison

RELATED LINKS

Changing how altered unisons appear individually

You can change how individual altered unisons appear, independently of your project-wide settings and independently of other altered unisons in chords.

PROCEDURE

1. Select the altered unison notes whose appearance you want to change. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate **Split stem** in the **Notes and Rests** group.

3. Activate/Deactivate the corresponding checkbox.

RESULT

The selected altered unison notes are shown with split stems when the checkbox is activated, and with single stems when the checkbox is deactivated.

NOTE

Split stem applies to individual notes. You can have altered unisons appear differently within the same chord by setting their properties independently.

Changing how altered unisons appear project-wide

You can change how altered unisons appear project-wide. They can appear either beside each other or as split stems.

You can also change how chords containing multiple altered unisons appear project-wide. Notes can be shown on only one side of the original stem or on both sides of the original stem.

PROCEDURE

1. In Write mode, choose **Write** > **Notation Options**.
   The **Notation Options** dialog opens.

2. In the **Flows** list, select the flows in which you want to make changes in one of the following ways:

   ● **Ctrl/Cmd**-click individual flows.

   ● **Shift**-click adjacent flows.

   ● Click **Select All**.

   By default, only the current flow is selected when you open the dialog.

3. Select **Accidentals** from the **Category** menu.

4. In the **Altered unisons** section, choose one of the following options for **Appearance of altered unisons**:

- **Single stem**

- **Split stem**

5. Optional: In the **Altered unisons** section, choose one of the following options for **Chords with multiple altered unisons**:

- **Allocate only to the left**

- **Alternate between right and left**

6. Click **Apply**, then **Close**.

Microtonal accidentals

Microtonal accidentals indicate pitches beyond the standard accepted chromatic scale in Western tonality, such as a quarter sharp. You can customize microtonal accidentals in Dorico.

The default tonality system can be found in the Key Signatures, Tuning Systems, and Accidentals panel on the right of the window. In Write mode, the default is **Equal temperament (12-EDO)**. When this option is selected, the accidentals available at the bottom of the menu are half-step (semitone) accidentals, such as sharp, flat, double flat, and so on.

You can use microtonal accidentals, such as quarter sharp or quarter flat, when you have selected a tonality system that includes microtonal accidentals in the **Tonality Systems** section of the Key Signatures, Tuning Systems, and Accidentals panel. For example, **Equal temperament (24-EDO)**.

NOTE

Even if you do not want to use a conventional key signature, you must create an open or atonal key signature in order to use the microtonal accidentals.

TIP

You can also define your own tonality systems with custom octave divisions, key signatures, and accidentals.

RELATED LINKS

Inputting microtonal accidentals

You can input microtonal accidentals, such as quarter tone flat or three quarter tones sharp, into your project.

PREREQUISITE

You have input a key signature and selected a tonality system for that key signature that allows microtonal accidentals, such as **Equal temperament (24-EDO)**, for the section of your project where you want to input microtonal accidentals.

PROCEDURE

1. In Write mode, select the note or notes to which you want to apply a microtonal accidental.

2. In the Key Signatures, Tuning Systems, and Accidentals panel, click the microtonal accidental you want in the **Accidentals** section.

RESULT

The selected microtonal accidental appears beside the selected note or notes.

NOTE

You can only input one type of accidental at a time.

RELATED LINKS

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 allows you to use different accidental duration rules.

Common practice

In Dorico, this is the default accidental duration rule. In common practice, an accidental applies for the duration of a bar and only to the pitch at which it is written; each octave requires a separate accidental.

Second Viennese School

The Second Viennese School accidental duration rule requires writing every note with an accidental, including naturals.

Modernist

The Modernist accidental duration rule states that only notes that have been altered from the key signature show accidentals; naturals are not shown.

RELATED LINKS

Changing the accidental duration rule

You can change the accidental duration rule to the one most appropriate for your project.

PROCEDURE

1. In Write mode, choose **Write** > **Notation Options**.
   The **Notation Options** dialog opens.

2. In the **Flows** list, select the flows in which you want to change the accidental duration rule in one of the following ways:

   - **Ctrl/Cmd**-click individual flows.
   - **Shift**-click adjacent flows.

- Click **Select All**.

    By default, only the current flow is selected when you open the dialog.

3. Select **Accidentals** from the **Category** menu.
4. In the **Basic** section, choose one of the following options for **Accidental duration rule**:

    - **Common Practice**
    - **Second Viennese School**
    - **Modernist**

5. Click **Apply**, then **Close**.

RELATED LINKS
Common practice accidental duration rule on page 361
Second Viennese School accidental duration rule on page 363
Modernist accidental duration rule on page 364

Double accidental cancellation

There are two generally accepted practices for the cancellation of double accidentals, which are archaic and modern. You can use either practice in each flow independently in Dorico.

By default, Dorico 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.

You can change how double accidentals are cancelled project-wide in the **Basic** section of the **Accidentals** page in **Write** > **Notation Options**.

- If you choose **Use archaic cancellation**, natural signs are shown before new accidentals that come after double accidentals.

- If you choose **Use modern cancellation**, double accidentals are replaced immediately with a new accidental without showing a natural sign first.

EXAMPLE

Archaic cancellation

Modern cancellation

RELATED LINKS
Notation Options dialog on page 110

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, the common practice accidental duration rule is used by default. You can change the accidental duration rule on the **Accidentals** page in **Write** > **Notation Options**.

Common practice rules

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 also displays cautionary accidentals. Cautionary accidentals, also known as "courtesy accidentals", 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 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.

RELATED LINKS
Changing the accidental duration rule on page 360
Hiding/Showing cautionary accidentals on page 363
Cancelling double accidentals (Common practice) on page 362

Cancelling double accidentals (Common practice)

You can change the way double accidentals are cancelled if you use the common practice accidental duration rule.

PROCEDURE

1. In Write mode, choose **Write** > **Notation Options**.
   The **Notation Options** dialog opens.

2. In the **Flows** list, select the flows in which you want to change the cancellation rule for double accidentals in one of the following ways:

   ● **Ctrl/Cmd**-click individual flows.

   ● **Shift**-click adjacent flows.

   ● Click **Select All**.

   By default, only the current flow is selected when you open the dialog.

3. Select **Accidentals** from the **Category** menu.

4. In the **Basic** section, choose one of the following options for **Single accidentals cancelling double accidentals**:

   ● **Use archaic cancellation**
     Double accidentals are cancelled by a natural-sharp or a natural-flat sign.

   ● **Use modern cancellation**
     Double accidentals are cancelled by a single sharp or a single flat sign.

5. Click **Apply**, then **Close**.

Hiding/Showing cautionary accidentals

You can hide/show cautionary accidentals if you use the common practice accidental duration rule.

PROCEDURE

1. In Write mode, choose **Write** > **Notation Options**.

   The **Notation Options** dialog opens.

2. In the **Flows** list, select the flows in which you want to hide/show cautionary accidentals in one of the following ways:

   - **Ctrl/Cmd**-click individual flows.
   - **Shift**-click adjacent flows.
   - Click **Select All**.

   By default, only the current flow is selected when you open the dialog.

3. Select **Accidentals** from the **Category** menu.

4. In the **Cautionary (courtesy) accidentals** section, choose the options that you want to apply to your project.

5. Click **Apply**, then **Close**.

RELATED LINKS
Common practice accidental duration rule on page 361

Second Viennese School accidental duration rule

The accidental duration rule of the Second Viennese School states that an accidental applies only to the note on which it is written. All notes show an accidental regardless of key signature, including unaltered notes which show naturals.

This accidental duration rule was used by Schoenberg and other composers of the Second Viennese School.

You can change the accidental duration rule on the **Accidentals** page in **Notation Options**.

Restating accidentals after intervening change of pitch (Second Viennese School)

If you use the Second Viennese School accidental duration rule, you can allow that an immediate repetition of the same note, including those on either side of an intervening rest, within the same bar does not require the accidental to be restated.

PROCEDURE

1. In Write mode, choose **Write** > **Notation Options**.

   The **Notation Options** dialog opens.

2. In the **Flows** list, select the flows in which you want to change the Second Viennese School rule for restating accidentals in one of the following ways:

   - **Ctrl/Cmd**-click individual flows.
   - **Shift**-click adjacent flows.
   - Click **Select All**.

   By default, only the current flow is selected when you open the dialog.

3. Select **Accidentals** from the **Category** menu.

4. In the **Second Viennese School options** section, choose **Restate after intervening change of pitch** for **Accidentals on immediate repetitions of the same note within a bar**.

5. Click **Apply**, then **Close**.

Modernist accidental duration rule

The Modernist accidental duration rule states that only notes that have been altered from the key signature show accidentals. Naturals are not shown. However, accidentals that are shown only apply to the notes on which they are written, as with the Second Viennese School.

You can change the accidental duration rule on the **Accidentals** page in **Notation Options**.

RELATED LINKS
Second Viennese School accidental duration rule on page 363

Restating accidentals after intervening change of pitch (Modernist)

If you use the Modernist accidental duration rule, you can prevent accidentals from being shown on an immediate repetition of a note of the same pitch within a bar.

NOTE

Charles Ives and Robert Crumb used this variation.

PROCEDURE

1. In Write mode, choose **Write** > **Notation Options**.
The **Notation Options** dialog opens.

2. In the **Flows** list, select the flows in which you want to change the Modernist rule for restating accidentals in one of the following ways:

● **Ctrl/Cmd**-click individual flows.

● **Shift**-click adjacent flows.

● Click **Select All**.

By default, only the current flow is selected when you open the dialog.

3. Select **Accidentals** from the **Category** menu.

4. In the **Basic** section, choose one of the following options for **Accidental duration rule**:

● **Common Practice**

● **Second Viennese School**

● **Modernist**

5. In the **Modernist options** section, choose **Restate after intervening change of pitch** for **Accidentals on immediate repetitions of the same note within a bar**.

6. Click **Apply**, then **Close**.

Preventing restatements of accidentals on repetitions of notes in beamed groups

If you use the Modernist accidental duration rule, you can prevent accidentals from being shown on a repetition of a note of the same pitch within the same beam group.

PROCEDURE

1. In Write mode, choose **Write** > **Notation Options**.

364

The **Notation Options** dialog opens.

2.   In the **Flows** list, select the flows in which you want to change the Modernist rule for restating accidentals in one of the following ways:

- **Ctrl/Cmd**-click individual flows.

- **Shift**-click adjacent flows.

- Click **Select All**.

By default, only the current flow is selected when you open the dialog.

3.   Select **Accidentals** from the **Category** menu.

4.   In the **Modernist options** section, choose **Do not restate within a beamed group** for **Accidentals on repetitions of the same note within a beamed group**.

5.   Click **Apply**, then **Close**.

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, 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.

Stacking rules for dense chords

For dense chords with six or more accidentals within the span of an octave, 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.

Stacking accidentals without interspersion

You can allow accidentals to be stacked without interspersion, so that the accidentals in the columns describe a diagonal line sloping downwards to the left.

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Engraving Options**.

The **Engraving Options** dialog opens.

2. Click **Accidentals** in the page list.

3. In the **Stacking** section, choose **Arrange stacks high to low** for **Order of accidental stacks in lattice arrangement**.

4. Click **Apply**, then **Close**.

Changing the stacking rule for accidentals in dense chords

You can change the accidental stacking rule used for all dense chords project-wide.

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Engraving Options**.

The **Engraving Options** dialog opens.

2. Click **Accidentals** in the page list.

3. In the **Stacking** section, choose one of the following options for **Arrangement for dense chords with many accidentals**:

- **Use lattice arrangement**

- **Use zig-zag arrangement**

4. Click **Apply**, then **Close**.

RESULT

The arrangement of accidentals in dense chords is changed project-wide.

NOTE

The lattice arrangement is wider and uses more columns than the default zig-zag arrangement that is used in Dorico for dense chords.

Kerning of accidental columns

Dorico 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, 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.

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, 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 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, which is sometimes called a strong accent. Dorico 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, which is sometimes called louré. If a note includes ties, Dorico 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 shows these articulations at the start of a note or tie chain by default.

You can find the articulations at the bottom of the Notes panel in Write mode.

Dorico 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.

You can change the effect of articulations on playback, based both on the type of instrument and the playback devices in use in the **Note Dynamics** section of the **Dynamics** page in **Playback Options**.

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

- Press **Ctrl/Cmd-Shift-P** in any mode.
- Choose **Play** > **Playback Options** in Play mode.

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.
   - Choose **Edit** > **Copy**, select the position where you want to copy the selected notes, and choose **Edit** > **Paste**.

     NOTE

     You can also use the standard key commands of your operating system for copying and pasting: usually **Ctrl/Cmd-C** for copy, and **Ctrl/Cmd-V** for paste.

   - Hold down **Alt**, then click at the position where you want to copy the selected notes with articulations.

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.

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.

RELATED LINKS

Project-wide engraving options for articulations

You can find options for the appearance and placement of articulations project-wide on the **Articulations** page in **Engraving Options**.

The options on this page allow you to change the positions of articulations in detail, including whether different articulations are shown above the staff or by the notehead, the positions of articulations relative to ties and slurs, and the vertical gaps between articulations and notes/other articulations.

There are musical examples for many options to demonstrate how they affect the appearance of your music.

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

- Press **Ctrl/Cmd-Shift-E** in any mode.
- Choose **Engrave** > **Engraving Options** in Engrave mode.

You can then click **Articulations** in the page list on the left of the dialog.

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

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 tied notes

You can change where in tie chains articulations appear individually, independently of your project-wide settings. 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 whose articulation position you want to change. You can do this in Write mode and Engrave mode.

2. In the **Articulations** group of the Properties panel, activate **Pos. in tie chain** under the corresponding heading for the articulation whose position you want to change.

   For example, activate **Pos. in tie chain** under the **Articulations of force** heading to change the position of accents.

3. Choose one of the following options:

   - **First note**

- **Last note**

RESULT

The position of articulations in the selected tie chains is changed.

TIP

You can change the default position of each type of articulation relative to all tie chains project-wide in the **Ties** section of the **Articulations** page in **Engrave** > **Engraving Options**.

RELATED LINKS

Changing the horizontal position of staccato marks

You can change the default horizontal position of all staccato and staccatissimo articulations when they are placed on the stem side of notes project-wide. By default, staccato and staccatissimo articulations are centered on the stem when on the stem side.

The horizontal position of most articulations is centered on a stem or a notehead. However, if a staccato or *staccatissimo* is the only articulation, its horizontal position can also be half-centered when they are placed on the stem side.

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Engraving Options**.
   The **Engraving Options** dialog opens.
2. Click **Articulations** in the page list.
3. In the **Horizontal Position** section, choose one of the following options for **Horizontal position of staccato on stem side**:
   - **Center on notehead**
   - **Center on stem**
   - **Half-center**
4. Click **Apply**, then **Close**.

RESULT

Staccato marks are positioned project-wide according to the option selected.

RELATED LINKS

Moving individual articulations vertically

You can move individual articulations graphically upwards/downwards so they are closer to/further away from notes.

PROCEDURE

1. In Engrave mode, select the articulations that you want to move.
2. Move the articulations in any of the following ways:
   - Press **Alt-Up Arrow** to move them upwards.
   - Press **Alt-Down Arrow** to move them downwards.

> **TIP**
>
> If you want to move items by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Up Arrow**.

- Click and drag them upwards/downwards.

RESULT

The selected articulations are moved vertically.

> **TIP**
>
> - When you move articulations vertically, **Offset Y** in the **Articulations** group of the Properties panel is activated for the corresponding type of articulation. For example, **Offset Y** under the **Articulations of force** heading is activated when you move accents.
>
>   You can also use these properties to move articulations vertically by changing the value in the value field.
>
>   Deactivating the properties resets the selected articulations to their default positions.
>
> - You can change the default gaps between all articulations and their noteheads and other articulations on the **Articulations** page in **Engrave** > **Engraving Options**.

RELATED LINKS
Project-wide engraving options for articulations on page 369

Changing the placement of articulations

You can change whether individual articulations are placed on the notehead side or stem side of notes.

PROCEDURE

1. Select the notes or chords whose articulation placement you want to change. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **Placement** in the **Articulations** group.
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 automatically makes adjustments to make sure all markings are clear and legible.

RELATED LINKS
Moving individual articulations vertically on page 371

Articulations in playback

Adding articulations to your score affects how notes sound in playback.

If you do not have a sample library, Dorico 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.

The **Timing** page in **Playback Options** provides options for the default effect of articulations of duration. The **Dynamics** page contains options for articulations of force.

If you do have a sample library, Dorico loads the specific sample for an articulation if such a sample is included in your sample 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.

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

- Press **Ctrl/Cmd-Shift-P** in any mode.
- Choose **Play** > **Playback Options** in Play mode.

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 388
Input methods for bars and barlines on page 155

Deleting bars

You can delete bars from your project completely by using the bars and barlines popover.

PROCEDURE

1.   In Write mode, select the first bar you want to delete, or the first note or rest in that bar.

2.   Open the bars and barlines popover in any of the following ways:

- Press **Shift-B**.

- Choose **Write** > **Create Bar or Barline**.

3.   Enter – (minus), followed by the number of bars you want to delete into the popover.

For example, enter **–1** to delete just the selected bar, or **–6** to delete six bars, meaning the bar you selected and the subsequent five bars.

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

RESULT

The number of bars specified is deleted.

Deleting empty bars at the end of flows

You can delete any empty bars left at the ends of flows.

PROCEDURE

- In Write mode, choose **Write** > **Trim Flow**.

RESULT

Empty bars at the end of the current flow are deleted.

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. Delete the selected contents in any of the following ways:

- Press **Backspace** or **Delete**.
- Choose **Edit** > **Delete**. You can also choose this option from the context menu.

RESULT

The contents of the selected bars are deleted.

RELATED LINKS
Selecting/Deselecting notes and items individually on page 108
Large selections on page 109
Filters on page 109

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
Inputting time signatures with the popover on page 153
Inputting time signatures with the panel on page 154
Hiding/Showing time signatures on page 761

Changing the width of empty bars

You can change the width of empty bars individually by activating **Note Spacing** in Engrave mode.

PROCEDURE

1. In Engrave mode, activate **Note Spacing** in the Formatting panel.

2. Select a square handle at the rhythmic position of a barline at the start/end of an empty bar whose width you want to change.

3. Adjust the spacing in any of the following ways:

- Press **Alt-Right Arrow** to increase the space to the left of the selected handle.
- Press **Alt-Left Arrow** to decrease the space to the left of the selected handle.

> TIP
>
> If you want to move handles by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

RESULT

The width of the empty bar is changed.

For example, if you select the handle of the barline on the right of a bar and nudge the handle to the left, the bar appears narrower. If you select the barline on the right of a bar and nudge the handle to the right, the bar appears wider.

RELATED LINKS

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. In Setup mode, choose **Setup** > **Layout Options**.
   The **Layout Options** dialog opens.
2. In the **Layouts** list, select the layouts in which you want to hide/show bar rests in empty bars in one of the following ways:
   - Click **Select All**.
   - Click **Select All Full Score Layouts**.
   - Click **Select All Part Layouts**.
   - Click **Select All Custom Score Layouts**.
   - **Ctrl/Cmd**-click individual layouts.
   - **Shift**-click adjacent layouts.

   By default, the layout currently open in the music area is selected when you open the dialog.
3. Select **Players** from the **Category** menu.
4. In the **Bar Rests and Multi-bar Rests** section, activate/deactivate **Show bar rests in empty bars**.

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.

Hiding/Showing multi-bar rests

You can hide/show multi-bar rests in each layout in your project independently of other layouts. For example, you can hide multi-bar rests in full score layouts but show multi-bar rests in part layouts.

Multi-bar rests group two or more consecutive empty bars together.
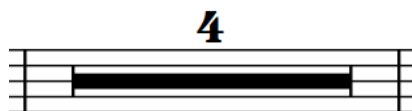
A multi-bar rest representing four empty bars

PROCEDURE

1. In Setup mode, choose **Setup** > **Layout Options**.
   The **Layout Options** dialog opens.

2. In the **Layouts** list, select the layouts in which you want to hide/show multi-bar rests in one of the following ways:

   - Click **Select All**.
   - Click **Select All Full Score Layouts**.
   - Click **Select All Part Layouts**.
   - Click **Select All Custom Score Layouts**.
   - **Ctrl/Cmd**-click individual layouts.
   - **Shift**-click adjacent layouts.

   By default, the layout currently open in the music area is selected when you open the dialog.

3. Select **Players** from the **Category** menu.

4. In the **Bar Rests and Multi-bar rests** section, activate/deactivate **Show multi-bar rests**.

RESULT

Multi-bar rests are shown in the selected layouts when the checkbox is activated, and hidden when the checkbox is deactivated.

Moving bar rest symbols

Although Dorico automatically positions rests in multiple-voice contexts to avoid collisions, you can also move bar rests vertically.

PROCEDURE

1. Select the bar rest symbol you want to move. You can do this in Write mode and Engrave mode.

   NOTE

   You can only change the position of one bar rest symbol at a time.

2. In the Properties panel, activate **Rest pos.** in the **Notes and Rests** group.

3. Change the value in the value field in any of the following ways:

   - Enter a value into the value field.

- Click the arrows beside the value field.

RESULT

Position 0 is the middle line of the staff. The bar rest moves upwards when you increase the value, and downwards when you decrease the value.

Deactivating **Rest pos.** returns the selected rests to their default positions.

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.

The new time signature you input applies 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 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, if you activate **Insert** mode, then Dorico 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 150
Input methods for bars and barlines on page 155
Inserting system breaks on page 273
Inserting frame breaks on page 270
Inputting notes in Insert mode on page 120

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. Delete the barline in any of the following ways:

    ● Press **Backspace** or **Delete**.

    ● Choose **Edit** > **Delete**. You can also choose this option from the context menu.

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, you can add a new time signature to reflect the new rhythmic duration of the bar.

RELATED LINKS
Deleting barlines on page 382
Input methods for time signatures on page 150

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.
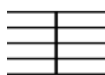
Double

> A double barline consists of two lines, both the width of single barlines, 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.
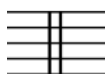
Final

> A final barline consists of two lines: one of normal width, the other thick. It marks where the music ends.

Dashed

> A dashed barline has the same thickness as a normal barline, but has gaps within it to give it a dashed appearance. It is used to subdivide bars to make complex time signatures easier to read, and to differentiate editorial barlines from ones originally in the manuscript.
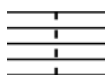
Tick

> A tick barline is a short line that spans only the top line of the staff. It is useful when notating plainsong, in which context it denotes a breath or short gap between phrases, or other music with an unusual metrical structure.
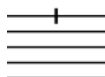
Short

A short barline spans the middle of the staff, which on a five-line staff is between the second and fourth lines. On staves with fewer than fives lines, the short barline is scaled proportionally. It is useful when notating plainsong, in which context it denotes a longer gap between phrases than a tick barline.

Thick

A thick barline is half a space wide by default, so it is noticeably thicker than a normal barline. This gives it a greater visual impact.

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.
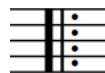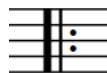
End repeat

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.
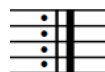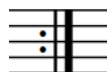
End/Start repeat

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

381
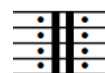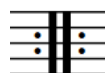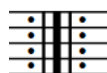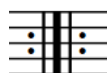
Deleting barlines

You can delete barlines without affecting the rhythmic positions of notes.

PROCEDURE

1. In Write mode, select the barlines you want to delete.

2. Delete the barlines in any of the following ways:

   - Press **Backspace** or **Delete**.

   - Choose **Edit** > **Delete**. You can also choose this option from the context menu.

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.

To avoid confusion, you can add a new time signature to reflect the new rhythmic duration of the bar.

RELATED LINKS
Inputting time signatures with the popover on page 153
Inputting time signatures with the panel on page 154

Barline spacing

You can find options for the default spacing of all barlines project-wide on the **Spacing Gaps** page in **Engraving Options**.

On the **Spacing Gaps** page in **Engraving Options**, you can change project-wide values for the spaces before and after barlines, and between barlines and other staff objects, such as clefs, time signatures, or key signatures.

The options are accompanied by diagrams to help you visualize how they affect the appearance of your music.

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

- Press **Ctrl/Cmd-Shift-E** in any mode.

- Choose **Engrave** > **Engraving Options** in Engrave mode.

You can then click **Spacing Gaps** in the page list on the left of the dialog.

RELATED LINKS
Project-wide engraving options for barlines on page 385

Moving barlines rhythmically

You can only move barlines to new rhythmic positions after they have been input by inputting new barlines at the positions you want.

PROCEDURE

1. In Write mode, input a new barline of your preferred type at the position you want.

2. Delete the barline from the old position.

NOTE

You can complete these steps in any order. However, deleting barlines can cause note and beam groupings to change. If you are choosing a new barline position based on particular phrases, this might make it harder to find the new position you want.

Moving barlines graphically

You can adjust the spacing between barlines and neighboring notes, time signatures, key signatures, or rests.

PROCEDURE

1. In Engrave mode, activate **Note Spacing** in the Formatting panel.
2. Select a note spacing handle at the rhythmic position of the barline.

3. Move the handle in any of the following ways:
   - Press **Alt-Right Arrow** to move it to the right.
   - Press **Alt-Left Arrow** to move it to the left.

   TIP

   If you want to move items by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

   NOTE

   You cannot move note spacing handles using the mouse. You can only move them using the keyboard.

RESULT

The spacing to the right/left of the barline is increased/decreased.

EXAMPLE
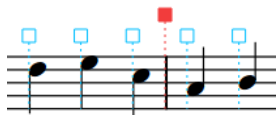
The new position of the barline after decreasing the space to its left

383

Changing the barline shown at key signature changes

You can change the default barline shown at all key signature changes that occur at barlines project-wide. By default, Dorico shows double barlines at key signature changes.

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Engraving Options**.

    The **Engraving Options** dialog opens.

2. Click **Barlines** in the page list.

3. In the **Key Signatures** section, choose one of the following options for **Changes of key signature at the start of the bar**:

    ● **Draw double barline**

    ● **Draw single barline**

4. Click **Apply**, then **Close**.

RESULT
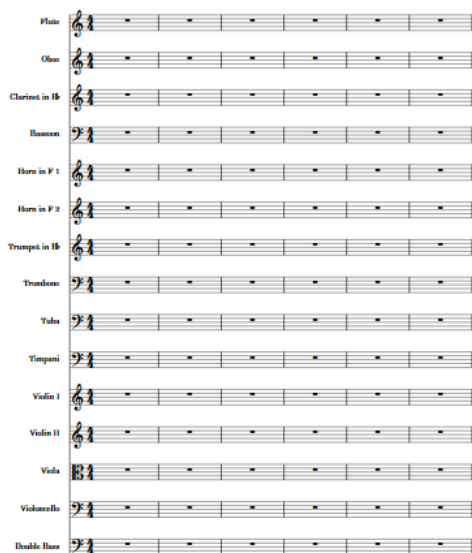
The barline shown at all key signature changes that occur at the start of bars is changed project-wide.

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.
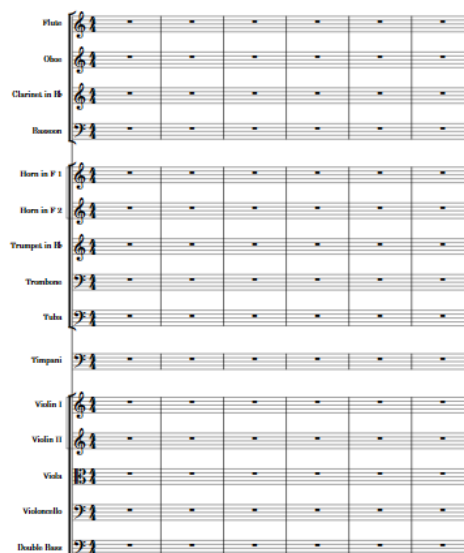
Using default staff groups

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 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.

By default, Dorico brackets staves according to their instrument family. This means that in projects with only a few instruments, barlines do not extend across the whole ensemble, because all the instruments are from different families.

You can change the bracketing style according to the ensemble type in your project on the **Brackets and Braces** page in **Engrave** > **Engraving Options**.

Making custom staff groups

You can also manually arrange your players into groups, which have their own bracket and barline groupings.

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 select a single player and add it to its own group in order to have it appear separately, which could be useful for showing a soloist separately from the remainder of the ensemble, such as in a concerto.

RELATED LINKS
Changing bracket grouping according to ensemble type on page 424
Adding groups of players on page 86
Adding players to groups on page 87
Deleting player groups on page 86

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. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate **Barline joins all staves** in the **Time Signatures** group.

RESULT

All staves in the layout currently open in the music area are joined by a barline at the selected time signature changes.

RELATED LINKS
Barlines across staff groups on page 384

Project-wide engraving options for barlines

You can find options for the project-wide appearance of barlines on the **Barlines** page in **Engraving Options**.

The options on the **Barlines** page allow you to change the appearance and thickness of barlines, and which barlines are used in different contexts.

There are musical examples for many options to demonstrate how they affect the appearance of your music.

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

- Press **Ctrl/Cmd-Shift-E** in any mode.
- Choose **Engrave** > **Engraving Options** in Engrave mode.

You can then click **Barlines** in the page list on the left of the dialog.

Per-flow notation options for barlines

You can set the appearance of barlines in each flow in your project independently on the **Barlines** page in **Engraving Options**.

On the **Barlines** page, you can change which barline is shown by default at the end of each flow, and choose whether barlines join all staves at the end of each system and at the end of the final system in a flow.

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

- Press **Ctrl/Cmd-Shift-N** in any mode.
- Choose **Write** > **Notation Options** in Write mode.
- Choose **Setup** > **Notation Options** in Setup mode.
- Click **Notation Options** on the right of the **Flows** panel in Setup mode.

You can then select **Barlines** from the **Category** menu.

Changing the default barline at the end of flows

You can choose which type of barline is placed automatically at the end of each flow.

PROCEDURE

1. In Write mode, choose **Write** > **Notation Options**.
    The **Notation Options** dialog opens.

2. In the **Flows** list, select the flows in which you want to change the default barline in one of the following ways:

    - **Ctrl/Cmd**-click individual flows.
    - **Shift**-click adjacent flows.
    - Click **Select All**.

    By default, only the current flow is selected when you open the dialog.

3. Select **Barlines** from the **Category** menu.

4. Choose one of the following options for **Automatic barline at end of flow**:

    - **Final barline**
    - **Double barline**
    - **Normal barline**
    - **Dashed barline**
    - **Thick barline**
    - **No barline**

RESULT

The default final barline at the end of the selected flows is changed.

TIP

You can override individual final barlines by changing their type, but you cannot delete individual final barlines.

RELATED LINKS
Inputting barlines with the popover on page 160
Inputting barlines with the panel on page 161

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 it is correct.

In Dorico, bar numbers appear automatically, following the most common practice of showing a bar number at the start of each system in scores and parts by default.

However, sometimes it is useful to show a bar number for every bar, which is frequently done for film music scores. You can also show bar numbers at a regular interval, such as every five bars, but this can be misleading as it can give the impression that those bars are significant, particularly if bar numbers are shown within an enclosure.

RELATED LINKS

Changes to the appearance of bar numbers

You can change different aspects of the appearance, frequency, and position of bar numbers in three places in Dorico.

You can change the appearance of bar numbers in the following places:

- On the **Bar Numbers** page in **Setup** > **Layout Options**.
- On the **Bar Numbers** page in **Engrave** > **Engraving Options**.
- In the **Edit Font Styles** dialog.

Layout Options

On the **Bar Numbers** page in **Layout Options**, you can change the following aspects of the appearance and position of bar numbers:

- Bar number frequency
- Placement above/below the staff
- Distance from the staff and from other objects
- Horizontal position
- Enclosure type
- Hiding/Showing bar numbers at rehearsal marks
- Hiding/Showing the first bar number when bar numbers are shown every bar

You can change options for bar numbers for each instrument layout and full score layouts independently of each other within the dialog. For example, you can show bar numbers every bar in full score layouts but only at the start of each system in part layouts.

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** at the bottom of the **Layouts** panel in Setup mode.

  ⚙

- Right-click an instrumental part or a full score in the **Layouts** panel and choose **Layout Options** from the context menu.

Engraving Options

On the **Bar Numbers** page in **Engraving Options** you can change the case of letters in subordinate bar numbers and the thickness and padding values for bar number enclosures.

This affects all layouts that show bar numbers in enclosures.

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

- Press **Ctrl/Cmd-Shift-E** in any mode.
- Choose **Engrave** > **Engraving Options** in Engrave mode.

Edit Font Styles dialog

You can change different aspects of the bar number font style, such as their font size, in the **Edit Font Styles dialog**.

- You can open the **Edit Font Styles** dialog in Engrave mode by choosing **Engrave** > **Font Styles**.

NOTE

Changes made to font styles apply to the entire project, including part layouts.

RELATED LINKS
Changing the bar number frequency on page 389
Changing the bar number font style on page 390
Changing the bar number enclosure type on page 391
Edit Font Styles dialog on page 275

Changing the bar number frequency

You can change how frequently bar numbers appear in each layout independently of other layouts. For example, you can have bar numbers appear with different frequencies in full score layouts compared to individual part layouts.

PROCEDURE

1. In Setup mode, choose **Setup** > **Layout Options**.
   The **Layout Options** dialog opens.

2. In the **Layouts** list, select the layouts in which you want to change the bar number frequency in one of the following ways:

   - Click **Select All**.
   - Click **Select All Full Score Layouts**.
   - Click **Select All Part Layouts**.
   - Click **Select All Custom Score Layouts**.
   - **Ctrl/Cmd**-click individual layouts.

- **Shift**-click adjacent layouts.

By default, the layout currently open in the music area is selected when you open the dialog.

3. Select **Bar Numbers** from the **Category** menu.

4. Choose one of the following options for **Show bar numbers**:

- **Every system**
- **Every n bars**
- **Every bar**
- **None**

Selecting **Every n bars** activates the **Interval** value field.

5. Optional: Change the value for **Interval** in any of the following ways:

- Enter a value into the value field.
- Click the arrows beside the value field.

RESULT

The frequency of bar numbers in the selected layouts is changed.

Changing the **Interval** value changes how frequently bar numbers are shown. For example, setting an interval value of ten means that bar numbers are shown every tenth bar.

RELATED LINKS
Changes to the appearance of bar numbers on page 388

Changing the bar number font style

You can change the font style used for all bar numbers project-wide.

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Font Styles**.
   The **Edit Font Styles** dialog opens.

2. Select **Bar Number Font** from the **Font style** menu.

3. Activate the following options, individually or together, to change the corresponding aspect of the font:

- **Font family**
- **Size**
- **Style**
- **Underlined**

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

RESULT

The bar number font style is changed project-wide.

RELATED LINKS
Changes to the appearance of bar numbers on page 388

Changing the bar number enclosure type

If you want bar numbers to be clearly distinguished, you can enclose them in a rectangular or circular enclosure. You can change the bar number enclosure type in each layout independently of other layouts.

For example, you can have bar numbers appear with different enclosures in full score layouts compared to individual part layouts.

PROCEDURE

1. In Setup mode, choose **Setup** > **Layout Options**.

   The **Layout Options** dialog opens.

2. In the **Layouts** list, select the layouts in which you want to change the bar number enclosure type in one of the following ways:

   - Click **Select All**.
   - Click **Select All Full Score Layouts**.
   - Click **Select All Part Layouts**.
   - Click **Select All Custom Score Layouts**.
   - **Ctrl/Cmd**-click individual layouts.
   - **Shift**-click adjacent layouts.

   By default, the layout currently open in the music area is selected when you open the dialog.

3. Select **Bar Numbers** from the **Category** menu.

4. 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

10

Bar number with no enclosure

10

Bar number with a rectangle enclosure

10

Bar number with a circle enclosure

RELATED LINKS
Layout Options dialog on page 62
Bar number enclosure size and padding values on page 392

Bar number enclosure size and padding values

In the **Enclosure** section of the **Bar Numbers** page in **Engrave** > **Engraving Options**, there are a number of options to control the shape and size of bar number enclosures.

Rectangle bar number enclosure

The figure shows a rectangle bar number enclosure with default settings. The minimum height and minimum width are both 2 spaces, horizontal padding is half a space, and minimum bottom and minimum top padding are both 1/8 of a space.

Adjusting the minimum values can help make bar number enclosures more consistent project-wide, as the default values can allow their size to vary significantly, depending on the size and shape of the bar number inside. This might make a narrow bar number less obvious to a conductor. Increasing **Minimum width** to reduce the difference in size can create a more consistent visual effect.

Bar numbers with rectangle enclosures, default minimum width
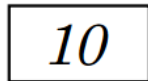
Bar numbers with rectangle enclosures, minimum width increased to 5

Minimum width
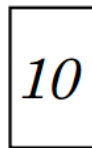
Sets a minimum value for the width of enclosures. In this example, the value was increased from 2 spaces to 6 spaces.
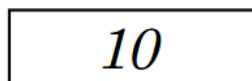
Minimum height

Sets a minimum value for the height of enclosures. In this example, the value was increased from 2 spaces to 6 spaces.

Minimum horizontal padding

Sets a minimum value for the distance between the two sides of the enclosure and the bar number within it. In this example, the value was increased from 1/2 a space to 4 spaces.

Minimum bottom padding

Sets a minimum value for the distance between the bottom line of the enclosure and the bar number within it. In this example, the value was increased from 1/8 of a space to 2 spaces.
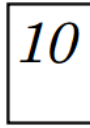
Minimum top padding

Sets a minimum value for the distance between the top line of the enclosure and the bar number within it. In this example, the value was increased from 1/8 of a space to 2 spaces.
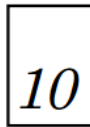
Circle bar number enclosure

The figure shows a circle bar number enclosure with default settings. The minimum diameter is 2 spaces, and the minimum padding is 1/6 of a space.

Minimum diameter

Sets a minimum value for the diameter of the enclosure. In this example, the value was increased from 2 spaces to 8 spaces.
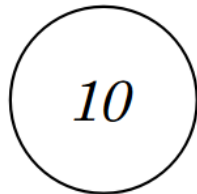
Minimum padding

Sets a minimum value for the distance between the enclosure line and the bar number within it. In this example, the value was increased from 1/6 of a space to 1 space.
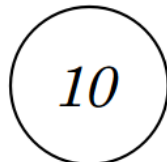
All enclosures

Enclosure line thickness

Sets the thickness of enclosure lines for both rectangle and circle enclosure types. The default is 1/8 of a space. The examples have a thickness of 1/2 a space.
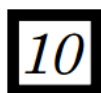
NOTE

Changing the **Enclosure line thickness** changes the thickness of bar number enclosures in all layouts in the project. Changing any padding values for rectangle enclosures affects all layouts with rectangle enclosures, and changing any padding values for circle enclosures affects all layouts with circle enclosures.

Positions of bar numbers

You can change the default positions of all bar numbers project-wide on the **Bar Numbers** page in **Layout Options**, and you can move individual bar numbers in Engrave mode.

NOTE

Bar numbers can only be shown at one position per system. You cannot show bar numbers above/below multiple staves in a single system.

RELATED LINKS

Changing the horizontal position of bar numbers

You can change the horizontal position of bar numbers in each layout independently of other layouts. For example, you can have bar numbers at a different horizontal position in full score layouts compared to individual part layouts.

PROCEDURE

1. In Setup mode, choose **Setup** > **Layout Options**.
   The **Layout Options** dialog opens.

2. In the **Layouts** list, select the layouts in which you want to change the horizontal position of bar numbers in one of the following ways:

   - Click **Select All**.

   - Click **Select All Full Score Layouts**.

   - Click **Select All Part Layouts**.

   - Click **Select All Custom Score Layouts**.

   - **Ctrl/Cmd**-click individual layouts.

   - **Shift**-click adjacent layouts.

By default, the layout currently open in the music area is selected when you open the dialog.

3. Select **Bar Numbers** from the **Category** menu.

4. Choose one of the following options for **Horizontal position**:

- **Centered on barline**

- **Centered on bar**

RESULT

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.

Changing the distance between bar numbers and the staff

You can change the minimum value for how far away from the staff bar numbers appear in each layout independently of other layouts. For example, you can position bar numbers differently in full score layouts compared to individual part layouts.

PROCEDURE

1. In Setup mode, choose **Setup** > **Layout Options**.

The **Layout Options** dialog opens.

2. In the **Layouts** list, select the layouts in which you want to change the minimum distance of bar numbers from the staff in one of the following ways:

- Click **Select All**.

- Click **Select All Full Score Layouts**.

- Click **Select All Part Layouts**.

- Click **Select All Custom Score Layouts**.

- **Ctrl/Cmd**-click individual layouts.

- **Shift**-click adjacent layouts.

By default, the layout currently open in the music area is selected when you open the dialog.

3. Select **Bar Numbers** from the **Category** menu.

4. Change the value for **Minimum distance from staff** in any of the following ways:

- Enter a value into the value field.

- Click the arrows beside the value field.

The default value is 2 spaces.

RESULT

If you increase the value, bar numbers are positioned further away from the staff, either above or below depending on your setting for **Placement relative to staff**. If you decrease the value, bar numbers are positioned closer to the staff.

NOTE

This affects the minimum distance away from the staff, so bar numbers might be positioned further away than this to avoid collisions.

RELATED LINKS
Changing the placement of bar numbers relative to the staff on page 396

Changing the position of bar numbers relative to other objects

You can change the minimum value for how far away from other objects bar numbers are positioned in each layout independently of other layouts. For example, you can have bar numbers appear closer to objects in individual parts than in the score.

PROCEDURE

1. In Setup mode, choose **Setup** > **Layout Options**.

   The **Layout Options** dialog opens.

2. In the **Layouts** list, select the layouts in which you want to change the minimum distance of bar numbers relative to other objects in one of the following ways:

   - Click **Select All**.
   - Click **Select All Full Score Layouts**.
   - Click **Select All Part Layouts**.
   - Click **Select All Custom Score Layouts**.
   - **Ctrl/Cmd**-click individual layouts.
   - **Shift**-click adjacent layouts.

   By default, the layout currently open in the music area is selected when you open the dialog.

3. Select **Bar Numbers** from the **Category** menu.

4. Change the value for **Minimum distance from other objects** in any of the following ways:

   - Enter a value into the value field.
   - Click the arrows beside the value field.

   The default value is 3/4 of a space.

RESULT

If you increase the value, bar numbers are positioned further away from other objects, either above or below depending on your setting for **Placement relative to staff**.

If you decrease the value, bar numbers are positioned closer to other objects.

RELATED LINKS
Changing the placement of bar numbers relative to the staff on page 396

Changing the placement of bar numbers relative to the staff

You can change the side of the staff on which bar numbers appear for each layout independently of other layouts. For example, bar numbers can appear below the staff in full score layouts but above the staff in individual part layouts.

PROCEDURE

1. In Setup mode, choose **Setup** > **Layout Options**.

   The **Layout Options** dialog opens.

2. In the **Layouts** list, select the layouts in which you want to change the bar number placement in one of the following ways:

   - Click **Select All**.
   - Click **Select All Full Score Layouts**.
   - Click **Select All Part Layouts**.
   - Click **Select All Custom Score Layouts**.

- **Ctrl/Cmd**-click individual layouts.
- **Shift**-click adjacent layouts.

By default, the layout currently open in the music area is selected when you open the dialog.

3. Select **Bar Numbers** from the **Category** menu.

4. Choose one of the following options for **Placement relative to staff**:

- **Above**
- **Below**

Moving bar numbers graphically

You can move individual bar numbers graphically without changing the rhythmic positions to which they apply.

PROCEDURE

1. In Engrave mode, select the bar numbers you want to move.

2. Move the bar numbers in any of the following ways:

- Press **Alt-Right Arrow** to move them to the right.
- Press **Alt-Left Arrow** to move them to the left.
- Press **Alt-Up Arrow** to move them upwards.
- Press **Alt-Down Arrow** to move them downwards.

TIP

If you want to move items by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

RESULT

The selected bar numbers are moved graphically.

TIP

The following properties in the **Time Signatures** group of the Properties panel are activated automatically when you move bar numbers in the corresponding directions:

- **Bar number X** moves bar numbers horizontally.
- **Bar number Y** moves bar numbers vertically.

You can also use these properties to move bar numbers graphically by changing the values in the value fields.

Deactivating the properties resets the selected bar numbers to their default positions.

RELATED LINKS
Adding bar number changes on page 398
Changing the horizontal position of bar numbers on page 394
Changing the distance between bar numbers and the staff on page 395

Bar number changes

Bar numbers follow a continuous sequence, with each bar having a unique bar number that follows on from the previous bar number. However, you can make manual changes to the bar number sequence, including changing to a subordinate sequence.

In Dorico, you can make the following types of changes to bar number sequences using the **Insert Bar Number Change** dialog:

Primary

The main bar number sequence, which bars in your project follow by default.

Subordinate

A secondary bar number sequence that uses letters rather than numbers to indicate the sequence. This can be useful in situations where a new version of a piece has been created with more bars inserted, but the original bar numbers are required.

Don't Include

Excludes the selected bar from the current bar number sequence. If bar numbers are shown every bar, no bar number is shown in bars in which you have chosen **Don't Include**.

Continue Primary

Returns the bar number sequence to the **Primary** sequence without counting intervening bars, for example, after a section of bars following the **Subordinate** bar number sequence.

RELATED LINKS
[Adding bar number changes](#) on page 398
[Subordinate bar numbers](#) on page 399

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, 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.

    You can do this in Write mode and Engrave mode.

2. Choose **Edit** > **Bar Numbers** > **Add Bar Number Change**. You can also choose this option from the context menu.

    The **Insert Bar Number Change** dialog opens.

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 value with which you want the bar number sequence change to start in the corresponding value field in any of the following ways:

- Enter a value into the value field.

- Click the arrows beside the 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.

RELATED LINKS
Bar number changes on page 398

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.   Delete the bar number changes in any of the following ways:

- Press **Backspace** or **Delete**.

- Choose **Edit** > **Delete**. You can also choose this option from the context menu.

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 organizing 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**, after which the bar number 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 can be presented as either upper case letters or lower case letters.

Lower case subordinate bar number

Upper case subordinate bar number

RELATED LINKS
Changing the appearance of subordinate bar numbers on page 401

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.

   You can do this in Write mode and Engrave mode.

2. Choose **Edit** > **Bar Numbers** > **Add Bar Number Change**. You can also choose this option from the context menu.

   The **Insert Bar Number Change** dialog opens.

3. Choose **Subordinate** for **Type**.

   This activates the **Subordinate** value field.

4. Change the value in the value field in any of the following ways:

   - Enter a number into the value field.

   - Click the arrows beside the 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.

   You can do this in Write mode and Engrave mode.

2. Choose **Edit** > **Bar Numbers** > **Add Bar Number Change**. You can also choose this option from the context menu.

   The **Insert Bar Number Change** dialog opens.

3. Choose **Continue Primary** for **Type**.

Text 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.

Changing the appearance of subordinate bar numbers

You can show subordinate bar numbers as either lower case or upper case letters.

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Engraving Options**.
The **Engraving Options** dialog opens.

2. Click **Bar Numbers** in the page list.

3. In the **Sequence** section, select how you want subordinate numbers to appear:

- **Lower case** (default)

- **Upper case**

Bar numbers in parts

You can show bar numbers differently in each layout independently. For example, you can show bar numbers every bar in full score layouts but only at the start of each system in the part layouts.

You can change the following aspects of the appearance of bar numbers independently in each layout:

- Bar number frequency

- Minimum distance from staff and other objects

- Horizontal position

- Enclosure type

NOTE

- You cannot change the size of bar numbers in each layout independently. One bar number font size applies to all layouts in your project.

- Changing values for enclosure sizes, padding values, and line thickness changes the corresponding aspect of bar number enclosures in all layouts in the project.

RELATED LINKS

Bar numbers in repeat endings

By default in Dorico, bar numbers continue through repeat endings.

For example, in a repeat section ending at the end of bar 10, the bar number at the start of the second time section is bar 11.

You can manually change bar numbers so that bar numbers in repeat endings reflect the total number of bars played, rather than the number of bars written on the page. For example, in a repeat section starting at the beginning of the piece and ending at the end of bar 10, you might want the bar number at the start of the second time section to be 20 rather than 11.

You can do this by adding a bar number change at the start of the second time section.

EXAMPLE

Default bar numbers in a repeat ending

Bar numbers changed to reflect the total number of bars played

RELATED LINKS

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 when you input two or more adjacent notes or chords that are an eighth note (quaver) or shorter in duration.

There are many different accepted standards for how to present beams, so Dorico offers a number of customizing options. You can find these options on the **Beams** page in **Engrave** > **Engraving Options**.

You can find options that control how notes are grouped into beam groups by default in each flow on the **Beam Grouping** page in **Write** > **Notation Options**.

RELATED LINKS
Inputting notes on page 115
Beaming notes together manually on page 404
Per-flow changes to beam grouping defaults on page 403
Engraving Options dialog on page 228
Notation Options dialog on page 110

Beam groups

You can control how notes are beamed in several different ways in Dorico.

You can set beam grouping defaults in each flow in your project independently in **Notation Options**.

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
Per-flow changes to beam grouping defaults on page 403
Beaming notes together manually on page 404
Beams according to time signatures on page 404

Per-flow changes to beam grouping defaults

You can change the default beam grouping rules for each flow independently on the **Beam Grouping** page in **Notation Options**.

Dorico has sophisticated underlying rules for producing beam groupings that follow the accepted conventions of music theory, including crossing the half-bar in time signatures like 4/4,

beaming all eighth notes together in 3/4, beam groups that include tuplets, and many other situations.

There are alternative conventions for some of these rules, so you can change your default beam grouping rules for each flow in your project independently on the **Beam Grouping** page in **Notation Options**.

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

- Press **Ctrl/Cmd-Shift-N** in any mode.
- Choose **Write** > **Notation Options** in Write mode.
- Choose **Setup** > **Notation Options** in Setup mode.
- Click **Notation Options** on the right of the **Flows** panel in Setup mode.

  ⚙

Beams according to time signatures

Default beam groupings are determined by the time signature, which you can customize by specifying the subdivision of beats within bars and changing your per-flow beam grouping settings in **Notation Options**.

Dorico has default beaming settings for common time signatures, based on general conventions and your chosen settings. For example, phrases are beamed in quarter notes (crotchets) when in 3/4, but in dotted quarter notes when in 6/8.

For situations where you want to control the beam grouping in more detail, you can input a custom time signature with an explicit rhythmic subdivision. Dorico then automatically beams phrases according to this subdivision. For example, entering [7]/8 into the time signatures popover means all seven eighth notes (quavers) are beamed together, whereas entering [2+2+3]/8 subdivides the seven eighth notes into two, then two, then three.

NOTE

The duration of beam groups in Dorico depends on the beat grouping in the current time signature and your per-flow beam grouping settings in **Write** > **Notation Options**.

RELATED LINKS

Beaming notes together manually

You can beam notes together manually, including notes across barlines as well as system breaks and frame breaks.

For example, if you want to change individual beam groups independently of your default beam grouping settings for the current flow.

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. You can do this in Write mode and Engrave mode.

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, system breaks, or frame breaks.

If there are notes either side of the new beam group that were previously beamed to part or all of your selection, they either beam together as separate beams, or appear unbeamed. This depends on how many notes are left either side in the bar, and on the beam grouping settings for the flow.

NOTE

Even if part of the beamed group previously had a centered beam, the new beam is not centered.

RELATED LINKS
Creating fanned beams on page 418

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. You can do this in Write mode and Engrave mode.

2. Split the beam or secondary beam in one of the following ways:

    ● Choose **Edit** > **Beaming** > **Split Beam**.

    ● Choose **Edit** > **Beaming** > **Split Secondary Beam**.

    TIP

    You can also choose these options from the context menu.

RESULT

The beam or secondary beam is split to the left of the 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 406

Changing the direction of partial beams

Dorico automatically inputs a partial beam if one is required. You can change on which side of stems individual partial beams appear.

PROCEDURE

1. Select a note with a partial beam. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate **Partial beam direction** in the **Beaming** group.

3. Choose one of the following options:

- **Left**
- **Right**

RESULT

The partial beam appears on the corresponding side of the stem.

EXAMPLE

Partial beam direction **Left**

Partial beam direction **Right**

Unbeaming notes

You can separate all notes in a beamed group so that each note shows its own tail.

This can be useful when setting syllabic text with a fast rhythm.

PROCEDURE

1. Select the notes you want to make unbeamed. You can do this in Write mode and Engrave mode.

2. Choose **Edit** > **Beaming** > **Make Unbeamed**. You can also choose this option from the context menu.

Resetting beam grouping

You can remove all changes made to the beam grouping of notes and chords.

PROCEDURE

1. Select the notes or chords whose beaming you want to reset. You can do this in Write mode and Engrave mode.

2. Choose **Edit** > **Beaming** > **Reset Beaming**. You can also choose this option from the context menu.

RESULT

Beam grouping is reset to your default settings in **Notation Options** for the current flow and time signature.

Beam placement relative to the staff

You can change the placement relative to the staff of the stems within beams, so that beams appear on the other side of the staff to their default placement.

The default placement of beams relative to the staff is determined by the staff positions of the notes within the beamed group.

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 placement of beams relative to the staff.

Changing the placement of beams relative to the staff involves changing the direction of the stems in the beam. Therefore, Dorico categorizes changing the placement of beams relative to the staff as a stem change.

RELATED LINKS

Changing the placement of beams relative to the staff

You can change on which side of the staff a beam appears by forcing the stem direction to change.

PROCEDURE

1. Select one or more notes in the beamed phrases whose placement relative to the staff you want to change. You can do this in Write mode and Engrave mode.

2. Force the stem direction of notes in the selected beams in any of the following ways:

- Choose **Edit** > **Stem** > **Force Stem Up**.
- Choose **Edit** > **Stem** > **Force Stem Down**.

TIP

You can also choose these options from the context menu.

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 placement of beams relative to the staff in order to remove the stem direction change. This reverts selected beams to their default placement.

PROCEDURE

1. Select one or more notes in the beamed phrases whose placement change relative to the staff you want to remove. You can do this in Write mode and Engrave mode.

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 placement relative to the staff.

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".

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.

You can change the default settings for how beams appear project-wide.

- You can specify the minimum stem length for notes of different durations on the **Notes** page in **Engrave** > **Engraving Options**.

- You can set ideal beam slants on the **Beams** page in **Engrave** > **Engraving Options**.

You can also change the beam slants of individual beams.

RELATED LINKS
Changing beam slants on page 408

Changing beam slants

You can change the slants, or angles, of individual beams.

PROCEDURE

1. In Engrave mode, select the square handles on the beam corners of the beams whose slants you want to change.

   TIP

   You can show handles on all items, not just selected items, by choosing **Engrave** > **Show Handles** > **Always**. This can make it easier to select individual handles on multiple items.

   You can also select the beams first, and then select the handles.

2. Move the handles in any of the following ways:

   - Press **Alt-Up Arrow** to move them upwards.
   - Press **Alt-Down Arrow** to move them downwards.

     TIP

     If you want to move handles by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Up Arrow**.

   - Click and drag them upwards/downwards.

3. Optional: Repeat steps 1 and 2 to move the other end of the selected beams.

RESULT

The slants of the selected beams are changed.

TIP

You can also use **Beam direction** in the **Beaming** group of the Properties panel to change the slant of beams. The property is available when you select noteheads within the beam group, and has the following beam slant options:

● **Flat**

● **Up**

● **Down**

These options all ensure that beam ends are positioned correctly 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.

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

Creating centered beams on page 410
Changing the placement of beams relative to the staff on page 407

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 notes in the beams you want to center. You can do this in Write mode and Engrave mode.

   TIP

   You do not have to select all notes in the beam.

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/after centering the beams.

NOTE

Dorico automatically angles the beam based on the shape of the phrase, but you can change the angles or slants of beams manually in Engrave mode.

RELATED LINKS
Beaming notes together manually on page 404
Changing beam slants on page 408

Removing centered beams

You can remove centered beams and revert beams to their default placements either above or below the phrase.

PROCEDURE

1. Select one or more notes within the centered beams that you want to revert to their default placement. You can do this in Write mode and Engrave mode.

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 in one staff.

PROCEDURE

1. Select the notes you want to cross to another staff. You can do this in Write mode and Engrave mode.

    NOTE

    You can only cross notes to other staves in grand 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**.

    - Choose **Edit** > **Cross Staff** > **Cross to Staff Above**.

    - Choose **Edit** > **Cross Staff** > **Cross to Staff Below**.

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 all in the upper staff of a grand staff instrument

Notes spanning both staves of a grand staff instrument

RELATED LINKS

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.

You can make stems, rather than noteheads, evenly spaced by activating **Use optical spacing for beams between staves** for layouts in your project that contain cross-staff beams on the **Note Spacing** page in **Setup** > **Layout Options**.

Default spacing: The distance between noteheads is optimized.

Optical spacing for cross-staff beaming: the distance between stems is optimized.

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** at the bottom of the **Layouts** panel in Setup mode.

- Right-click an instrumental part or a full score in the **Layouts** panel and choose **Layout Options** from the context menu.

RELATED LINKS
Note Spacing page in Layout Options on page 285

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.
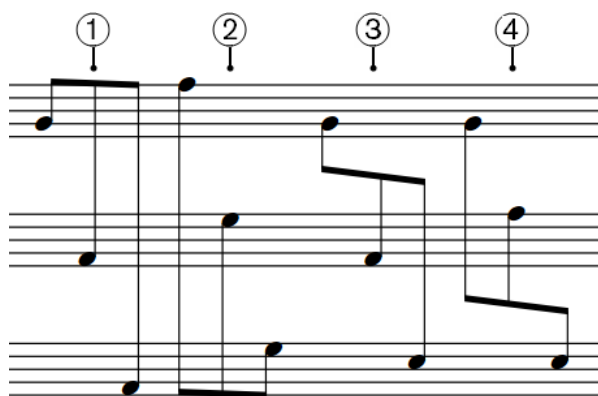
1 If all notes in the beam group are stem-up, the beam is placed above the top staff.

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 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 714

413

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 avoids beam corners by analyzing the pitches and stems within a phrase, and implementing stem directions that avoid a beam corner.

Secondary beams

Secondary beams are the lines that are added between the primary beam and the notehead as the rhythmic division gets smaller.

The primary beam is the outermost beam line that joins all of the notes in the beamed group. Depending on the durations of the notes in the beamed group, the primary beam may in fact be two or more lines; that is, for notes of a 16th or shorter in duration.

Secondary beams are additional beam lines that join only some of the notes in the group, creating subdivisions of the beam in order to make the metrical groupings of the beam clearer.

A phrase of 64th notes, with secondary beams subdivided to show 16th and eighth note groups

You can set per-flow options for how secondary beams appear on the **Beam Grouping** page in **Write** > **Notation Options**.

Changing the number of beam lines in secondary beams

You can change the number of beam lines shown in secondary beams individually, independently of your default setting for the current flow.

PROCEDURE

1. Select the notes to the right of where you want to change the number of secondary beaming lines. You can do this in Write mode and Engrave mode.

2. Optional: If the note you selected does not immediately follow an existing split in the secondary beam, split the secondary beam 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 consists only of 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.

- You can change the default number of secondary beam lines shown in each flow independently on the **Beam Grouping** page in **Write** > **Notation Options**.

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. You can do this in Write mode and Engrave mode.

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. However, you can change this setting on the **Beam Grouping** page in **Notation Options**.

Eighth note (quaver) tuplets are not beamed together with subsequent non-tuplet eighth notes by default.

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

You can change the default appearance of stemlets in each flow, and you can show stemlets in individual beams.

Showing stemlets in beam groups

You can show stemlets on rests in beam groups individually, independently of your default setting for showing stemlets in the current flow.

PROCEDURE

1. Select the notes you want to beam together with stemlets shown on rests.

For example, to show a stemlet on a rest between two notes, select both notes. To show a stemlet on a rest at the end of a beamed phrase, select all notes in the beam and the rest.

2. Choose **Edit** > **Beaming** > **Stemlets** > **Force Stemlet Beam**. You can also choose this option from the context menu.

RESULT

The selected notes are beamed together with stemlets shown on rests within the beam group.

NOTE

- If you later reset the beaming of the selected group, stemlets revert to your default setting for the flow.

- You can choose to show stemlets on rests in all beamed groups in each flow on the **Beam Grouping** page in **Write** > **Notation Options**.

EXAMPLE

Stemlet with only the rest selected

Stemlet with notes either side selected

Stemlets shown with all notes and rests in beam group selected

Removing stemlets from beam groups

You can remove stemlets from rests in beam groups individually, independently of your default setting for showing stemlets in the current flow.

PROCEDURE

1. Select a note in the beam groups from which you want to remove stemlets on rests.

2. Choose **Edit** > **Beaming** > **Stemlets** > **Suppress Stemlet Beam**. You can also choose this option from the context menu.

RESULT

Stemlets are removed from all rests in the selected beams.

NOTE

● Removing stemlets from beams does not reset the selected beams to your default beam grouping for the flow.

● You can choose not to show stemlets on rests in all beam groups in each flow on the **Beam Grouping** page in **Write** > **Notation Options**.

EXAMPLE

Beam group showing stemlets

Beam group with suppressed stemlets

RELATED LINKS
Resetting beam grouping on page 406

Fanned beams

Fanned, or "feathered", 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.

A single 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.

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

Creating fanned beams

You can create fanned beams across a group of any notes that can be beamed, such as eighth notes (quavers), 16th notes (semiquavers), and 32nd notes.

PROCEDURE

1. Select the notes you want to include in a fanned beam. You can do this in Write mode and Engrave mode.

2. Choose **Edit** > **Beaming** > **Create Fanned Beam** > **[Direction and number of lines]**.

   For example, choose **Edit** > **Beaming** > **Create Fanned Beam** > **Accelerando (Three Lines)** for an accelerando fanned beam with three lines.

   TIP

   You can also choose these options from the context menu.

RESULT

The selected notes are joined with a fanned beam with a single slope.

NOTE

The durations of the notes you select are ignored when showing a fanned beam.

AFTER COMPLETING THIS TASK

You can change the direction within the fanned beam in multiple places.

RELATED LINKS
Changing the direction within fanned beams on page 418

Changing the direction within fanned beams

You can change the direction of fanned beams within phrases to indicate tempo changes.

PROCEDURE

1. In Engrave mode, select the notehead at each rhythmic position where you want to change the direction of the fanned beam slope.

NOTE

You can select multiple positions within phrases.

2.   In the Properties panel, activate **Change fanned beam direction** in the **Beaming** group.

EXAMPLE

Fanned beam with multiple changes of direction

Note and rest grouping

There are generally accepted conventions for how notes and rests of different durations are notated and grouped in different contexts.

In Dorico, notes are automatically notated to fit within bars and are grouped according to your per-flow settings.

Depending on the prevailing time signature, there can be many different ways to beam notes together. For example, you might want to beam all notes in the bar together in time signatures that cannot be divided in half and are often not divided at all, such as 3/4.

Tied notes are affected by your note and rest grouping settings, as there are different conventions for how the 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.

You can change the default note grouping and beam grouping settings for your project on the **Note Grouping** and **Beam Grouping** pages in **Write** > **Notation Options**.

The options are accompanied by diagrams to help you visualize how they affect the appearance of your music.

RELATED LINKS

Conventions for beam grouping according to meter

According to accepted conventions, notes are beamed differently in different time signatures to make the meter clear and easily readable.

For example, music in 3/4 is beamed in one group of six eighth notes (quavers), whereas music in 6/8 is beamed in two groups, each the value of a dotted quarter note (crotchet). Although these two time signatures describe the same rhythmic value, the implicit meter within them is different, and so the beam grouping is different.

Default beam grouping in 3/4

Default beam grouping in 6/8

For irregular time signatures, such as 5/8 or 7/8, Dorico beams notes by default according to the most common practices for those time signatures.

Default beam grouping in 5/8

Default beam grouping in 7/8

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.

NOTE

The duration of beam groups in Dorico depends on the beat grouping in the current time signature and your per-flow beam grouping settings in **Write** > **Notation Options**. For example, entering [1+1+1+1]/4 into the time signatures popover inputs a time signature with four quarter note (crotchet) groups. Because this creates a time signature with a half-bar, beam grouping options for time signatures with a half-bar apply.

PROCEDURE

1. In Write mode, select an item at the rhythmic position where you want to input a time signature with a custom beam grouping.

2. Open the time signatures popover in any of the following ways:

   - Press **Shift-M**.

   - Choose **Write** > **Create Time Signature**.

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

RESULT

The time signature appears either as a single number, such as 7/8, or showing the beat groups, such as 2+3+2/8, depending on your setting on the **Time Signatures** page in **Engrave** > **Engraving Options**.

TIP

You can change the appearance of numerators in individual time signatures so that they show a single number or beat groups independently of your project-wide settings.

RELATED LINKS
Notation Options dialog on page 110
Project-wide engraving options for time signatures on page 752
Time signature styles on page 755
Changing the numerator style of time signatures on page 756

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, barlines join the same staves that are joined by brackets and braces, meaning that a bracketed group of staves or a braced pair of staves appears with barlines extending across the group.

Braces

A brace is a wavy or curly line that joins multiple staves belonging to the same 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

RELATED LINKS
Barlines across staff groups on page 384
Player groups on page 86
Adding groups of players on page 86
Secondary brackets on page 425

Brackets according to ensemble type

You can bracket staves together according to their ensemble type in Dorico.

The following ensemble types are available on the **Brackets and Braces** page in **Engrave** > **Engraving Options**:

No brackets

All staves appear separately, with no brackets.

Orchestral

Staves are bracketed according to their instrument family. This is the default setting.

Small ensemble

All staves in the project are bracketed together.

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.

RELATED LINKS
Changing bracket grouping according to ensemble type on page 424
Project-wide engraving options for brackets and braces on page 424

Changing bracket grouping according to ensemble type

You can change which staves are included in brackets by changing the project-wide setting for ensemble type.

The default setting is **Orchestral**. We recommend that you change this setting for projects containing small ensembles.

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Engraving Options**.
    The **Engraving Options** dialog opens.
2. Click **Brackets and Braces** in the page list.
3. In the **Approach** section, choose one of the following options for **Ensemble type**:
    - **No brackets**
    - **Orchestral**
    - **Small ensemble**
    - **Wind band**
    - **Big band**
    - **British brass band**

RELATED LINKS
Brackets according to ensemble type on page 423
Barlines across staff groups on page 384

Project-wide engraving options for brackets and braces

You can find options for the project-wide appearance of brackets and braces on the **Brackets and Braces** page in **Engraving Options**.

The options on the **Brackets and Braces** page allow you to change which instruments are bracketed together, and change the design of brackets.

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

- Press **Ctrl/Cmd-Shift-E** in any mode.
- Choose **Engrave** > **Engraving Options** in Engrave mode.

You can then click **Brackets and Braces** in the page list on the left of the dialog.

Changing the appearance of bracket ends project-wide

You can change the appearance of all bracket ends project-wide.

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Engraving Options**.
    The **Engraving Options** dialog opens.
2. Click **Brackets and Braces** in the page list.
3. In the **Design** section, choose one of the following options for **Bracket end design**:
    - **Wings** (default)

- **Horizontal line**

- **None**

Secondary brackets

Secondary brackets extend beyond brackets, allowing you to mark groups of staves within a bracketed group. You can show secondary brackets as a brace positioned outside the bracket or as a sub-bracket in Dorico.

Secondary bracket 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 how thick the lines of sub-brackets are, and the distance between sub-brackets and the systemic barline, in the **Sub-brackets** subsection of the **Design** section of the **Brackets and Braces** page in **Engrave** > **Engraving Options**.

Secondary bracket as a brace

Secondary brackets can also appear as a brace instead of a sub-bracket.

You can change the distance between braces and brackets in the **Sub-brackets** subsection of the **Design** section of the **Brackets and Braces** page in **Engraving Options**.

RELATED LINKS
Project-wide engraving options for brackets and braces on page 424

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.

Depending on the style of music, there are different conventions regarding how to present chord names.

RELATED LINKS

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♭.

Project-wide engraving options for chord symbols

You can find options for the project-wide appearance and position of chord symbols on the **Chord Symbols** page in **Engraving Options**.

The options on the **Chord Symbols** page in **Engraving Options** allow you to change the appearance of different types of chords and their default positions.

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

- Press **Ctrl/Cmd-Shift-E** in any mode.
- Choose **Engrave** > **Engraving Options** in Engrave mode.

You can then click **Chord Symbols** in the page list on the left of the dialog.

Chord symbol appearance presets

There are many conventions for the appearance of chord symbols, so Dorico provides a choice of preset conventions that you can use and edit.

For example, you can edit default preset chord symbols, you can edit individual chord symbols without changing the default appearance for that chord symbol, and you can edit individual components within chord symbols.

You can find chord symbol presets at the top of the **Chord Symbols** page in **Engraving Options**.

Chord symbol preset example	Chord symbol preset name
$\mathrm{B\flat maj7} \binom{\sharp 11}{\sharp 9} / \mathrm{F}$	Default
$\mathrm{B\flat maj7}(\sharp 9\ \sharp 11) / \mathrm{F}$	Boston
$\mathrm{B^\flat MA7} \binom{\sharp 11}{\sharp 9} \big/ \mathrm{F}$	Brandt-Roemer
$\mathrm{B\flat} \triangle {}^{+11}_{+9} / \mathrm{F}$	Indiana
$\mathrm{B\flat Maj7}{}^{+11}_{+9} / \mathrm{F}$	New York
$\dfrac{\flat 7 \triangle {}^{\sharp 11}_{\sharp 9}}{4}$	Nashville
$\mathrm{B^\flat MA7} \binom{\sharp 11}{\sharp 9} \big/ \mathrm{F}$	Jazz Standards
$\dfrac{\mathrm{B\flat maj7}{}^{+11}_{+9}}{\mathrm{F}}$	Ross
$\mathrm{B^\flat M7} \binom{\sharp 11}{\sharp 9} on\mathrm{F}$	Japanese

These presets use specific combinations of the options on the **Chord Symbols** page.

You can also adjust these options individually to suit your requirements.

Default uses a set of symbols intended to be as unambiguous as possible. For example, **Default** avoids the use of symbols for major seventh, augmented, diminished, and half-diminished. This is the default preset for new projects.

Custom is automatically selected when you change any of the preset options on the **Chord Symbols** page.

RELATED LINKS

Project Default Chord Symbol Appearances dialog

You can edit the default appearance of chord symbols in the **Project Default Chord Symbol Appearances** dialog. This changes the appearance of chord symbols project-wide.

- You can open the **Project Default Chord Symbol Appearances** dialog by clicking **Edit** in the **Project Default Appearances** section of the **Chord Symbols** page in **Engrave** > **Engraving Options**.

Project Default Chord Symbol Appearances dialog

The **Project Default Chord Symbol Appearances** dialog contains the following sections:

1 Enter a chord symbol

Allows you to enter the chord symbol whose default project-wide appearance you want to edit. Click **Add Project Default** or press **Return** to add the chord symbol to the **Project Default Appearances** list, which allows you to edit the chord symbol in the editor.

2 Project Default Appearances list

Contains the chord symbols whose project default appearance you have edited in the project.

You can delete changes to the project default appearance of chord symbols by clicking **Delete** in the action bar.

3 **Single Overrides** list

Contains the chord symbols whose individual appearance you have overridden in the project.

You can promote your edits to individual chord symbols to be the project default appearance for that chord symbol by clicking **Promote to Project Default** in the action bar.

You can reset single overrides to the project default appearance for that chord symbol by clicking **Remove Overrides** in the action bar.

4 Editor

Allows you to arrange and edit the components that make up the chord symbol. You can use the controls at the bottom of the dialog, and you can also move individual components in any of the following ways after selecting them in the editor:

- Press the standard key commands for moving items. For example, press **Alt-Right Arrow** to move components to the right, or press **Ctrl/Cmd-Alt-Right Arrow** to move components to the right by larger increments.

- Click and drag each component.

NOTE

You cannot move the first component in chord symbols.

In addition to using **Scale**, you can also change the size of components by clicking and dragging the square handle in the top right corner after selecting a component in the editor.

5 Controls

- **X offset** moves components horizontally. Increasing the value moves components to the right, decreasing the value moves components to the left.

- **Y offset** moves components vertically. Increasing the value moves components upwards, decreasing the value moves components downwards.

- **Scale** changes the size of components. Increasing the value increases the size of components proportionally, decreasing the value decreases the size of components proportionally.

- **Reset X offset** resets the horizontal position of the selected component.

- **Reset Y offset** resets the vertical position of the selected component.

- **Reset Scale** resets the size of the selected component.

6 Alternative component presentations

Contains alternative ways of presenting the component selected in the editor.

Allows you to create new components and edit existing components by clicking the respective button in the action bar.

- **Add Component**

- **Edit Component**

Clicking either button opens the **Edit Composite Component** dialog, in which you can create new chord symbol components and edit existing chord symbol components.

Edit Chord Symbol Appearance dialog

You can use the **Edit Chord Symbol Appearance** dialog to edit the appearance and arrangement of individual chord symbols, without changing the project default appearance of that chord symbol.

You can open the **Edit Chord Symbol Appearance** dialog in the following ways:

- In Engrave mode, select a chord symbol and press **Return**.

- In Engrave mode, double-click a chord symbol.
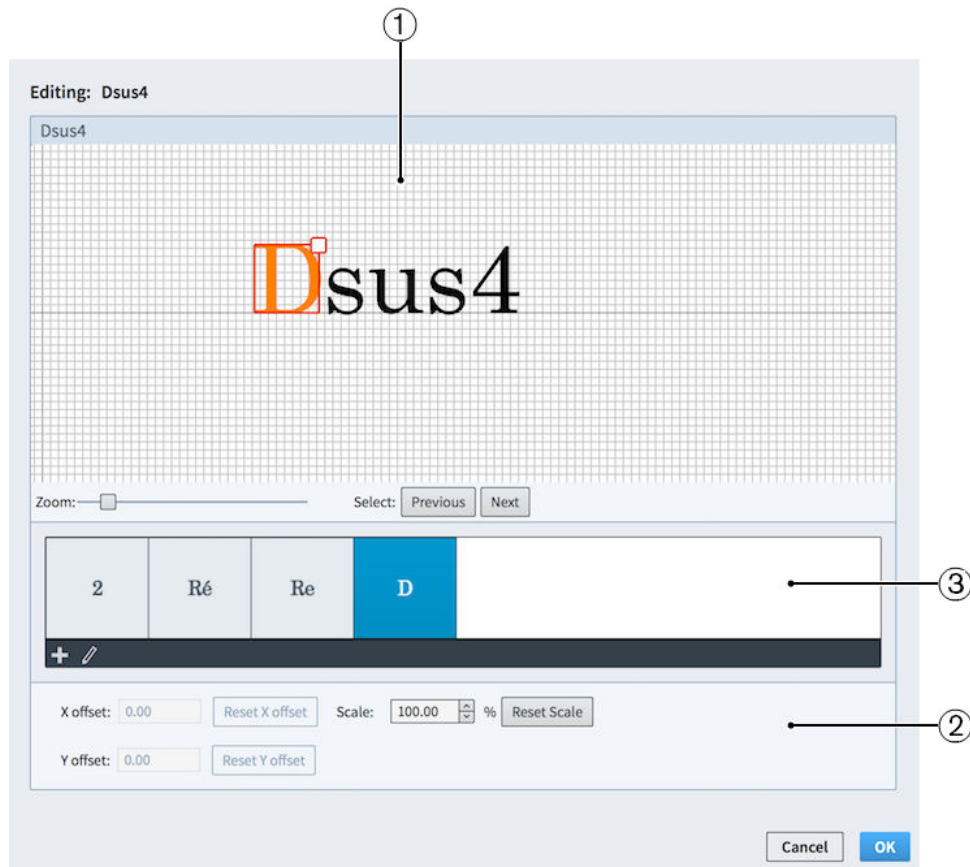
Edit Chord Symbol Appearance dialog

The **Edit Chord Symbol Appearance** dialog contains the following sections:

1   Editor

Allows you to arrange and edit the components that make up the chord symbol.

As well as using the controls at the bottom of the dialog, you can move individual components in any of the following ways after selecting them in the editor:

- Press the standard key commands for moving items. For example, press **Alt-Right Arrow** to move components to the right, or press **Ctrl/Cmd-Alt-Right Arrow** to move components to the right by larger increments.

- Click and drag each component.

NOTE

You cannot move the first component in chord symbols.

In addition to using **Scale**, you can also change the size of components by clicking and dragging the square handle in the top right corner after selecting a component in the editor.

2   Controls

Allow you to move individual components and change their size. You can also reset their position and size.

- **X offset** moves components horizontally. Increasing the value moves components to the right, decreasing the value moves components to the left.

- **Y offset** moves components vertically. Increasing the value moves components upwards, decreasing the value moves components downwards.

- **Scale** changes the size of components. Increasing the value increases the size of components proportionally, decreasing the value decreases the size of components proportionally.

- **Reset X offset** resets the horizontal position of the selected component.

- **Reset Y offset** resets the vertical position of the selected component.

- **Reset Scale** resets the size of the selected component.

3   Alternative component presentations

You can create new components and edit existing components by clicking the respective button in the action bar.

- **Add Component**

- **Edit Component**

Clicking either button opens the **Edit Composite Component** dialog, in which you can create new components and edit existing components.

RELATED LINKS
Chord symbol appearance presets on page 428
Edit Composite Component dialog on page 432

Edit Composite Component dialog

You can create custom components and edit existing components for both individual chord symbols and for project default chord symbols in the **Edit Composite Component** dialog.

You can open the **Edit Composite Component** dialog by clicking either **Add Component** or **Edit Component** in the alternative component presentations action bar in the following dialogs:

- **Project Default Chord Symbol Appearances** dialog
- **Edit Chord Symbol Appearance** dialog
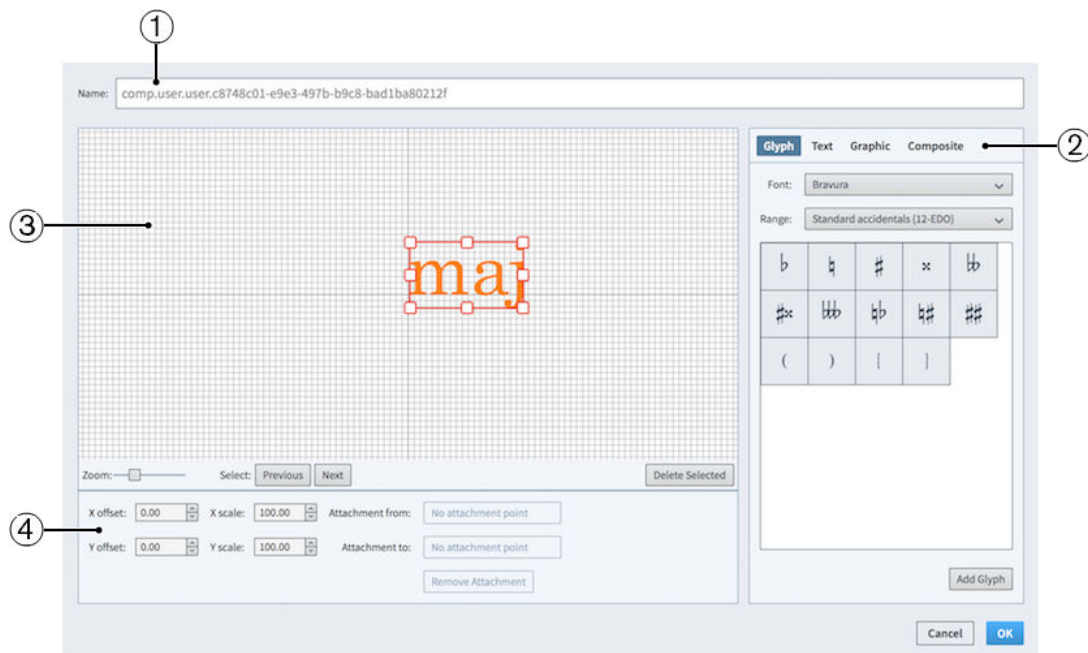
Edit Composite Component dialog

The **Edit Composite Component** dialog contains the following sections:

1 Name

Contains an automatically generated name for the chord symbol component. You cannot change this name.

2 Component selector

Allows you to choose components to add to your chord symbol component. You can add different types of components by clicking the respective tab titles.

- **Glyph**, for example, ♮ or ♯. You can use different styles of glyphs by selecting different fonts and different ranges from the menus. Click **Add Glyph** to add the selected glyph to the chord symbol component.

  NOTE

  A full list of the different ranges of glyphs is available on the SMuFL website.

- **Text**, including numbers and other text. You can use numbers and text from the available **Preset text** list, or select any font available from the menu and enter your preferred text into the text box at the bottom. Click **Add Text** to add the selected text, or input text, to the chord symbol component.

- **Graphic**: Allows you to load a new graphic file, or select an existing graphic from the **Select existing** list. Most image formats are supported. You can see a preview of the graphic in the **Preview** box. Click **Add Graphic** to add the selected graphic to the chord symbol component.

- **Composite**: Allows you to select a composite from the list. Click **Add Composite** to add the selected composite to the chord symbol component.

3 Editor

Allows you to arrange and edit the components that make up your chord symbol component. You can arrange and edit components using the controls at the bottom of the dialog.

4 Controls

- **X offset** moves components horizontally. Increasing the value moves components to the right, decreasing the value moves components to the left.

- **Y offset** moves components vertically. Increasing the value moves components upwards, decreasing the value moves components downwards.

- **X scale** changes the width of graphics only. Increasing the value makes graphics wider, decreasing the value makes graphics narrower.

- **Y scale** changes the size of components. Increasing the value makes components larger, decreasing the value makes components smaller. For graphics only, increasing the value makes graphics taller, decreasing the value makes graphics shorter.

- **Attachment from**: Select the attachment point on the component to the left of the selected component to which the selected component attaches. We recommend that you select a right edge attachment point for **Attachment from**.

- **Attachment to**: Select the attachment point on the selected component which attaches to the component to its left. We recommend that you select a left edge attachment point for **Attachment to**.

There are eight attachment points for glyphs and graphics, and eleven for text, due to the extra space required for letters that extend below the baseline. The example diagram helps you visualize how these points relate to components.
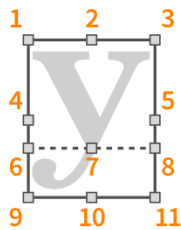
The attachment points have the following names in the **Edit Composite Component** dialog:

1   **Top Left**

2   **Top Middle**

3   **Top Right**

4   **Left Middle**

5   **Right Middle**

6   **Baseline Left** (text only)

7   **Baseline Middle** (text only)

8   **Baseline Right** (text only)

9   **Bottom Left**

10   **Bottom Middle**

11   **Bottom Right**

RELATED LINKS

Setting single chord symbol overrides as the project default

You can set single overrides you have made to individual chord symbols as the project default appearance for that chord symbol.

PROCEDURE

1.   Open the **Project Default Chord Symbol Appearances** dialog.

2. Select the single override that you want to set as project default in the **Single Overrides** list.

3. Click **Promote to Project Default**.

RESULT

The selected single chord symbol override becomes the default appearance for that chord symbol.

NOTE

This cannot be undone. If you want to revert your changes, you must delete the chord symbol from the **Project Default Appearances** list.

RELATED LINKS
Project Default Chord Symbol Appearances dialog on page 429

Resetting the appearance of chord symbols with single overrides

You can reset the appearance of chord symbols you have overridden individually to the project default appearance for that chord symbol.

PROCEDURE

1. Open the **Project Default Chord Symbol Appearances** dialog.

2. Select the single override that you want to reset in the **Single Overrides** list.

3. Click **Remove Overrides**.

RESULT

All individual changes to the chord symbol are removed. It now follows the project default appearance for that chord symbol.

RELATED LINKS
Project Default Chord Symbol Appearances dialog on page 429

Changing chord symbol fonts

You can change the text fonts used for chord symbols project-wide.

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Font Styles**.
The **Edit Font Styles** dialog opens.

2. Select one of the following fonts from the **Font style** menu:

- **Chord Symbols Altered Bass Separator Font**
- **Chord Symbols Font**
- **Chord Symbols Music Text Font**

> **TIP**
>
> When using the option to show the word "on" instead of a slash or line to separate a chord from its altered bass note, you can edit the font used for that word by editing **Chord Symbols Altered Bass Separator Font**.

> **NOTE**
>
> We recommend that you do not edit **Chord Symbols Music Text Font**, which is set to Bravura Text by default. This can only be set to a SMuFL-compliant font intended for use in text-based applications.

3. Activate the following options, individually or together, to change the corresponding aspect of the font:

    - **Font family**
    - **Size**
    - **Style**
    - **Underlined**

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

Changing existing chord symbols

You can change chord symbols after they have been input.

PROCEDURE

1. In Write mode, select the chord symbol you want to change.
2. Open the chord symbols popover in any of the following ways:

    - Press **Return**.
    - Double-click the chord symbol.

    The existing short-hand for the chord symbol is shown inside the popover.
3. Change the existing chord symbol in one of the following ways:

    - Change the existing short-hand in the popover or enter an entirely new chord symbol.
    - Play in a new chord symbol using your MIDI keyboard.
4. Press **Return** to close the popover.

RESULT

The chord symbol is changed to what you entered or played into the popover.

Transposing chord symbols

Chord symbols can be transposed, and appear at the appropriate transposed pitch when shown on transposing instruments.

PROCEDURE

1. In Write mode, select the chord symbols you want to transpose.
2. Choose **Write** > **Transpose**.
    The **Transpose** dialog opens.
3. Change the transposition using the options in the dialog.

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

Showing instruments and chord symbols at transposed pitch

You can show chord symbols at the appropriate transposed pitch for transposing instruments, rather than at concert pitch.

PROCEDURE

- Choose **Edit** > **Transposed Pitch**.

IMPORTANT

This changes the shown transposition for all transposing instruments in the layout.

Hiding/Showing chord symbols

You can hide/show chord symbols in the current layout without deleting them.

PROCEDURE

1. Select the chord symbols or chord symbol signposts you want to hide/show. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate/deactivate **Hidden** in the **Chord Symbols** group.

RESULT

Chord symbols are hidden when the property is activated, and shown when the property is deactivated.

Signposts are shown at the positions of each chord symbol so you can always find them again. However, signposts are not printed by default.

TIP

If you do not want to show chord symbol signposts, choose **View** > **Signposts** > **Chord Symbols**.

Chord symbol signposts are shown when a tick appears beside **Chord Symbols** in the menu, and hidden when no tick appears.

RELATED LINKS
Signposts on page 106

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. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate **Hide root and quality** in the **Chord Symbols** group.

3. Activate/Deactivate the corresponding checkbox.

RESULT

The root and quality of the selected chord symbols are hidden when the checkbox is activated, and shown when the checkbox is deactivated.

When the property is deactivated, chord symbols follow your project-wide setting.

TIP

You can choose to show the root and quality of chord symbols always, even if successive chord symbols have the same root and quality, in the **Altered Bass Notes** section of the **Chord Symbols** page in **Engrave** > **Engraving Options**.

RELATED LINKS
Project-wide engraving options for chord symbols on page 427

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 positions in full scores is determined by the staves above which they are set to appear. 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 chord symbols by choosing an option for **Horizontal alignment relative to note, chord or rest** in the **Position** section of the **Chord Symbols** page in **Engraving Options**.

You can also override this for an individually selected chord symbol 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. You can deactivate **Align chord symbols across width of system** in the **Position** section of the **Chord Symbols** page in **Engraving Options** if you want each chord symbol to be positioned above the staff independently.

RELATED LINKS
Project-wide engraving options for chord symbols on page 427
Moving chord symbols rhythmically on page 439
Moving chord symbols graphically on page 439
Changing the staves above which chord symbols appear on page 440
Changing the layouts in which chord symbols appear on page 441

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 value in any of the following ways:

- Press **Alt-Right Arrow** to move them to the right.
- Press **Alt-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.

Moving chord symbols graphically

You can move chord symbols graphically without affecting the rhythmic positions to which they apply.

PROCEDURE

1. In Engrave mode, select the chord symbols you want to move.

2. Move the chord symbols in any of the following ways:

- Press **Alt-Right Arrow** to move them to the right.
- Press **Alt-Left Arrow** to move them to the left.
- Press **Alt-Up Arrow** to move them upwards.
- Press **Alt-Down Arrow** to move them downwards.

  > TIP
  >
  > If you want to move items by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

- Click and drag them in any direction.

RESULT

The selected chord symbols are moved graphically, without affecting the rhythmic positions to which they are attached.

> **TIP**
>
> **Start offset** in the **Chord Symbols** group of the Properties panel is activated automatically when you move chord symbols.
>
> - **Start offset X** moves chord symbols horizontally.
> - **Start offset Y** moves chord symbols vertically.
>
> You can also use this property to move chord symbols graphically by changing the values in the value fields.
>
> Deactivating the property resets the selected chord symbols to their default positions.

Changing the staves above which chord symbols appear

You can change the players above whose staves chord symbols appear.

By default, chord symbols appear above the staves belonging to rhythm section instruments, such as keyboards, guitars, and bass guitars.

PROCEDURE

1. In Setup mode, select a player in the **Players** panel above which you want to hide/show chord symbols.
2. Right-click the player and choose one of the following options from the context menu:
   - **Chord Symbols** > **Show For All Instruments**

     Chord symbols are shown above the staff of the selected player.
   - **Chord Symbols** > **Show For Rhythm Section Instruments**

     Chord symbols are shown above the staff of the selected player if it is a rhythm section instrument.
   - **Chord Symbols** > **Hide For All Instruments**

     Chord symbols are not shown above the staff of the selected player.

RESULT

Chord symbols are hidden/shown above the staff of the selected player. For example, if you choose **Show For All Instruments**, chord symbols can now appear above the selected player in the full score and any corresponding part layouts, depending on the layouts in which chord symbols are shown in your project.

> **TIP**
>
> You can show chord symbols between the two staves of grand staff instruments, such as piano. In **Engraving Options**, choose **Between staves** for **Position of chord symbols on grand staff instruments** in the **Position** section of the **Chord Symbols** page.

RELATED LINKS

Changing the layouts in which chord symbols appear

You can change which layouts show chord symbols. By default, chord symbols appear both in full score and part layouts for rhythm section instruments.

NOTE

If chord symbols are not set to appear for any instrument 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:

    ● **Chord Symbols** > **Show in Full Score and Parts**

    Chord symbols are shown above the staff of the selected player in all layouts that include the player.

    ● **Chord Symbols** > **Show in Full Score Only**

    Chord symbols are only shown above the staff of the selected player in full score layouts and not in any part layouts.

    ● **Chord Symbols** > **Show in Parts Only**

    Chord symbols are only shown above the staff of the selected player in part layouts and not in full score layouts.

Changing the enharmonic spelling of chord symbols

You can respell a chord symbol for a transposing instrument in a transposing layout by editing the chord symbol.

PROCEDURE

1. In Write mode, select the chord symbol you want to respell.
2. Open the chord symbols popover for the selected chord symbol in any of the following ways:

    ● Press **Return**.

    ● Double-click the chord symbol.

    The existing short-hand for the chord symbol is shown inside the popover.

3. 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 altered for all instruments with the same transposition.

Resetting the enharmonic spelling of chord symbols

You can remove enharmonic spelling overrides for chord symbols. You can remove overrides for the current instrument only, or for all instruments to which the chord symbol applies.

PROCEDURE

1. In Write mode, select the chord symbol you want to respell.

2. Open the chord symbols popover for the selected chord symbol in any of the following ways:

- Press **Return**.

- Double-click the chord symbol.

The existing short-hand 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 remove the enharmonic spelling override for a chord symbol for the instrument above which the popover appears, enter **Alt-S** into the chord symbol popover.

- To remove all enharmonic spelling overrides for a chord symbol for all instruments, enter **Shift-Alt-S** into the popover.

Playing back chord symbols

Chord symbols are played back as sustained chords, with their duration taken from the gap between one chord symbol and the next.

If the chord symbol was input using a MIDI keyboard, the chord plays back using the voicing that was used to input the chord symbol.

PROCEDURE

1. Expand the chord track at the top of the event display in Play mode.

2. Choose the playback device (VST instrument or MIDI device) that you want to use, and choose the channel or slot containing the desired sound.

You can also load a new sound manually.

3. Activate the speaker icon to enable playback.

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.

Clefs and octave lines

Clefs and octave lines provide crucial information about the pitch and register of notes.

Clefs define which staff line or space corresponds to which scale degree, and also help to communicate the register of the notes on the staff. Octave lines allow notes to be written within the staff when they would otherwise require many ledger lines due to their register.

In Dorico, clefs and octave lines are grouped together because they both affect the meaning of note positions on the staff. In this way, octave lines could be considered to be temporary clef changes.

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
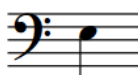
The E below middle C shown in a bass clef
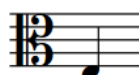
The E below middle C shown in a C (alto) clef

The E below middle C shown in a C (tenor) clef

In Dorico, clefs and octave lines are both contained in the Clefs panel on the right of the window. Three sections of the panel apply to clefs:

- **Common Clefs**, including treble clef, bass clef, alto clef, and tenor clef.
- **Uncommon Clefs**, including tab, French violin clef, treble clef octave above, treble clef octave below, and so on.
- **Archaic Clefs**, including baritone bass clef, mezzo-soprano clef, and soprano clef, which are not commonly used any more.

RELATED LINKS
Input methods for clefs and octave lines on page 175

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, but we recommend that you position clef changes either before or after tie chains.

RELATED LINKS
Ties on page 735
Tie chains on page 737
Ties vs. slurs on page 737
Input methods for clefs and octave lines on page 175

Project-wide spacing gaps for clefs

You can change the minimum gaps between objects, including clefs, on the **Spacing Gaps** page in **Engraving Options**.

The options are accompanied by diagrams to help you visualize how they affect the appearance of your music.

The following minimum values directly relate to clefs:

- **Gap after barline before clef, key or time signature**
- **Gap after initial clef**
- **Gap to the left of clef, cancellation naturals or grace notes before note or barline**
- **Gap after clef change**

Other values may have an effect on the position of clefs, however they also affect other objects.

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

- Press **Ctrl/Cmd-Shift-E** in any mode.
- Choose **Engrave** > **Engraving Options** in Engrave mode.

You can then click **Spacing Gaps** in the page list on the left of the dialog.

Moving clefs rhythmically

You can move clefs to new rhythmic positions after they have been input.

TIP

You can change the default positions of clefs relative to notes or barlines by changing the project-wide values for spacing gaps on the **Spacing Gaps** page in **Engrave** > **Engraving Options**.

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 value in any of the following ways:

    - Press **Alt-Right Arrow** to move them to the right.

    - Press **Alt-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.

RELATED LINKS
Inputting clefs with the popover on page 178
Inputting clefs with the panel on page 178

Moving clefs graphically

You can move individual clefs graphically without affecting the positions of any other items.

PROCEDURE

1. In Engrave mode, activate **Note Spacing** in the Formatting panel.

2. Select the square handle above the clef you want to move.

    A circular handle appears beside the clef.

3. Select the circular handle.

4. Move the handle in any of the following ways:

- Press **Alt-Right Arrow** to move it to the right.

- Press **Alt-Left Arrow** to move it to the left.

   TIP

   If you want to move items by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

NOTE

You cannot move note spacing handles with the mouse, you can only move them using the keyboard.

RESULT

The clef is moved graphically to the right/left, without affecting other items at the same rhythmic position.

TIP

You can also change **Spacing Offset** in the **Clefs** group of the Properties panel to move clefs horizontally. However, this also affects global note spacing around the rhythmic position of the clef.

NOTE

The **Spacing Offset** property in the **Clefs** group of the Properties panel is not available when **Note Spacing** is activated.

RELATED LINKS
Note spacing on page 284

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 you want to delete.

2. Delete the clefs in any of the following ways:

- Press **Backspace** or **Delete**.

- Choose **Edit** > **Delete**. You can also choose this option from the context menu.

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

Default size of clef changes

You can change the default scale factor of all clef changes project-wide.

The default **Clef change scale factor** is 2/3. You can change the default clef change size on the **Clefs** page in **Engraving Options**.

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

- Press **Ctrl/Cmd-Shift-E** in any mode.
- Choose **Engrave** > **Engraving Options** in Engrave mode.

Increasing the scale factor makes clef changes appear larger, decreasing the scale factor makes clef changes appear smaller. This does not affect the size of clefs at the start of each system.

The smallest scale factor that you can input is **1/8**. There is no maximum limit. However, for example, a scale factor of more than 30 causes a single clef to take up most of an A4 page, which is rarely beneficial.

Changing the position of clefs relative to grace notes

By default, clefs are not positioned between a note and its grace note. Dorico automatically positions clefs correctly and updates their position according to what you input. However, in some circumstances you might want to position clefs between a note and its grace note.

PROCEDURE

1. Select the clef whose position you want to change. You can do this in Write mode and Engrave mode.
2. Choose **Edit** > **Clef Position** > **After Grace Notes**. You can also choose this option from the context menu.

RESULT

The clef is positioned between a note and its grace note.

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.

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.

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, 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 175

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:

   ● Press **Shift-Alt-Right Arrow** to lengthen them by the current rhythmic grid value.

   ● Press **Shift-Alt-Left Arrow** to shorten them by the current rhythmic grid value.

   ● Press **Ctrl/Cmd-Shift-Alt-Right Arrow** to snap the end of a single octave line to the next notehead.

   ● Press **Ctrl/Cmd-Shift-Alt-Left Arrow** to snap the end of a single octave line to the previous notehead.

      NOTE

      ● You can only lengthen/shorten octave lines by the current rhythmic grid value 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 value or to the next/previous notehead, whichever is closer.

Multiple octave lines are lengthened/shortened according to the current rhythmic grid value.

RELATED LINKS
Positions of octave lines on page 450
Moving octave lines rhythmically on page 450
Moving octave lines graphically on page 451

Positions of octave lines

You can change the default position of all octave lines project-wide and move octave lines individually. For example, you can override the default position of individual octave lines where the notes to which they apply require more/less vertical space.

You can move octave lines to new rhythmic positions in Write mode. They are positioned by default according to your settings in **Engraving Options**. You can move octave lines graphically in Engrave mode, however this does not change the rhythmic positions to which they apply.

You can change the default positions of all octave lines project-wide on the **Octave Lines** page in **Engrave** > **Engraving Options**.

RELATED LINKS
Project-wide engraving options for octave lines on page 455
Moving octave lines rhythmically on page 450
Moving octave lines graphically on page 451

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:

- Press **Alt-Right Arrow** to move them to the right.
- Press **Alt-Left Arrow** to move them to the left.
- Click and drag the octave line to the right/left.

RESULT

The octave lines are moved to noteheads to the right/left along the staff. The octave lines now apply to the notes at their new positions. If an 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.

NOTE

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
Inputting octave lines with the popover on page 179
Inputting octave lines with the panel on page 180

Moving octave lines graphically

You can move octave lines graphically without changing the rhythmic positions to which they apply. You can move each end of octave lines independently, meaning you can also adjust the graphical lengths of individual octave lines.

NOTE

You cannot change the angle of octave lines.

PROCEDURE

1. In Engrave mode, select one of the following that you want to move:

- Whole octave lines
- The start/end handles of octave lines

TIP

You can show handles on all items, not just selected items, by choosing **Engrave** > **Show Handles** > **Always**. This can make it easier to select individual handles on multiple items.

2. Move the octave lines or handles in any of the following ways:

- Press **Alt-Right Arrow** to move octave lines and handles to the right.
- Press **Alt-Left Arrow** to move octave lines and handles to the left.
- Press **Alt-Up Arrow** to move octave lines and start handles upwards.
- Press **Alt-Down Arrow** to move octave lines and start handles downwards.

  NOTE

  You cannot move the end handles on octave lines upwards/downwards, you can only move them to the right/left.

  You can move the start handles on octave lines upwards/downwards but this also moves the whole octave line.

  TIP

  If you want to move items by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

- Click and drag whole octave lines upwards/downwards.
- Click and drag handles on octave lines to the right/left.

RESULT

The selected octave lines or handles are moved to new graphical positions.

TIP

The following properties in the **Octave Lines** group of the Properties panel are activated automatically when you move octave lines in the corresponding directions:

- **Start X offset** moves the start of octave lines horizontally.
- **End X offset** moves the end hooks of octave lines horizontally.
- **Y offset** moves whole octave lines vertically.

For example, if you move a whole octave line to right, both handles are moved, so **Start X offset** and **End X offset** are both activated. You can also use all three properties to move and lengthen/shorten octave lines graphically by changing the values in the value fields.

Deactivating the properties resets the selected octave lines to their default positions.

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. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate **L alignment** in the **Octave Lines** group.

3. Select one of the following options from the menu:

    *   **Left**

    *   **Center**

    *   **Right**

RESULT

The alignment of the numerals of the selected octave lines is changed. For example, if you select **Right**, the right edge of the selected octave line numerals is aligned with the first noteheads to which the octave lines apply.

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, independently of your project-wide setting.

PROCEDURE

1. Select the octave lines whose numeral alignment relative to accidentals you want to change. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate **L position** in the **Octave Lines** group.

3. Choose one of the following options:

    *   **Notehead**

    *   **Accidental**

RESULT

The alignment of the numerals of the selected octave lines is changed. For example, if you choose **Accidental**, the octave line numerals are aligned with the accidental on the first noteheads to which the octave lines apply.

TIP

You can change the default alignment of all octave line numerals project-wide in the **Horizontal Position** section of the **Octave Lines** page in **Engrave** > **Engraving Options**.

RELATED LINKS
Project-wide engraving options for octave lines on page 455

Changing the placement of octave lines relative to the staff

You can change the side of the staff on which individual octave lines appear.

PROCEDURE

1.   Select the octave lines whose placement relative to the staff you want to change. You can do this in Write mode and Engrave mode.

2.   In the Properties panel, activate **Placement** in the **Octave Lines** group.

3.   Choose one of the following options:

- **Above**

- **Below**

RESULT

The selected octave lines appear above/below the staff.

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.   Delete the octave lines in any of the following ways:

- Press **Backspace** or **Delete**.

- Choose **Edit** > **Delete**. You can also choose this option from the context menu.

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
Clefs and octave lines popover on page 176
Input methods for clefs and octave lines on page 175
Changing whether layouts are transposing/non-transposing on page 93

Octave lines in Engrave mode

In Engrave mode, each octave line has three square handles. You can use these handles to move the start/end of octave lines graphically, and to lengthen/shorten octave line hooks.

An octave line in Engrave mode

- The start handle moves the start of octave lines graphically. You can move this handle to the right/left.

    NOTE

    When using the keyboard, you can also move this handle upwards/downwards. This moves the whole octave line.

- The top end handle moves the end of octave lines graphically. You can move this handle to the right/left.

- The bottom end handle changes the length of the hook. You can move this handle upwards/downwards.

Lengthening/Shortening octave line hooks

You can change the length of individual octave line hooks, independently of your project-wide setting.

PROCEDURE

1. In Engrave mode, select the hook handles on the octave lines whose hooks you want to lengthen/shorten.

TIP

You can show handles on all items, not just selected items, by choosing **Engrave** > **Show Handles** > **Always**. This can make it easier to select individual handles on multiple items.

2. Move the hook handles in any of the following ways:

- Press **Alt-Up Arrow** to move them upwards.
- Press **Alt-Down Arrow** to move them downwards.

  TIP

  If you want to move handles by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Up Arrow**.

- Click and drag them upwards/downwards.

RESULT

The length of the selected octave line hooks is changed.

TIP

Hook length in the **Octave Lines** group of the Properties panel is activated automatically when you move octave line hooks. You can also use this property to lengthen/shorten octave line hooks by changing the value in the value field.

Deactivating the property resets the selected octave lines to their default hook length.

TIP

You can change the default hook length for all octave lines project-wide by changing the value for **Octave line hook length**, which you can find by clicking **Advanced Options** in the **Appearance** section of the **Octave Lines** page in **Engrave** > **Engraving Options**.

RELATED LINKS

Tucking index properties

The tucking index of notations determines their position relative to other notations in the vertical stacking order when multiple notations exist at the same rhythmic positions.

In most published music, the order in which items appear relative to each other is consistent. Dorico uses established conventions to determine the position and placement of notations automatically. For example, where slurs and tuplet brackets exist at the same positions, Dorico calculates their placement based on their relative lengths. If the slur is longer than the tuplet

bracket, the slur is placed outside the tuplet bracket; if the tuplet bracket is longer than the slur, the slur is placed inside the tuplet bracket.

However, rules for the order and placement of articulations, slurs, tuplets, and octave lines frequently vary, based on their lengths and musical context. Therefore, you can override the automatic order and manually change the order in which they appear in specific contexts.

To allow you this flexibility, slurs, octave lines, and tuplets all have **Tucking Index** properties in their respective Properties panel groups.

NOTE

Articulations are considered alongside these notations when calculating the stacking order, but do not have a tucking index property.

A **Tucking Index** value of **0** positions items closest to notes. The higher the number, the further away the item is positioned from notes in the stacking order.

RELATED LINKS
Changing the vertical stacking order of octave lines on page 455

Changing the vertical stacking order of octave lines

You can change the placement of individual octave lines relative to other objects in the vertical stack by changing their tucking index value.

According to general convention, octave lines are placed outside all other objects, but there are some instances where they can go inside other objects, for example, inside a slur if that slur is longer than the octave line.

PROCEDURE

1. In Engrave mode, select the octave lines whose placement in the vertical stack you want to change.

2. In the Properties panel, activate **Tucking index** in the **Octave Lines** group.

3. Change the value in the value field in any of the following ways:

   - Enter a value into the value field.

   - Click the arrows beside the value field.

   0 positions items closest to notes. The higher the number, the further the item is positioned from notes in the stacking order.

RESULT

The placement of the selected octave lines in the vertical stacking order is changed.

RELATED LINKS
Tucking index properties on page 454

Project-wide engraving options for octave lines

You can find options for the project-wide appearance of octave lines on the **Octave Lines** page in **Engrave** > **Engraving Options**.

The options on this page allow you to change the appearance of continuation lines, continuation labels, the numeral at the start of octave lines, the position of octave lines relative to accidentals and noteheads, and their placement relative to the staff.

There are musical examples for many options to demonstrate how they affect the appearance of your music.

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

- Press **Ctrl/Cmd-Shift-E** in any mode.
- Choose **Engrave** > **Engraving Options** in Engrave mode.

You can then click **Octave Lines** in the page list on the left of the dialog.

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.

In Dorico, you can input correctly formatted cues quickly using the cues popover. Cues are automatically input into a new voice, with bar rests shown alongside cues to make sure the player reading the cue understands that they do not play the cued music. Clefs are automatically input in cues as required, including restorative clefs.

A cue in a violin part showing music from a Bassoon 1 part

Dorico features dynamic cues that are linked to the original source material, meaning cues are updated in real time if the source material changes.

The instrument whose music is included in a cue is known as the source instrument. The instrument whose part contains a cue from another instrument is known as the destination instrument.

RELATED LINKS

General placement and notation conventions for cues

Cues are usually notated using notes of a smaller size than normal notes, with the name of the cued instrument indicated at the start of the passage.

It is generally accepted that full-sized rests are shown above/below cues to reinforce that the player reading the cue does not play these notes.

Cues might exclude some notations that are present in the source instrument. However, cues normally include slurs, articulations, and dynamics, as these often help the player reading the cue to identify passages.

Depending on the register of the cued instrument and the range of each cue passage, clef changes might also be needed at the start of cues.

RELATED LINKS

Rhythmic cues

Rhythmic cues only show the rhythm in the source instrument, whether it is pitched or unpitched, and are positioned above the staff by default. Cues from unpitched percussion source instruments are positioned on the middle line of the staff by default.

Rhythmic cues do not show clef changes, accidentals, or ledger lines. Their default position outside staff lines ensures they can never be misread as containing pitched material.

You can change existing cues into rhythmic cues and vice versa. Changing cues from pitched source instruments into rhythmic cues shows only the rhythm, which can be helpful when multiple instruments play the same rhythm together but each instrument plays a different note, such as in big band music with large unison chords. In this context, showing the pitches of a single instrument in the group could be misleading as the destination instrument might think this indicates a distinctive melody. You can then change the cue label to include information about the instruments playing the rhythm in the cue.

By default, cues from unpitched percussion source instruments are input as rhythmic cues. If you want to save vertical space, you can change them to cues from unpitched percussion source instruments. This positions them on the middle line of the staff by default.

You can change the default staff positions for rhythmic cues and cues from unpitched percussion source instruments in the **Rhythmic Cues** and **Unpitched Instruments** sections of the **Cues** page in **Engrave** > **Engraving Options**.

You can also change the staff position of rhythmic cues and cues from unpitched percussion source instruments individually.

A rhythmic cue

A cue from an unpitched percussion source

RELATED LINKS
Changing existing cues to rhythmic cues on page 458
Changing the text shown in cue labels on page 465
Changing the staff position of cues from unpitched percussion source instruments on page 459

Changing existing cues to rhythmic cues

Cues normally show pitched material played by a specific instrument. However, you can change existing cues showing pitched material into rhythmic cues that only show the rhythm of the cued music. This can be helpful for passages where many instruments play the same distinctive rhythm together.

PROCEDURE

1. Select the cues you want to change into rhythmic cues. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **Rhythmic cue** in the **Cues** group.

RESULT

The selected cues are shown as rhythmic cues. They are automatically positioned above the staff according to your setting for **Distance from space above staff** in the **Rhythmic Cues** section of the **Cues** page in **Engrave** > **Engraving Options**.

NOTE

Deactivating **Rhythmic cue** returns the selected cues back to normal cues. This includes cues from unpitched percussion instruments that are automatically input as rhythmic cues.

If you deactivate **Rhythmic cue** for cues from unpitched percussion instruments, the cues are positioned on the middle line of the staff by default.

RELATED LINKS
Rhythmic cues on page 458
Inputting cues on page 216
Changing the text shown in cue labels on page 465
Changing the distance between rhythmic cues and the staff on page 459

Changing the distance between rhythmic cues and the staff

You can change the distance between individual rhythmic cues and the staff, independently of your project-wide setting.

PROCEDURE

1. Select the cue label of the rhythmic cues whose distance from the staff you want to change. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate **Distance** in the **Cues** group.

3. Change the value in the value field in any of the following ways:

   - Enter a value into the value field.

   - Click the arrows beside the value field.

RESULT

The position of the selected cues is changed according to the new value.

For example, entering 0 positions rhythmic cues in the space immediately above the top line on the staff. Higher values increase the distance between rhythmic cues and the staff.

TIP

You can change the default distance between all rhythmic cues and the top line of the staff project-wide on the **Cues** page in **Engrave** > **Engraving Options**.

RELATED LINKS
Project-wide engraving options for cues on page 463

Changing the staff position of cues from unpitched percussion source instruments

You can change the staff position of cues from unpitched percussion source instruments individually, independently of your project-wide setting.

By default, cues from unpitched percussion source instruments that are not rhythmic cues are positioned on the middle line of staves.

PROCEDURE

1.   Select the cue label of the cues from unpitched percussion source instruments whose staff position you want to change. You can do this in Write mode and Engrave mode.

2.   In the Properties panel, activate **Unpitched notes pos.** in the **Cues** group.

3.   Change the value in the value field in any of the following ways:

    ●   Enter a value into the value field.

    ●   Click the arrows beside the value field.

RESULT

The staff position of the selected cues is changed according to the new value. 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.

TIP

You can change the default staff position of all cues from unpitched percussion source instruments project-wide on the **Cues** page in **Engrave** > **Engraving Options**.

EXAMPLE
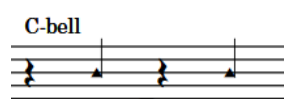
Unpitched cue on the middle line of the staff (default)
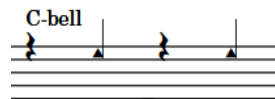
Unpitched cue at a higher staff position

RELATED LINKS
Project-wide engraving options for cues on page 463

Changing the octave of cues

You can change the octave in which cues are shown so the cue fits better on the staff of the destination instrument. This can be useful if the source instrument plays in a significantly different octave to the destination instrument.

PROCEDURE

1.   In the music area, open the layout in which you want to change the octave of cues.

2.   Select the cues whose octave you want to change. You can do this in Write mode and Engrave mode.

3.   In the Properties panel, activate **Octave shift** in the **Cues** group.

4.   Change the value in the value field in any of the following ways:

    ●   Enter a value into the value field.

    ●   Click the arrows beside the value field.

    For example, 1 shifts the cue up one octave, and -1 shifts the cue down one octave.

RESULT

The octave of the selected cues is changed.

NOTE

If octave transpositions are shown in the cue labels, they are automatically updated.

EXAMPLE

Cue with no octave change
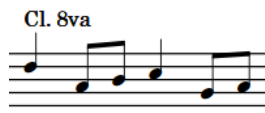
Cue with an octave above line

Hiding/Showing octave transpositions in cue labels

By default, octave transpositions are included in cue labels when you shift the octaves at which cues are shown. You can hide/show octave transpositions in cue labels individually, independently of your project-wide setting.

PROCEDURE

1. Select the cue labels in which you want to hide/show octave transpositions. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate/deactivate **Show octave transposition** in the **Cues** group.
3. Activate/Deactivate the corresponding checkbox.

RESULT

Octave transpositions are shown in the selected cue labels when the checkbox is activated, and hidden when the checkbox is deactivated.

Deactivating the property returns cue labels to your project-wide setting.

TIP

You can show/hide octave transpositions in all cue labels project-wide on the **Cues** page in **Engrave** > **Engraving Options**.

RELATED LINKS

Moving cues

You can move cues to new rhythmic positions after they have been input. This changes the material shown in cues to reflect the material at the corresponding rhythmic positions in the source instrument.

PROCEDURE

1. In Write mode, select the cues you want to move.

    NOTE

    When using the mouse, you can only move one cue at a time.

2. Move the cues, while maintaining their total durations, in any of the following ways:

- Press **Alt-Right Arrow** to move them to the right.
- Press **Alt-Left Arrow** to move them to the left.
- Click and drag the cue to the right/left, according to the rhythm in the source instrument.

RESULT

If a single cue is selected, it is moved to the right/left, depending on the rhythm in the source instrument.

If multiple cues are selected, they are moved to the right/left, according to the current rhythmic grid value.

RELATED LINKS
Overlapping cues on page 470
Hiding/Showing cues in layouts on page 469

Lengthening/Shortening cues

You can change the length of cues after they have been input. This changes the material shown in cues to reflect the material at the corresponding rhythmic positions in the source instrument.

PROCEDURE

1. In Write mode, select the cues you want to lengthen/shorten.

   NOTE

   When using the mouse, you can only lengthen/shorten one cue at a time.

2. Lengthen/Shorten the cues in any of the following ways:

   - Press **Shift-Alt-Right Arrow** to lengthen cues by the current rhythmic grid value.
   - Press **Shift-Alt-Left Arrow** to shorten cues by the current rhythmic grid value.
   - Press **Ctrl/Cmd-Shift-Alt-Right Arrow** to lengthen a single cue to the next notehead of the source instrument.
   - Press **Ctrl/Cmd-Shift-Alt-Left Arrow** to shorten a single cue to the previous notehead of the source instrument.

     NOTE

     When multiple cues are selected, you can only lengthen/shorten cues by the current rhythmic grid value.

   - Click and drag the circular handle at the start/end of a single cue to the right/left.

RESULT

The selected cues are lengthened/shortened.

NOTE

Key commands lengthen/shorten items by moving their end only.

NOTE

You can lengthen cues so that they overlap with other existing cues, as multiple cues can exist at the same rhythmic position. However, their stem directions are not automatically adjusted so you might have to change them manually.

Deleting cues

You can delete individual cues without deleting the corresponding notes in the source instrument or other instruments containing the same cue.

PROCEDURE

1. In Write mode, select one of the following:

    ● The cues you want to delete.

    ● The signposts of cues you want to delete that are not shown in the current layout.

2. Delete the cues in any of the following ways:

    ● Press **Backspace** or **Delete**.

    ● Choose **Edit** > **Delete**. You can also choose this option from the context menu.

RESULT

The selected cues are deleted from all the layouts containing the affected instruments. For example, deleting a cue in a piano part also deletes the cue from the piano staff in corresponding full score layouts.

Project-wide engraving options for cues

You can find options for the project-wide appearance, content, and position of cues on the **Cues** page in **Engraving Options**.

The options on the **Cues** page allow you to change the size, appearance, placement, and precise position of cues. You can also decide which notations are included in all cues, set the default spacing of cues, and set the default staff position of rhythmic cues and cues from unpitched percussion source instruments.

There are musical examples for many options to demonstrate how they affect the appearance of your music.

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

● Press **Ctrl/Cmd-Shift-E** in any mode.

● Choose **Engrave** > **Engraving Options** in Engrave mode.

You can then click **Cues** in the page list on the left of the dialog.

Individual changes to the content of cues

The content of individual cues can appear differently in each layout, independently of other layouts and without changing the source material, if you make changes in a layout that does not contain the source instrument.

Music in cues is dynamically linked to the music in the source instrument. Any changes you make to the source music are automatically shown in the cue, but you cannot change the pitch or duration of notes within the cue. This ensures that cues are an accurate reflection of the notes being played by the cued instrument.

You can make graphical changes to the music in cues without affecting the corresponding music in the source instrument. For example, you can adjust the placement of slurs and the angles of glissando lines, lengthen/shorten stems in cues, and respell accidentals. You can also change the note spacing scale factor of cues for whole layouts and from specific points in individual layouts.

NOTE

Graphical changes to cues are layout-specific. For example, if you make changes to a cue within a full score layout that also contains the source instrument, your changes to the cue affect the corresponding material in the source instrument and other instruments with the same cue in the layout. However, if you make changes to a cue in a part layout that only contains the destination instrument, the corresponding material in the part layout of the source instrument is not affected.

It is also possible to change the enharmonic spelling of notes in cues in Engrave mode in the same way as changing the enharmonic spelling of normal notes. If you respell notes in cues in the part layout of the destination instrument, the spelling of notes in the source instrument is not affected. For example, you can change the enharmonic spelling of notes in cues in transposing instrument layouts to avoid double accidentals.

IMPORTANT

If you respell notes in cues in a layout that also contains the source instrument, the enharmonic spelling is also changed in the source instrument.

RELATED LINKS

Cue labels

Cue labels usually indicate the source instrument from which the music is taken, but can also include other information, such as the transposition interval for transposing instruments. This information can help players identify both where the sound is coming from in the ensemble and the type of sound to listen for.

By default, cue labels in Dorico use abbreviated instrument names, exclude instrument transpositions, include octave transpositions, and do not show an additional label at the end of cues to indicate where players enter after cues. Additional labels showing "Play" at the end of cues are sometimes used in jazz scores, where it is customary not to show bar rests alongside cues. Showing additional labels at the ends of cues can also be useful in film music, where cues are often included in parts as an option that the player might be asked to play.

You can change the information and text shown in cue labels both project-wide and on an individual basis in Dorico.

NOTE

If you want to hide/show cue labels at the start/end of cues individually, you can use the following properties in the **Cues** group of the Properties panel:

- **Start text** applies to labels at the start of cues.
- **End text** applies to labels at the end of cues.

RELATED LINKS

Changing the information included in cue labels project-wide

You can change the information included as text in cue labels project-wide.

PROCEDURE

1.   In Engrave mode, choose **Engrave** > **Engraving Options**.
     The **Engraving Options** dialog opens.

2.   Click **Cues** in the page list.

3.   In the **Cue Labels** section, change any of the following options:
     - **Instrument name in label**
     - **Instrument pitch or transposition**
     - **Octave transposition**
     - **Additional label at end of cue**

4.   Click **Apply**, then **Close**.

RESULT

The information included in cue labels is changed project-wide.

TIP

You can also change cue labels individually. For example, if two instruments are playing in unison, you can change the cue label that shows the name of one of the instruments to include both instrument names.

RELATED LINKS

Changing the text shown in cue labels

You can override the text shown in cue labels individually. For example, if two instruments are playing in unison, you can change the cue label that shows the name of one of the instruments to include both instrument names.

You can also show additional labels at the ends of individual cues, even if your project-wide setting is to show no additional labels.

PROCEDURE

1. Select the cue labels whose text you want to override. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate the following properties, individually or together, in the **Cues** group:

   - **Start text**

   - **End text**

3. Enter the text you want to be shown in the corresponding cue labels into each value field.

   For example, to indicate that two violinists are playing the same material but an octave apart, you might enter **Vln.I & Vln.II coll'ottava** in the value field for **Start text**.

4. Save your changes in any of the following ways:

   - Press **Return**.

   - Click outside of the value field.

RESULT

The cue labels of the selected cues are changed to show the text you entered.

Deactivating the properties returns the corresponding cue labels of the selected cues to their default text.

NOTE

Deactivating properties permanently deletes any custom text entered.

RELATED LINKS
Changing the information included in cue labels project-wide on page 465

Changing the placement of cue labels relative to the staff

You can change the placement of individual cue labels relative to the staff, independently of your project-wide setting.

PROCEDURE

1. Select the cue labels whose placement relative to the staff you want to change. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate **Placement** in the **Cues** group.

3. Choose one of the following options:

   - **Above**

   - **Below**

RESULT

The selected cue labels appear above/below the staff.

TIP

- Deactivating **Placement** returns the selected cue labels to their default placement.

- You can change the default placement of all cue labels relative to the staff project-wide on the **Cues** page in **Engrave** > **Engraving Options**.

Moving cue labels graphically

You can move individual cue labels graphically without affecting the rhythmic positions of the cue. You can move cue labels at the start and end of cues independently of each other.

PROCEDURE

1. In Engrave mode, select the cue labels you want to move.

2. Move the cue labels in any of the following ways:

   - Press **Alt-Right Arrow** to move them to the right.

   - Press **Alt-Left Arrow** to move them to the left.

   - Press **Alt-Up Arrow** to move them upwards.

   - Press **Alt-Down Arrow** to move them downwards.

     TIP

     If you want to move items by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

   - Click and drag them in any direction.

RESULT

The selected cue labels are moved to new graphical positions.

TIP

Offset in the **Cues** group of the Properties panel is activated automatically when you move cue labels.

- **Offset X** moves cue labels horizontally.

- **Offset Y** moves cue labels vertically.

You can also use this property to move cue labels by changing the values in the value fields. The same property applies to cue labels both at the start and end of cues.

Deactivating the property resets the selected cue labels to their default positions.

Notations in cues

It is beneficial to include musically significant notations from the source instrument in cues, as they can help players identify the cued music more easily. However, only certain notations are included in cues to avoid overloading players with too much information.

By default, Dorico includes the following notations in cues:

- Slurs
- Articulations
- Ornaments
- Playing techniques
- Lyrics (for vocal music)

You can also include dynamics and text in cues, but these are not included by default as this information is not usually required to help identify the cued material.

NOTE

Playing techniques that only indicate important information for the source instrument, such as bowing marks for string players, are not included in cues.

To be included in cues, playing techniques must exist within the range of the cued material. For example, slurs must begin and end within the cued material to be included in cues.

Similarly, pizzicato markings are not shown in cues if they are input before the first cued note. However, pizzicato strings sound significantly different to bowed strings, so omitting this information could prevent the player reading the cue from identifying it.

NOTE

If important playing technique information does not exist within the range of cued material, we recommend that you include this information in the corresponding cue labels.

RELATED LINKS

Changing the notations included in cues

You can change the notations included in individual cues, independently of your project-wide settings.

PROCEDURE

1. Select the cue labels of the cues whose included notations you want to change. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate the property for each notation that you want to include in, or exclude from, the selected cues in the **Cues** group:

   - **Show articulations**
   - **Show slurs**
   - **Show dynamics**
   - **Show lyrics**
   - **Show playing techniques**
   - **Show ornaments**
   - **Show text**

3. Activate/Deactivate the corresponding checkboxes.

RESULT

Notations are included in cues when the checkboxes are activated, and excluded from cues when the checkboxes are deactivated.

NOTE

Playing techniques that only indicate important information for the source instrument, such as bowing marks for string players, are not included in cues.

TIP

You can change which notations are included in all cues project-wide on the **Cues** page in **Engrave** > **Engraving Options**.

Hiding/Showing cues in layouts

You can input cues in any layout, but by default cues do not appear in full score layouts, as cues are normally only shown in instrumental parts. You can hide/show cues in each layout in your project independently of other layouts.

Cue signposts are shown in full score layouts by default in page view. In galley view, the cued music appears in addition to cue signposts.

PROCEDURE

1. In Setup mode, choose **Setup** > **Layout Options**.
   The **Layout Options** dialog opens.

2. In the **Layouts** list, select the layouts in which you want to hide/show cues in one of the following ways:

   - Click **Select All**.
   - Click **Select All Full Score Layouts**.
   - Click **Select All Part Layouts**.
   - Click **Select All Custom Score Layouts**.
   - **Ctrl/Cmd**-click individual layouts.
   - **Shift**-click adjacent layouts.

   By default, the layout currently open in the music area is selected when you open the dialog.

3. Select **Players** from the **Category** menu.

4. In the **Cues** section, activate/deactivate **Show cues**.

RESULT

All cues in the selected layouts are shown when the checkbox is activated, and hidden when the checkbox is deactivated.

If cues are hidden, signposts show where they begin.

NOTE

You can hide individual cues in layouts where cues are shown, but you cannot show individual cues in layouts where cues are hidden.

Hiding cues individually

You can hide individual cues in layouts in which cues are shown, but you cannot show individual cues in layouts where cues are hidden.

PROCEDURE

1. In the music area, open the layout in which you want to hide individual cues.

2. Select the cues you want to hide. You can do this in Write mode and Engrave mode.

3.   In the Properties panel, activate **Hide** in the **Cues** group.

RESULT

The selected cues are hidden when **Hide** is activated. Signposts are shown at the positions of each cue so you can always find them again. However, signposts are not printed by default.

Deactivating **Hide** shows the selected cues again.

RELATED LINKS

Stem direction in cues

Notes in cues normally have the same stem direction, as cues usually highlight lines containing only one voice. Cues are shown by default with bar rests alongside them to indicate that the player reading the cue does not play those notes.

If cues contain music in multiple voices, the original stem directions of the source music are used. For single-voice cues, Dorico determines the default stem direction depending on the pitches in the cue. Stems point downwards when most notes in the cue are at positions below the middle line of the staff, and upwards when most notes in the cue are at positions above the middle line of the staff.

TIP

You can override the stem directions of notes in single-voice cues individually.

RELATED LINKS

Overlapping cues

Sometimes it is helpful to give players multiple consecutive cues so they can follow passages of music more easily. Dorico allows cues to overlap in order to give you flexibility over how to give useful information in cues to players.

However, the stem directions of cues are not automatically adjusted when they exist at the same rhythmic position as other cues. For example, if you want to show a melody passing from Violin 1 to Violin 2 that requires the two cues to overlap, and both instruments are shown in up-stem voices by default, then the two cues appear with up-stem notes.

You can override the default stem directions of cues individually to make overlapping cues easier to read.
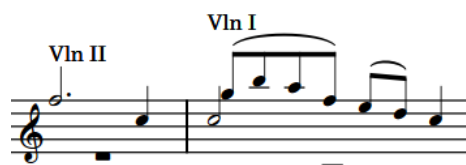
Default stem directions in two overlapping cues
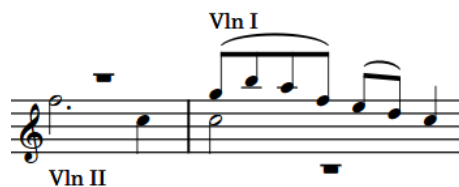
Overridden stem directions in the cue containing lower notes so that its notes are down-stem

RELATED LINKS

Overriding default stem directions in single-voice cues

You can override the default stem directions of individual single-voice cues.

PROCEDURE

1. In the music area, open the layout in which you want to override the default stem direction of selected cues.

2. Select the cue labels or cue signposts of the cues whose stem direction you want to change. You can do this in Write mode and Engrave mode.

3. In the Properties panel, activate **Voice direction** in the **Cues** group.

4. Choose one of the following options:

   - **Force stems up**

   - **Force stems down**

RESULT

The stem direction of all notes in the selected cues is changed.

Deactivating **Voice direction** returns the selected cues back to their default stem direction.

RELATED LINKS
Stem direction in cues on page 470

Ties in cues

If cues begin in the middle of sustained notes, ties are shown joining to the first note in cues. Similarly, if cues end in the middle of sustained notes, ties are shown proceeding from the final notes in cues.

For monophonic instruments, these ties are normally positioned correctly by default. However, in complex cases, such as cues involving chords, the positions of these ties can require some adjustment.

You can edit ties that start before/end after cues in the same way as normal ties in Engrave mode.

RELATED LINKS
Changing the position/shape of ties on page 742

Rests in cues

If cues start/end partway through bars, they are padded with cue-sized rests up to bar boundaries or up to the next played entry, whichever comes first. This ensures it is clear to the player how the rhythm of the cue fits within the current time signature and how it relates to their existing material.

By default, full-sized bar rests also appear throughout cued passages. This makes it clear that the performer does not play the cued notes.

Full-sized bar rests are automatically positioned according to the stem direction of the notes in the cue. If cues use up-stem notes, bar rests are positioned below cued notes. If cues use down-stem notes, bar rests are positioned above the cued notes.

You can choose not to show bar rests alongside cues. For example, this can be appropriate in some jazz scores, or in scores where the cues are provided as potential passages for doubling.

> **TIP**
>
> You can adjust the vertical position of full-sized bar rests individually using **Rest pos.** in the **Notes and Rests** group of the Properties panel.

RELATED LINKS

Hiding/Showing padding rests in cues

You can hide/show padding rests around individual cues. Padding rests fill up bars when cues start/end partway through bars, so that the full duration of each bar is clear.

PROCEDURE

1. Select the cue labels or cue signposts of the cues whose padding rests you want to hide/ show. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate/deactivate **Hide rests around cue** in the **Cues** group.

RESULT

Padding rests around the selected cues are hidden when **Hide rests around cue** is activated, and shown when it is deactivated.

RELATED LINKS

Hiding/Showing bar rests in cues

You can hide/show bar rests alongside all cues in each flow in your project.

PROCEDURE

1. In Write mode, choose **Write** > **Notation Options**.
   The **Notation Options** dialog opens.

2. In the **Flows** list, select the flows in which you want to hide/show bar rests in cues in one of the following ways:

   - **Ctrl/Cmd**-click individual flows.

   - **Shift**-click adjacent flows.

   - Click **Select All**.

   By default, only the current flow is selected when you open the dialog.

3. Select **Rests** from the **Category** menu.

4. In the **Rests in additional voices** section, choose one of the following options for **Bar rests in cues**:

   - **Show bar rests**

   - **Omit bar rests**

5. Click **Apply**, then **Close**.

RESULT

Bar rests alongside cues are hidden/shown in all layouts in the selected flows in your project.

Clef changes in cues

If the music for the source instrument is in a different clef from the destination instrument, Dorico automatically inputs a clef change at the start of cues to match the clef used by the source instrument, and a restorative clef change at the end of cues to match the original clef used by the destination instrument.

Clef changes at the start of cues are positioned differently to normal clef changes.

Cues starting at the beginning of bars

Clef changes appear to the right of barlines.

Restorative clef changes at the ends of cues are positioned like normal clef changes.

Cues crossing system breaks

Original clefs of destination parts are shown in their usual positions at the start of new systems.

Clefs required for cues appear immediately before the first note of the new system, to the right of key signatures and time signatures.

When there are multiple adjacent cues, clef changes are created as needed:

● If two adjacent cues use the same clef that is different than the clef in the destination instrument, a single clef change appears at the start of the first cue, with a restorative clef at the end of the second cue.

● If cues overlap, and the second cue requires a different clef than the first, Dorico creates a clef change at the start of the second cue.

● If there are two adjacent cues, the first of which uses a different clef than the destination instrument, and the clef property for the second cue is set to **None**, then the clef change that restores the destination instrument's original clef appears at the end of the first cue.

You can override this automatic behavior for individual clefs using one of the following properties in the **Cues** group of the Properties panel:

● **Concert clef**

● **Transposed clef**

The property available depends on whether the layout currently open in the music area uses concert or transposed pitch.

Dorico can show the following clefs in cues:

● **None**

● **Treble**

● **Alto**

● **Tenor**

● **Bass**

NOTE

● If you select **None**, the clef of the destination instrument is used instead of the clef of the source instrument.

● Any clef changes that occur in the source instrument in the middle of cued passages are not included in the cue in the destination instrument.

Changing the clef shown in cues

You can change the clef shown in individual cues, independently of your project-wide settings.

You can show different clefs for the same cue in each layout in which it appears. For example, you can show a cue with a treble clef in a full score layout but with a bass F clef in the corresponding part layout.

PROCEDURE

1. In the music area, open the layout in which you want to change the clef shown in cues.

2. Select the cues whose clef you want to change. You can do this in Write mode and Engrave mode.

3. In the Properties panel, activate one of the following properties in the **Cues** group:

   - **Concert clef**: shown if the layout uses concert pitch

   - **Transposed clef**: shown if the layout uses transposed pitch

4. Select one of the following clefs from the menu:

   - **None**

     NOTE

     None uses the clef of the destination instrument instead of the clef of the source instrument.

   - **Treble**

   - **Alto**

   - **Tenor**

   - **Bass**

   The same clefs are available for each property.

RESULT

The clef shown in the selected cues is changed.

TIP

You can change whether the clef of the source instrument or destination instrument is used in all cues project-wide on the **Cues** page in **Engrave** > **Engraving Options**.

Viewing options for cues

You can highlight cues and/or show cued material in a different color to normal notes in your project to help you identify cues more easily as you are working.

Choosing **View** > **Highlight Cues** shows bars containing cues with a translucent yellow highlight behind them, and a translucent blue highlight behind the bars that are used as the sources for cues.

As you zoom out, the highlights become more opaque, allowing you to get an overview both of where cues have already been added, and which instruments are being used as cues. This is especially useful when viewing full score layouts in galley view.

Choosing **View** > **Note and Rest Colors** > **Cues** shows cued material in gray, which indicates that this material cannot be edited directly.

In layouts where cues are not shown, cues are indicated by signposts. You can hide/show cue signposts by choosing **View** > **Signposts** > **Cues**. Cue signposts are shown when a tick appears beside **Cues** in the menu, and hidden when no tick appears.

RELATED LINKS

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 qualifying and expressive text to dynamics that can give stylistic direction context alongside the volume level, for example, *f espressivo* indicates that a passage is played loudly but also with expressive feeling.

While almost all expression text is written in italics, dynamics such as *f* and *pp* use a bold italic font.

RELATED LINKS
Input methods for dynamics on page 161
General placement conventions for dynamics on page 477

Types of dynamics

Dorico categorizes dynamics into four groups.

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, 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, 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, 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 483

General placement conventions for 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.

In Dorico, dynamics are positioned automatically relative to noteheads. You can change project-wide settings for how dynamics appear on the **Dynamics** page in **Engraving Options**, and you can move individual dynamics graphically in Engrave mode.

RELATED LINKS
Project-wide engraving options for dynamics on page 496
Positions of dynamics on page 490
Moving dynamics graphically on page 492

General placement conventions for hairpins relative to barlines

In Dorico, the ends of hairpins align with the left edge of the note to their right.

Hairpins that end on the first note of a bar extend across the preceding barline in certain cases.

- If there is not an immediate dynamic on the first note in the next bar.
- If there is a time signature or key signature change at the barline which increases the gap between the end of the current bar and the first note in the new bar.

Dorico 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 the barline extending below it.

You can change this default behavior and stop all hairpins project-wide from crossing barlines if the hairpin ends on the first note in the next bar. This ensures all applicable hairpins appear the same length. You can also change the minimum distance before hairpins are allowed to extend beyond barlines.

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.

RELATED LINKS

Changing the project-wide position of hairpins relative to barlines

You can change whether all hairpins cross barlines when they end on the first note in the next bar project-wide. You can also change the minimum distance before hairpins are allowed to extend beyond barlines.

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Engraving Options**.
   The **Engraving Options** dialog opens.

2. Click **Dynamics** in the page list.

3. In the **Gradual Dynamics** section, click **Advanced Options**.

4. Choose one of the following options for **Hairpins ending at beginning of note at start of bar**:

   - **Do not cross barline**

   - **Allow to cross barline**

5. Optional: In the **Horizontal Position** section, change the value for **Minimum distance to right of barline to allow dynamic to cross barline** in any of the following ways:

   - Enter a value into the value field.

   - Click the arrows beside the value field.

6. Click **Apply**, then **Close**.

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. You can do this in Write mode and Engrave mode.

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 in one of the following ways:

   - **Ctrl/Cmd**-click each dynamic.
   - Select a passage and choose **Edit** > **Filter** > **All Dynamics**.
   - Select a passage and choose **Edit** > **Filter** > **Gradual Dynamics**.
   - Select a passage and choose **Edit** > **Filter** > **Immediate Dynamics**.

2. Copy the dynamics in any of the following ways:

   - Press **Ctrl/Cmd**-**C**.
   - Choose **Edit** > **Copy**.

3. Select the notehead at the rhythmic position to which you want to copy the dynamics.

4. Paste the dynamics in any of the following ways:

   - Press **Ctrl/Cmd**-**V**.
   - Choose **Edit** > **Paste**.

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**-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
Dynamics linked across multiple staves on page 494

Deleting dynamics

You can delete dynamics from your project. If you delete a dynamic 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. Delete the dynamics in any of the following ways:

   - Press **Backspace** or **Delete**.
   - Choose **Edit** > **Delete**. You can also choose this option from the context menu.

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

Voice-specific dynamics

You can input different dynamics into each voice independently 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.

During step input, voice-specific dynamics are added to the voice indicated by the stem direction of the quarter note symbol beside the caret.

By default, dynamics apply to all voices on a staff if input without pressing **Alt**. If you want each voice to have their own dynamic in playback as well as in the score, press **Alt** when inputting dynamics for every voice on a staff.

RELATED LINKS

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 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

Changing the appearance of individual niente hairpins

You can show *niente* hairpins in two ways in Dorico, and you can change how they appear individually, independently of your project-wide setting.

PROCEDURE

1.   Select the hairpins whose *niente* style you want to change. You can do this in Write mode and Engrave mode.

2.   In the Properties panel, activate **Niente style** in the **Dynamics** group.

3.   Choose one of the following options:

   • **Circle on hairpin**

   • **Text**

RESULT

The *niente* style of the selected hairpins is changed.

TIP

You can change how all *niente* hairpins appear project-wide in the **Gradual Dynamics** section of the **Dynamics** page in **Engrave** > **Engraving Options**.

EXAMPLE

A niente shown as **Circle on hairpin**   A niente shown as **Text**

RELATED LINKS

Expressive text

Expressive text adds further detail to a dynamic than simply its volume level, and can help guide how a player performs a note or phrase.

In Dorico, expressive text, such as "sim.", *poco*, *molto*, or *subito*, must accompany a dynamic level, such as p or f.

NOTE

You cannot input expressive text on its own. However, you can hide the immediate dynamic that follows/precedes it.

You can input expressive text by entering it 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 it to existing dynamics by entering the expressive text you want into one of the following properties in the **Dynamics** group of the Properties panel:

- **Prefix** adds expressive text before existing dynamics.

- **Suffix** adds expressive text after existing dynamics.

RELATED LINKS
Hiding immediate dynamics on page 483
Adding expressive text to existing dynamics on page 482

Adding expressive text to existing dynamics

You can add expressive text to 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 expressive text. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate the following properties, individually or together, in the **Dynamics** group:

    - **Prefix** adds expressive text before the existing dynamic.

    - **Suffix** adds expressive text after the existing dynamic.
3. Enter the expressive text you want to add into the corresponding value field.
4. Save your text in any of the following ways:

    - Press **Return**.

    - Click outside of the value field.

RESULT

The text you entered is added to the selected dynamics as expressive text.

Deactivating the properties removes the corresponding expressive text from the selected dynamics.

NOTE

Deactivating properties permanently deletes any custom text entered.

RELATED LINKS
Niente hairpins on page 480
Inputting dynamics with the popover on page 164

Hiding immediate dynamics

You can hide immediate dynamics such as f and pp, for example, if you only want to show an expressive text, such as "sim.", without the immediate dynamic that accompanies it.

PROCEDURE

1. Select the immediate dynamics you want to hide. You can do this in Write mode and Engrave mode.

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 so you can always find them again. However, signposts are not printed by default.

Deactivating **Hide intensity marking** shows the selected immediate dynamics again.

RELATED LINKS

Gradual dynamics

Gradual dynamics indicate a change in volume that happens incrementally over the specified duration. By default, gradual dynamics appear either as hairpins or as text instructions, such as *cresc.* or *dim.*.

You can change the appearance and placement of gradual dynamics individually, independently of your project-wide settings, using properties in the **Dynamics** group of the Properties panel. For example, you can change the type of gradual dynamics so that they are shown as a hairpin with a single direction or as a *messa di voce* pair of hairpins with two directions.

You can change the style of gradual dynamics to show them in any of the following ways:

Hairpin	**cresc./dim.**	**cresc....**	**cre-scen-do**
◁▭▷	*cresc.*	*cresc.*...................	*cre ₋ scen ₋ do* .

TIP

You can also change the line style of hairpins using **Hairpin line style** in the **Dynamics** group of the Properties panel.

If you enter two or more consecutive hairpins of the same direction separated by immediate dynamics into the dynamics popover, you can show them as a single, continuous hairpin across the immediate dynamics by activating **Hairpin shown as continuation** and the corresponding checkbox in the **Dynamics** group of the Properties panel in Engrave mode.

Hairpin not shown as continuation

Hairpin shown as continuation

You can also change the style of diminuendo text of gradual dynamics using the **cresc./dim.** style, and you can change the continuation line style of gradual dynamics using the **cresc....** style.

In Engrave mode, hairpins have three square handles at the start/end:

● The middle handles at the start/end change the offset position of the start/end of the hairpin.

● The pair of outer handles at the start/end adjusts the aperture of the start/end of the hairpin.

A hairpin with the start middle handle selected in Engrave mode

You can use these handles to change the angle of hairpins.

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:

   ● Press **Shift**-**Alt**-**Right Arrow** to lengthen them by the current rhythmic grid value or to the next notehead, whichever is closer.

   ● Press **Shift**-**Alt**-**Left Arrow** to shorten them by the current rhythmic grid value or to the previous notehead, whichever is closer.

   ● Press **Ctrl/Cmd**-**Shift**-**Alt**-**Right Arrow** to lengthen them to the next notehead.

   ● Press **Ctrl/Cmd**-**Shift**-**Alt**-**Left Arrow** to shorten them to the previous notehead.

     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.

RESULT

Individual gradual dynamics are lengthened/shortened either according to the rhythmic grid 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 493
Positions of dynamics on page 490
Ungrouping dynamics and removing dynamics from groups on page 494

Changing the angle of hairpins

By default, hairpins are horizontal and are automatically adjusted to avoid collisions with other objects, such as noteheads and slurs. You can change the angle of individual hairpins as required for your music.

NOTE

Changing only the start offset position with the keyboard or activating **Start offset** only changes the position of the hairpin relative to the staff, not its angle. You must change the end offset position or activate **End offset** as well to change the angle of hairpins.

Dragging handles with the mouse changes the angle straight away.

PROCEDURE

1. In Engrave mode, select the middle handles of the hairpins whose angle you want to change.

   TIP

   - The hairpins you select do not have to be the same direction, or on the same staff.
   - You can show handles on all items, not just selected items, by choosing **Engrave** > **Show Handles** > **Always**. This can make it easier to select individual handles on multiple items.

2. Move the handles in any of the following ways:

   - Press **Alt-Up Arrow** to move them upwards.
   - Press **Alt-Down Arrow** to move them downwards.

     TIP

     If you want to move handles by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Up Arrow**.

   - Click and drag them upwards/downwards.

RESULT

The angle of the selected hairpins is changed. Each end can be moved independently of the other.

TIP

The following properties in the **Dynamics** group of the Properties panel are activated automatically when you move the corresponding handles on hairpins vertically:

- **Start offset Y** moves the start handles of hairpins vertically.
- **End offset Y** moves the end handles of hairpins vertically.

For example, if you move a whole hairpin upwards, both handles are moved so both properties are activated. You can also use these properties to change the angles of hairpins by changing the values in the value fields.

Deactivating the properties resets the selected hairpins to their default positions.

Changing the aperture of hairpins

The change in volume indicated by individual hairpins is shown in the distance between the two lines that make up hairpins at their apertures. You can change the aperture of hairpins individually.

Hairpins typically have a closed end and an open end. If the hairpin crosses a system or frame break, the closed end can appear with a small gap so that the hairpin is not misread as two separate hairpins.

In Dorico, you can use the pair of outer handles at the start/end of hairpins in Engrave mode to change the aperture. These handles are linked and mirror each other: moving one handle also moves the other handle by the same amount, but in the opposite direction. This ensures that hairpins remain symmetrical.

A hairpin with the outer handle selected in Engrave mode

PROCEDURE

1. In Engrave mode, select one of the outer handles of the hairpins whose aperture you want to change.

   TIP

   - The hairpins you select do not have to be the same direction, or on the same staff.
   - You can show handles on all items, not just selected items, by choosing **Engrave** > **Show Handles** > **Always**. This can make it easier to select individual handles on multiple items.

2. Change the distance between the handles in any of the following ways:

   - Press **Alt-Up Arrow** to move them upwards.
   - Press **Alt-Down Arrow** to move them downwards.

     TIP

     If you want to move handles by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Up Arrow**.

- Click and drag them upwards/downwards.

RESULT

The apertures of the selected hairpins are changed.

TIP

- You can also change the aperture of individual hairpins by activating **Hairpin open aperture** and/or **Hairpin closed aperture** in the **Dynamics** group of the Properties panel.

  Increasing the value makes the corresponding aperture wider. Decreasing the value makes the corresponding aperture narrower.

- You can find options to set minimum and maximum values for the width of hairpin apertures project-wide, including for hairpins across system and page breaks, by clicking **Advanced Options** in the **Hairpins** subsection of the **Gradual Dynamics** section of the **Dynamics** page in **Engrave** > **Engraving Options**.

EXAMPLE

A diminuendo that goes across a system break: aperture at the start is open, aperture at the end is closed. It appears slightly open to indicate the diminuendo continues after the system break.

The diminuendo continues onto a new system: aperture at the start is open, aperture at the end is closed.

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*. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **Poco a poco (little by little)** in the **Dynamics** group.

RESULT

Poco a poco is shown immediately after gradual dynamic text, below hairpins placed below the staff, and above hairpins placed above the staff.

Deactivating **Poco a poco (little by little)** removes *poco a poco* text from the selected gradual dynamics.

EXAMPLE

Text gradual dynamic with poco a poco

Hairpin gradual dynamic with poco a poco

Gradual dynamic spacing

Dorico 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.

You can change the minimum length of hairpins by changing the value for **Minimum length for hairpins**, which you can find by clicking **Advanced Options** in the **Hairpins** subsection of the **Gradual Dynamics** section of the **Dynamics** page in **Engrave** > **Engraving Options**.

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.
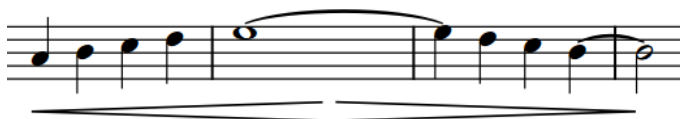
However, if you enter two hairpins without a space between them into the dynamics popover, you can move the center of the pair of hairpins and each hairpin rhythmically, but only to noteheads. You can lengthen/shorten each hairpin separately according to the current rhythmic grid value.

You can move individual hairpins in Engrave mode to any graphical position. If you input hairpins separated by a space into the popover, you can move each hairpin independently, for example, if you want to adjust the graphical peak of the pair of hairpins. You cannot move the graphical peak of *messa di voce* hairpins, except by adjusting the note spacing. However, moving dynamics graphically does not affect dynamics in playback.

RELATED LINKS
Lengthening/Shortening gradual dynamics and groups of dynamics on page 484
Moving dynamics graphically on page 492
Note spacing on page 284
Adjusting note spacing at individual rhythmic positions on page 291

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 guideline shows the link between the hairpin and the rhythmic position to which its end is attached.
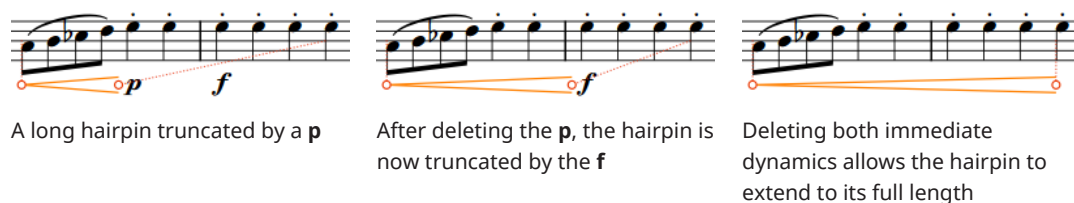
A long hairpin truncated by a **p**	After deleting the **p**, the hairpin is now truncated by the **f**	Deleting both immediate dynamics allows the hairpin to extend to its full length

RELATED LINKS
Lengthening/Shortening gradual dynamics and groups of dynamics on page 484

Placement of dynamics

Default settings for the vertical placement of dynamics and their placement relative to the staff in Dorico are designed to ensure that dynamics are clear and legible and follow general placement conventions.

The placement of dynamics relative to the staff 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 change how far above/below staves dynamics are placed on the **Dynamics** page in **Engrave** > **Engraving Options**.

RELATED LINKS
Project-wide engraving options for dynamics on page 496

Changing the placement of dynamics relative to the staff

By default, dynamics are placed below the staff for instruments and above the staff for voices.

In some circumstances, however, it is necessary to change the placement of individual dynamics relative to the staff. For example, you can have different dynamics above and below the staff in multiple-voice contexts.

PROCEDURE

1. Select the dynamics whose placement relative to the staff you want to change. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **Placement** in the **Dynamics** group.
3. Choose one of the following options:

   - **Above**
   - **Below**

RESULT

The placement of the selected dynamics is changed.

Positions of dynamics

You can change the positions of dynamics individually and their default positions project-wide. For example, you can override the default position of individual dynamics if you want to spread a dynamic phrase out wider so each dynamic is more legible.

You can move dynamics to different rhythmic positions in Write mode. They snap to noteheads and are positioned by default according to your settings in **Engraving Options**.

You can move dynamics graphically in Engrave mode, however, this does not change the rhythmic positions to which they are attached.

You can change the default positions of all dynamics project-wide, and their horizontal positions relative to beats, barlines, and system ends on the **Dynamics** page in **Engrave** > **Engraving Options**.

RELATED LINKS
Project-wide engraving options for dynamics on page 496
Moving dynamics rhythmically on page 491
Moving dynamics graphically on page 492

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. You can do this in Write mode and Engrave mode.

2.   In the Properties panel, activate **Beat-relative position** in the **Dynamics** group.

3.   Choose one of the following options:

    ●   **Before**

    ●   **After**

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 $\boldsymbol{ff}$ and $\boldsymbol{mp}$, are usually horizontally aligned with the optical center of noteheads. However, you can change the horizontal alignment of immediate dynamics individually, independently of your project-wide setting.

PROCEDURE

1.   Select the dynamics whose alignment relative to noteheads you want to change. You can do this in Write mode and Engrave mode.

2.   In the Properties panel, activate **Text alignment** in the **Dynamics** group.

3. Choose one of the following options:

- **Align optical center with notehead**

- **Left-align with notehead**

- **Align optical center with left of notehead**

RESULT

The alignment of the selected immediate dynamics is changed.

TIP

You can change the default alignment of all immediate dynamics relative to noteheads project-wide in the **Horizontal Position** section of the **Dynamics** page in **Engrave** > **Engraving Options**.

RELATED LINKS

Moving dynamics rhythmically

You can move dynamics to new rhythmic positions after they have been input.

NOTE

- You can only move dynamics to existing noteheads.
- 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 to the next/previous notehead on the staff in any of the following ways:

- Press **Alt-Right Arrow** to move them to the right.
- Press **Alt-Left Arrow** to move them to the left.
- Click and drag the dynamic to the right/left.

RESULT

The selected dynamics are moved to noteheads to the right/left along the staff.

Moving dynamics graphically

You can move dynamics graphically, without changing the rhythmic positions to which they apply. When you select hairpins in Engrave mode, three adjustment handles appear at each end. You can use these handles to lengthen/shorten gradual dynamics graphically.

PROCEDURE

1. In Engrave mode, select one of the following that you want to move:

    ●   Immediate dynamics or whole gradual dynamics

    ●   Individual handles on gradual dynamics

    TIP

    You can show handles on all items, not just selected items, by choosing **Engrave** > **Show Handles** > **Always**. This can make it easier to select individual handles on multiple items.

2. Move the dynamics or handles in any of the following ways:

    ●   Press **Alt-Right Arrow** to move them to the right.

    ●   Press **Alt-Left Arrow** to move them to the left.

    ●   Press **Alt-Up Arrow** to move them upwards.

    ●   Press **Alt-Down Arrow** to move them downwards.

    TIP

    If you want to move items by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

    ●   Click and drag them in any direction.

RESULT

The selected dynamics or handles are moved graphically, without affecting the rhythmic positions to which they are attached.

TIP

The following properties in the **Dynamics** group of the Properties panel are activated automatically when you move dynamics in the corresponding directions:

●   **Start offset** moves immediate dynamics and the start of gradual dynamics. **X** moves them horizontally, **Y** moves them vertically.

●   **End offset** moves the end of gradual dynamics. **X** moves them horizontally, **Y** moves them vertically.

For example, if you move a whole gradual dynamic upwards, both handles are moved so both properties are activated. You can also use these properties to move dynamics graphically by changing the values in the value fields.

Deactivating the properties resets the selected dynamics to their default positions.

RELATED LINKS

Groups of dynamics

When dynamics are grouped together, they are automatically aligned in a row and can be moved and edited as a group. For example, you can move the *f* in the middle of the example within the group, and the hairpins either side automatically adjust to compensate.

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.

A group of dynamics

The same group of dynamics adjusts to compensate when the **f** moves position.

All of the dynamics in a group are highlighted when any of the dynamics in the group are selected.

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

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.

RELATED LINKS

Ungrouping dynamics and removing dynamics from groups

You can ungroup dynamics so that all dynamics in the group become ungrouped, and you can remove only selected dynamics from groups while leaving dynamics that were not selected in the group.

PROCEDURE

1. In Write mode, select the dynamics you want to ungroup or remove from groups.

2. Do one of the following:

   - Choose **Edit** > **Dynamics** > **Ungroup Dynamics**.

   - Choose **Edit** > **Dynamics** > **Remove from Group**.

   TIP

   You can also choose these options from the context menu.

RESULT

If you ungroup dynamics, all dynamics in the group are ungrouped. This includes dynamics in the group that were not included in your selection.

If you remove dynamics from groups, only the selected dynamics are removed from their groups. Any unselected dynamics in the group remain grouped.

Dynamics linked across multiple staves

Identical dynamics at the same rhythmic position on multiple staves are linked together 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.
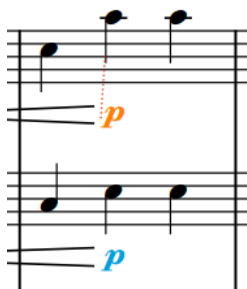
Two linked dynamics with only the top dynamic selected

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.

Three linked dynamics, where a hairpin added to the top staff and grouped with the dynamics on that staff has been automatically added to the staves below.

Deleting the **f** at the end of the first bar in the third staff causes the hairpin to extend to match the range of the top staff.

IMPORTANT

Deleting one dynamic that is linked to other dynamics also deletes all the linked dynamics.

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.

RELATED LINKS
Groups of dynamics on page 493
Linking dynamics together on page 495
Unlinking dynamics on page 496

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.

However, the 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.

RELATED LINKS
Dynamics linked across multiple staves on page 494
Copying dynamics on page 479

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.

RELATED LINKS
Dynamics linked across multiple staves on page 494

Project-wide engraving options for dynamics

You can find options for the project-wide appearance and position of dynamics on the **Dynamics** page in **Engraving Options**.

The options on the **Dynamics** page allow you to change the appearance of dynamics and gradual dynamics, and their default positions relative to noteheads, barlines, and the ends of systems.

There are musical examples for many options to demonstrate how they affect the appearance of your music.

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

● Press **Ctrl/Cmd-Shift-E** in any mode.

● Choose **Engrave** > **Engraving Options** in Engrave mode.

You can then click **Dynamics** in the page list on the left of the dialog.

Dynamics font styles

You can change different aspects of the fonts used for dynamics in the **Edit Font Styles** dialog.

● You can open the **Edit Font Styles** dialog in Engrave mode by choosing **Engrave** > **Font Styles**.

The following fonts affect the appearance of dynamics:

● **Default Text Font**: The parent font for all font styles in the project, including dynamic modifiers.

● **Dynamic Music Text Font**: Used for dynamic glyphs, such as pf and mp.

● **Dynamic Text Font**: Used for dynamic modifiers, including expressive text.

NOTE

Changes made to font styles apply to the entire project, including part layouts.

RELATED LINKS
Edit Font Styles dialog on page 275
Changing the dynamic modifier font styles on page 497
Changing the dynamic glyph font style on page 497

Changing the dynamic modifier font styles

You can change two fonts that affect the appearance of dynamic modifiers. One font only affects dynamic modifiers and the other affects the entire project.

The **Default Text Font** is the parent font for the whole project, so any changes you make to this font affect all fonts that are linked to the font. This includes dynamic modifiers, but also many other fonts.

The **Dynamic Text Font** is used for dynamic modifiers. Any changes you make to this font affect all dynamic modifiers, including expressive text, but do not affect any other font style.

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Font Styles**.
    The **Edit Font Styles** dialog opens.

2. Select one of the following fonts from the **Font style** menu:

    - **Default Text Font**
    - **Dynamic Text Font**

3. Activate the following options, individually or together, to change the corresponding aspect of the font:

    - **Font family**
    - **Size**
    - **Style**
    - **Underlined**

4. Optional: If required, repeat steps 2 and 3 to change the other font.

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

RESULT

The default font used for dynamic modifiers or all fonts in your project is changed.

RELATED LINKS

Changing the dynamic glyph font style

You can change the font used for dynamic glyphs. However, only specific fonts are compatible.

Any font used for dynamic glyphs, such as *mf* or *ff*, has to be SMuFL-compliant. SMuFL stands for Standard Music Font Layout.

These fonts are specifically designed to map thousands of the different symbols required for music notation onto a standard layout. Therefore, Dorico looks for a particular symbol in a specific place within the font, and if a non-SMuFL font is used, Dorico cannot find the correct one.

SMuFL-compliant fonts include Bravura and November 2.0.

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Font Styles**.
    The **Edit Font Styles** dialog opens.

2. Select **Dynamic Music Text Font** from the **Font style** menu.

3. Activate the following options, individually or together, to change the corresponding aspect of the font:

- **Font family**
- **Size**
- **Style**
- **Underlined**

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

RESULT

The font used for dynamic glyphs is changed project-wide.

RELATED LINKS

Playback Options for dynamics

You can change settings for how dynamics are interpreted in playback by making adjustments to the scale of the graphical curve on the **Dynamics** page in **Playback Options**.

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

- Press **Ctrl/Cmd-Shift-P** in any mode.
- Choose **Play** > **Playback Options** in Play mode.

You can then click **Dynamics** in the page list on the left of the dialog.

Dynamic Curve

The graph at the top of the **Dynamics** page in **Playback Options** maps a continuous curve. This curve determines how the volume of dynamics increases across the range $\boldsymbol{pppppp}$ to $\boldsymbol{ffffff}$.

A dynamic curve power of 1 creates a straight line, producing a steady dynamic increase. The difference between $\boldsymbol{pppp}$ and $\boldsymbol{pp}$ is the same as between $\boldsymbol{p}$ and $\boldsymbol{mf}$.

A dynamic curve power higher than 2 creates a curved line, producing a faster dynamic increase in the middle of the range. The difference between $\boldsymbol{pppp}$ and $\boldsymbol{pp}$ is much smaller than the difference between $\boldsymbol{p}$ and $\boldsymbol{mf}$.

The higher the dynamic curve power, the greater the contrast between dynamics in the middle of the range, and the smaller the contrast between dynamics at the ends of the range.

If your project uses a wide range of dynamics, including dynamics such as $\boldsymbol{pppp}$ and $\boldsymbol{ffff}$, you might want a lower curve power with larger differences between the extremes of the range.

If your project has a smaller range of dynamics, such as a minimum of $\boldsymbol{pp}$ to a maximum of $\boldsymbol{ff}$, you might prefer a higher curve power, so the differences between the dynamics in the middle of the range are more discernible.

NOTE

Changing the dynamic curve affects the playback of all instruments in the project.

Note Dynamics

In the **Note Dynamics** section of the **Dynamics** page, you can set how much the volume of notes in playback is affected by stresses and articulation marks.

Humanize

Humanize allows dynamics to vary randomly by the degree you set to mimic the natural fluctuations in a live performance.

Sustaining and non-sustaining instruments

The volume settings for sustaining instruments and non-sustaining instruments vary in terms of their control of gradual dynamics.

You can control settings for each software instrument by choosing **Play** > **Expression Maps** and selecting software instruments from the list on the left.

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 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.

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 provides the following default expression maps:

- **CC11 Dynamics**: dynamics produced by changing MIDI channel expression
- **Modulation Wheel Dynamics**: dynamics produced by changing MIDI controller 1

You can edit expression maps in the **Expression Maps** dialog, which you can open by choosing **Play** > **Expression Maps**.

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.

They 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.

Dorico 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 use a bold roman font by default, following accepted conventions for the appearance of fingerings. You can change the font used for fingerings project-wide on the **Fingering** page in **Engrave** > **Engraving Options**.

RELATED LINKS

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.

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. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **Substitution** in the **Fingering and Positions** group.
3. Enter the fingering you want for the substitution into the value field.
4. Save your change in any of the following ways:
   - Press **Return**.

- Click outside of the value field.

RESULT

The selected fingerings are now shown as substitution fingerings. The deferred position of the substitution is the same as the original fingering by default, but you can change the rhythmic position of substitution fingerings.

RELATED LINKS
Changing the rhythmic position of substitution fingerings on page 501

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. You can do this in Write mode and Engrave mode.
2. Change the rhythmic position of the substitution fingering in any of the following ways:

   - In Write mode, click and drag the circular handle to the right/left.
   - In Write mode and Engrave mode, activate **Substitution offset** in the **Fingering and Positions** group of the Properties panel.

     Change the rhythmic position of substitutions as fractions of a quarter note (crotchet) by entering a value into the left value field, or by clicking the arrows beside the value field. Increasing the value moves substitutions to later positions, decreasing the value moves them to earlier positions.

     NOTE

     The right value field is for the grace note position at which substitutions occur, if applicable.

RESULT

The rhythmic position of the substitution fingering is changed.

Dorico 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, even if you have chosen to show immediate substitutions with slurs.

RELATED LINKS
Fingerings popover on page 143
Project-wide engraving options for fingerings on page 505

Changing existing fingerings

You can change existing fingerings using the Properties panel. Alternatively, you can replace existing fingerings using the fingerings popover in the same way as adding new fingerings.

PROCEDURE

1. Select the fingerings you want to change. You can do this in Write mode and Engrave mode.

2. In the Properties panel, enter the new fingering you want into the **Finger or position** value field in the **Fingering and Positions** group.

3. Save your change in any of the following ways:

   ● Press **Return**.

   ● Click outside of the value field.

RESULT

The selected fingerings are changed.

RELATED LINKS
Inputting fingerings on page 142

Moving fingerings graphically

You can move fingerings graphically, independently of the noteheads to which they apply.

NOTE

You cannot move fingerings to different rhythmic positions as they are intrinsic parts of notes. If you want to move fingerings to other noteheads, you must delete the existing fingerings and re-input them on the noteheads to which you wanted to move them.

PROCEDURE

1. In Engrave mode, select the fingerings you want to move graphically.

2. Move the fingerings in any of the following ways:

   ● Press **Alt-Right Arrow** to move them to the right.

   ● Press **Alt-Left Arrow** to move them to the left.

   ● Press **Alt-Up Arrow** to move them upwards.

   ● Press **Alt-Down Arrow** to move them downwards.

   TIP

   If you want to move items by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

   ● Click and drag them in any direction.

RESULT

The fingerings are moved to new graphical positions.

TIP

Offset in the **Fingering and Positions** group of the Properties panel is activated automatically when you move fingerings.

- **Offset X** moves fingerings horizontally.
- **Offset Y** moves fingerings vertically.

You can also use this property to move fingerings by changing the values in the value fields.

Deactivating the property resets the selected fingerings to their default positions.

RELATED LINKS
Resetting the positions of fingerings on page 503

Resetting the positions of fingerings

You can reset the positions of individual fingerings whose graphical positions you have moved.

PROCEDURE

1. In Engrave mode, select the fingerings whose positions you want to reset.
2. Reset their positions in any of the following ways:
   - Choose **Edit** > **Reset Position**.
   - In the Properties panel, deactivate **Offset** in the **Fingering and Positions** group.

Changing the placement of fingerings relative to the staff

Dorico automatically follows conventions for fingering placement, but you can change the placement of fingerings relative to the staff individually, independently of your project-wide setting.

According to conventions, 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.

PROCEDURE

1. Select the fingerings whose position relative to the staff you want to change. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **Staff-relative position** in the **Fingering and Positions** group.
3. Choose one of the following options:
   - **Above**
   - **Below**

RESULT
The selected fingerings appear above/below the staff.

TIP

You can change the placement of all fingerings relative to the staff project-wide to follow voice directions on the **Fingering** page in **Engrave** > **Engraving Options**.

This can be useful in complex contrapuntal music where fingering may not be clear if it is only placed above the top staff and below the bottom staff.

RELATED LINKS
Project-wide engraving options for fingerings on page 505

Changing the position of individual fingerings relative to slurs, octave lines, and tuplet brackets

By default, fingerings are positioned inside the arcs of slurs, but outside the start/end of slurs. You can change the position of fingerings relative to individual slurs, independently of your project-wide settings.

PROCEDURE

1. In Engrave mode, select the fingerings whose position relative to slurs you want to change.
2. In the Properties panel, activate **Slur-relative position** in the **Fingering and Positions** group.
3. Choose one of the following options:
    - **Inside**
    - **Outside**

RESULT

The position of the selected fingerings relative to slurs, octave lines, and tuplet brackets is changed.

NOTE

If fingerings also coincide with the first note or last note of slurs, fingerings are positioned outside all of these notations.

TIP

You can change the position of all fingerings relative to slurs, octave lines, and tuplet brackets project-wide on the **Fingering** page in **Engrave** > **Engraving Options**.

RELATED LINKS
Project-wide engraving options for fingerings on page 505

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. In Setup mode, choose **Setup** > **Layout Options**.
    The **Layout Options** dialog opens.
2. In the **Layouts** list, select the layouts in which you want to hide/show fingering in one of the following ways:
    - Click **Select All**.
    - Click **Select All Full Score Layouts**.
    - Click **Select All Part Layouts**.
    - Click **Select All Custom Score Layouts**.
    - **Ctrl/Cmd**-click individual layouts.
    - **Shift**-click adjacent layouts.

By default, the layout currently open in the music area is selected when you open the dialog.

3. Select **Players** from the **Category** menu.

4. In the **Fingering** section, activate/deactivate **Show fingering**.

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 fingerings you want to remove in any of the following ways:

- In Write mode, **Ctrl/Cmd**-click or **Shift**-click the notes to which the fingerings apply.

- In Engrave mode, **Ctrl/Cmd**-click fingerings.

- In Write mode, make a marquee selection and choose **Edit** > **Filter** > **Notes and Chords**.

2. In the Properties panel, deactivate **Finger or position** in the **Fingering and Positions** group.

RESULT

All fingerings are removed from the selected notes.

Project-wide engraving options for fingerings

You can find options for the project-wide appearance and position of fingerings on the **Fingering** page in **Engraving Options**.

The options on the **Fingering** page allow you to change the font, size, appearance, placement, and precise position of fingerings on standard notes and grace notes, including fine adjustments for the different instrument groups. You can also change the position of fingerings relative to slurs, octave lines, and tuplets.

There are musical examples for many options to demonstrate how they affect the appearance of your music.

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

- Press **Ctrl/Cmd-Shift-E** in any mode.

- Choose **Engrave** > **Engraving Options** in Engrave mode.

You can then click **Fingering** in the page list on the left of the dialog.

Changing the appearance of cautionary fingerings project-wide

Cautionary fingerings remind players that fingerings specified at previous rhythmic positions continue to apply to notes that are still sounding. Dorico automatically shows cautionary

fingerings when you add other fingerings at rhythmic positions where notes with existing fingerings are still sounding.

By default, cautionary fingerings are shown enclosed in parentheses. You can choose to show cautionary fingerings without parentheses or not to show cautionary fingerings at all project-wide.

Cautionary fingering shown in parentheses (default)

NOTE

You cannot change the appearance of cautionary fingerings individually.

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Engraving Options**.
    The **Engraving Options** dialog opens.

2. Click **Fingering** in the page list.

3. In the **Alternative, Editorial and Cautionary** section, choose one of the following options for **Cautionary fingering appearance**:

    ● **Do not show**

    ● **Show fingering only**

    ● **Show fingering in parentheses**

4. Click **Apply**, then **Close**.

RESULT

The appearance of cautionary fingerings is changed project-wide.

Changing the appearance of slide positions for brass instruments

You can use Arabic or Roman numerals to indicate slide positions for slide brass instruments, such as trombones. By default, Dorico uses Arabic numerals for slide positions.

NOTE

You must enter slide positions using Arabic numerals into the fingerings popover, even if you have chosen to show slide positions with Roman numerals in your project.

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Engraving Options**.
    The **Engraving Options** dialog opens.

2. Click **Fingering** in the page list.

3. In the **Brass** section, choose one of the following options for **Trombone slide position appearance**:

    ● **Arabic numerals**

    ● **Roman numerals**

4. Click **Apply**, then **Close**.

RESULT

The numeral style used for slide positions on slide brass instruments is changed project-wide.

RELATED LINKS
Inputting fingerings on page 142

Fingering font styles

Bold and plain fingerings use different fonts. You can change different aspects of the font styles used for fingering in the **Edit Font Styles** dialog.

● You can open the **Edit Font Styles** dialog in Engrave mode by choosing **Engrave** > **Font Styles**.

The following fonts are used for fingering:

● **Fingering Font**: Used for bold fingerings.

● **Fingering Text Font**: Used for plain fingerings.

● **Fingering Text Italic Font**: Used for italic fingerings.

● **Fingering Horn Branch Accidental Font**

● **Fingering Horn Branch Alto Text Font**

● **Fingering Horn Branch Text Font**

NOTE

Changes made to font styles apply to the entire project, including part layouts.

RELATED LINKS
Edit Font Styles dialog on page 275
Project-wide engraving options for fingerings on page 505
Changing the fingering font styles on page 508
Changing the font used for fingerings project-wide on page 507

Changing the font used for fingerings project-wide

By default, fingerings are drawn in a bold, Arabic font that is similar in appearance to the digits in time signatures.

You can change the font used for fingerings project-wide on the **Fingering** page in **Engraving Options**. This changes the font style used to draw fingering numbers, parentheses, and brackets.

NOTE

The font used for thumb indicator, substitution lines and slurs, and brass valve separators is not changed.

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Engraving Options**.
The **Engraving Options** dialog opens.

2. Click **Fingering** in the page list.

3. In the **Design** section, choose one of the following options for **Fingering appearance**:

- **Bold font**
- **Plain font**

4. Click **Apply**, then **Close**.

RESULT

The font style used for fingerings project-wide is changed.

NOTE

You can change different aspects of the font style used in the **Edit Font Styles** dialog.

Bold fingerings use **Fingering Font**. Plain fingerings use **Fingering Text Font**.

RELATED LINKS
Changing the fingering font styles on page 508

Changing the fingering font styles

You can change the font styles used for all fingerings project-wide.

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Font Styles**.
   The **Edit Font Styles** dialog opens.

2. Select the fingering font style you want to change from the **Font style** menu:
   - **Fingering Font**
   - **Fingering Text Font**
   - **Fingering Text Italic Font**
   - **Fingering Horn Branch Accidental Font**
   - **Fingering Horn Branch Alto Text Font**
   - **Fingering Horn Branch Text Font**

3. Activate the following options, individually or together, to change the corresponding aspect of the font:
   - **Font family**
   - **Size**
   - **Style**
   - **Underlined**

4. Optional: Repeat steps 2 and 3 for any other font style you want to change.

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

RESULT

The selected fingering font styles are changed project-wide.

RELATED LINKS
Fingering font styles on page 507
Project-wide engraving options for fingerings on page 505

Showing individual fingerings in italics

Fingerings are normally shown in a bold, non-italic font, but you can show individual fingerings in italics.

PROCEDURE

1. In Engrave mode, select the fingerings you want to show in italics.

2. In the Properties panel, activate **Italic** in the **Fingering and Positions** group.

RESULT

The selected fingerings are shown in a bold italic font if your project-wide setting for fingerings is a bold font, and in a plain italic font if your project-wide setting for fingerings is a plain font.

NOTE

Bold italic fingerings look very similar to tuplet numbers, which can be confusing.

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 automatically stacks fingerings added to notes on brass instrument staves vertically. They are shown with no separator by default.

You can change the appearance of fingerings for valved brass instruments in the **Brass** section of the **Fingering** page in **Engrave** > **Engraving Options**.

For example, you can show fingerings for valved brass instruments in a single row or stacked vertically. You can also change the appearance of the separator or show no separator.

RELATED LINKS

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. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate **Horn branch** in the **Fingering and Positions** group.

3. Select one of the following horn branches from the menu:

   - **F**

- **B flat**
- **F alto**
- **E flat alto**
- **Thumb trigger**

RESULT

Branch indicators are added to the selected fingerings.

TIP

You can change the appearance of branch indicators in the **Brass** section of the **Fingering** page in **Engrave** > **Engraving Options**.

RELATED LINKS
Inputting fingerings on page 142
Project-wide engraving options for fingerings on page 505

Hiding/Showing fingering shifts for string instruments

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.

NOTE

Shift indicators are shown whether the notes at each end have explicit fingerings or not.

PROCEDURE

1. Select the notes or fingerings on string instrument staves from which you want to indicate a fingering shift. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate/deactivate **Indicate shift to next note** in the **Fingering and Positions** group.

RESULT

Shift indicators are shown when the property is activated, and hidden when the property is deactivated.

Shift indicators are positioned between the selected notes and the notes that immediately follow them.

TIP

You can change the length, thickness, angle, and placement of shift indicators in the **String Fingering Shifts** section of the **Fingering** page in **Engrave** > **Engraving Options**.

RELATED LINKS
Specifying on which string individual notes are played on page 581

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. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate **Shift direction** in the **Fingering and Positions** group.

3. Choose one of the following options:

    - **Up**
    - **Down**

RESULT

The selected shift indicators are angled up/down.

NOTE

You can also affect the direction of string shift indicators by specifying the strings on which notes are played.

RELATED LINKS
Specifying on which string individual notes are played on page 581

Fingerings imported from MusicXML files

Dorico 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 cannot import fingerings from MusicXML files exported by Sibelius.

Front matter

Front matter in Dorico 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

All information in your project that is not the music must be added within frames, which you can input and edit in Engrave mode.

Master pages in Engrave mode

Master pages in Dorico allow the same formatting to be applied to different pages in different layouts.

You can customize the default master pages and master page sets in your project. You can also create new master pages based on existing master pages or create new master pages.

Master page sets in Engrave mode

Master page sets group master page formats together, so there is a master page for all possible situations in your project. For example, if you are creating parts in a project that contains multiple flows and you want to have two flows on a single page, you can create a master page format that contains two text frames for flow titles and two music frames for the two flows. You can then apply that master page only to pages in parts that can fit two flows on a single page.

RELATED LINKS
Master pages on page 230
Master page sets on page 231
Master page types on page 232
Paragraph Styles dialog on page 276

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.

NOTE

Tokens are codes that refer to text elsewhere, meaning they are updated automatically if the source text is changed.

The default master pages include tokens, so that any information you include for each flow in the **Project Info** dialog is automatically shown. For example, the **Default Full Score** master page set shows the following information for each flow:

● Composer

● Lyricist

● Title

NOTE

These tokens are linked to the project information for each flow by default. If you only enter information for **Project** in the **Project Info** dialog, no text is shown.

Multiple flows on a single page

If there are multiple music frames on a single page, the title at the top of the page is taken from the flow in the music frame at the top of the page. For example, if you have Flow 1 followed by Flow 2 on the same page, the title at the top is Flow 1.

If you want to specify the flow title at the top of the page, change the title token to, for example, {@Flow2Title@}.

You can see the flow number of each flow in the **Flows** panel in Setup mode.

RELATED LINKS

Adding dedications in master pages

You can show dedications in multiple layouts by adding them to master pages. Dedications are usually shown above titles in scores, use a smaller font size than titles, and are shown in italics.

PREREQUISITE

You have entered a dedication in one of the **Dedication** fields in the **Project Info** dialog.

TIP

In the **Project Info** dialog, you can enter different dedications for the whole project and for each flow individually.

Optional: You have created a paragraph style for dedications in the **Paragraph Styles** dialog.

PROCEDURE

1. In Engrave mode, select the master page set containing the master page format to which you want to add a dedication from the **Current set** menu in the **Master Pages** section of the Pages panel.

   For example, if you want to add a dedication above titles in full score layouts, select **Default Full Score**.

2. Double-click the master page to which you want to add a dedication. For example, if you are using the default master pages, double-click **First**.

   The master page editor opens.

3. Open the text editor for the title text frame in any of the following ways:

   - Activate **Frames** in the Formatting panel, select the text frame, and press **Return**.

   - Double-click within the text frame.

4. Position the cursor at the start of the title token.

5. Press **Return** to input a new line above the title token.

6. Enter one of the following tokens in the new line above the title token:

   - {@flowDedication@} shows the dedication for the flow.

   - {@projectDedication@} shows the dedication for the whole project.

7. Optional: Change the appearance of the dedication text using the text editor options.

8. Close the text editor in any of the following ways:

   - Press **Esc** or **Ctrl/Cmd-Return**.

   - Click outside of the text editor.

RESULT

A dedication is shown above the title of all pages that use the selected master page format if a dedication is entered into the appropriate field in the **Project Info** dialog.

RELATED LINKS
Project Info dialog on page 62
Creating paragraph styles on page 278
Text editor options in Engrave mode on page 281
Edit Font Styles dialog on page 275

Changing the text in running headers in master pages

The **Default Part** master page set shows the part name at the top left of the first pages in flows, and also shows the part name centered at the top of subsequent pages as a running header.

You can change the text shown in running headers, for example, if you want to include the flow title as well.

PROCEDURE

1. In Engrave mode, select the master page set containing the master page whose running header text you want to change from the **Current set** menu in the **Master Pages** section of the Pages panel.

   For example, if you want to change the running header text in parts, select **Default Part**.

2. Double-click the master page whose running header text you want to change. For example, if you are using the default master pages, double-click **Default**.

   The master page editor opens.

3. Open the text editor for the header text frame in any of the following ways:

- Activate **Frames** in the Formatting panel, select the text frame, and press **Return**.
- Double-click within the text frame.

4. Change or delete the header text.

   For example, to show both the part name and the flow title in the header text separated by a dash, enter - {@flowTitle@} after the part name token in the text frame.

5. Close the text editor in any of the following ways:

   - Press **Esc** or **Ctrl/Cmd**-**Return**.
   - Click outside of the text editor.

RESULT

The running header text is changed for all layouts that use the selected master page format.

EXAMPLE

{@layoutName@} - {@flowTitle@}	Violin I - Allegro con moto
Token text added to a text frame	Token text in a part layout

RELATED LINKS
[Master page editor](#) on page 235

Individual changes to the formatting of pages

You can add new frames, and change the shape and size of existing frames, on individual pages independently of master page formats.

For example, you can include project information on the first page of the first flow in the project, but not on the first pages of subsequent flows.

RELATED LINKS
[Frames](#) on page 244
[Inputting frames](#) on page 244
[Moving frames](#) on page 245
[Changing the size/shape of frames](#) on page 245

Changing the default horizontal alignment of different text styles project-wide

You can change the default horizontal alignment of text styles. This changes the horizontal alignment of the corresponding text style wherever it is used in the project.

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Paragraph Styles**.
   The **Paragraph Styles** dialog opens.

2. In the paragraph style list, select the text style whose default alignment you want to change.

3. Choose one of the following **Alignment** options:

   - **Left-align**
   - **Center-align**

- **Right-align**
- **Justify**
- **Inside Edge**
- **Outside Edge**

RESULT

The default alignment of the selected text style is changed.

TIP

- You can change other aspects of text styles in the **Paragraph Styles** dialog.
- You can also override the horizontal alignment of text in individual text frames.

RELATED LINKS
Paragraph Styles dialog on page 276
Changing the horizontal alignment of text in text frames on page 259

Changing the vertical alignment of text in text frames

You can change the vertical alignment of text in text frames. You can do this on master pages, which changes the alignment of the selected text on all pages that use the master page format, and on individual pages, which only changes the alignment of the selected text on that page.

PREREQUISITE

If you want to change the vertical alignment of text on master pages, first open the master page editor.

PROCEDURE

1. In Engrave mode, activate **Frames** in the Formatting panel.
2. Select the frames whose text vertical alignment you want to change.
3. In the Properties panel, select one of the following options from the **Vertical alignment** menu in the **Text** group:
   - **Top**
   - **Center**
   - **Bottom**

RESULT

The vertical alignment of text in the selected text frames is changed.

NOTE

Changing the vertical alignment of text does not override its paragraph style. Any changes you make later to the paragraph styles of text whose vertical alignment has been changed are applied to the text.

RELATED LINKS
Customizing master pages on page 236

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 rhythmic value of the notehead to which they are attached and the meter.

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 can be beamed together.

In Dorico, grace notes are scaled to 3/5 the size of a normal notehead by default.

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

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 it is most clearly legible, which is most likely outside the staff. Dorico automatically places articulations on the stem-side of grace notes, and outside the staff if the stem or beam is within the staff.

RELATED LINKS

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.

NOTE

You can also override the stem direction of grace notes in multiple voices and change their directions individually if necessary.

RELATED LINKS

Changing the position of grace notes relative to barlines

You can change the position of individual grace notes so they appear before/after barlines.

By default, grace notes are positioned after barlines and directly before the notehead to which they apply, including for the first note in a bar.

However, you can position individual grace notes before barlines so that the note on the first beat in the bar is not pushed too far from the barline when the note has multiple grace notes, or to indicate that the grace notes are played before the beat.

PROCEDURE

1. Select the grace notes whose position relative to barlines you want to change. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate/deactivate **Grace note before barline** in the **Grace Notes** group.

RESULT

The selected grace notes are repositioned before barlines when the property is activated, and after barlines when the property is deactivated.

Project-wide changes to the position of grace notes

You can change the default position of grace notes relative to the notehead to which they apply in the **Grace Notes** section of the **Notes** page in **Engraving Options**.

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

- Press **Ctrl/Cmd-Shift-E** in any mode.
- Choose **Engrave** > **Engraving Options** in Engrave mode.

Increasing the value for the minimum distance to the right of the rightmost grace note moves grace notes further from the notehead to which they apply. Decreasing the value moves them closer to the notehead to which they apply.

A grace note with the default minimum value of half a space between it and the notehead to its right

A grace note with an increased value of 1.5 spaces between it and the notehead to its right

You can also adjust the position of grace notes in each layout independently by changing the note spacing scale factor for grace notes on the **Note Spacing** page in **Layout Options**.

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** at the bottom of the **Layouts** panel in Setup mode.

  ⚙

- Right-click an instrumental part or a full score in the **Layouts** panel and choose **Layout Options** from the context menu.

Decreasing the note spacing scale value for grace notes decreases the gap between multiple grace notes at the same rhythmic position.
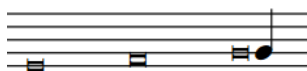
Three grace notes with long durations, with the default note spacing scale of 70%
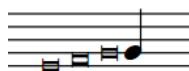
Three grace notes with long durations, with a decreased note spacing scale of 20%

Position of slurs relative to grace notes

You can set the position of slurs relative to grace notes in the **Grace Notes** section of the **Slurs** page in **Engraving Options**.

Included in this section are options for the position of slurs relative to grace notes in multiple voices.

RELATED LINKS
Slur placement relative to grace notes on page 665

Project-wide changes to the position of grace note beams

You can make project-wide changes to the position of grace note beams on the staff.

Position of grace note beams on the staff

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.

In Dorico, you can change how grace note beam slants are positioned project-wide in the **Vertical Position** section of the **Beams** page in **Engraving Options**.

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

- Press **Ctrl/Cmd-Shift-E** in any mode.
- Choose **Engrave** > **Engraving Options** in Engrave mode.

Beam slants in two-note groups of beamed grace notes

If there are two grace notes that cover a wide pitch range joined by a beam at the same rhythmic position, the angle of the beam can appear very steep.

You can choose whether the beam slant in such cases is left unchanged, or whether shallower slants are used, in the **Slants** section of the **Beams** page in **Engraving Options**.

Project-wide changes to the appearance of grace notes

You can make project-wide changes to the appearance of grace notes in terms of their size, stem length, and slash design.

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 this ratio by increasing/decreasing the value for **Grace note scale factor** in the **Grace Notes** section of the **Notes** page in **Engrave** > **Engraving Options**.

Grace note stem length

Grace notes are scaled-down notes, so the default stem length of grace notes is determined by your project-wide settings for the stem length of all notes. You can change these in the **Stems** section of the **Notes** page in **Engraving Options**.

Grace note slash design

The precise measurements of each part of grace note stem slashes can be set in the **Grace Notes** section of the **Notes** page in **Engraving Options**.

In this section you can change the following:

- Thickness of grace note stem slashes
- Default length of grace note stem slashes
- Position of grace note stem slashes relative to the end of the stem

Individual changes to the appearance of grace notes

You can make changes to the appearance of grace notes individually, such as changing the appearance of grace note stems and changing their stem direction.

You can change the appearance of grace notes using properties in the **Grace Notes** group of the Properties panel. More properties are available in Engrave mode than in Write mode.

For beamed grace note groups, you can also change the grace note beam using properties in the **Beaming** group of the Properties panel.

Following accepted conventions, grace notes in Dorico 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
Beaming on page 403
Beam groups on page 403
Changing the stem direction of notes on page 714
Lengthening/Shortening stems on page 717

Changing the type of grace notes

You can change the type of individual grace notes after they have been input. Grace notes can have slashed stems or unslashed stems.

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, grace notes appear with slashed stems by default.

PROCEDURE

1.   Select the grace notes whose type you want to change. You can do this in Write mode and Engrave mode.

2.   In the Properties panel, choose one of the following options for **Grace note type** in the **Grace Notes** group:

   ●   **Slashed stem**

   ●   **Unslashed stem**

RESULT

The selected grace notes are shown with slashed/unslashed stems.

TIP

You can also change the grace note type during step input.

RELATED LINKS
Inputting grace notes on page 128

Moving slashes on grace note stems

You can change the vertical position of individual grace note slashes, independently of your project-wide settings.

PROCEDURE

1. In Engrave mode, select the grace notes whose slash positions you want to change.

2. In the Properties panel, activate the following properties, individually or together, in the **Grace Notes** group:

   - **Slash inset from stem tip**

   - **Slash offset to right**

3. Change the values in the value fields in any of the following ways:

   - Enter values into the value fields.

   - Click the arrows beside the value fields.

RESULT

Increasing **Slash inset from stem tip** moves grace note slashes further from the tips of stems, decreasing the value moves them closer to the tips of stems.

Increasing **Slash offset to right** moves grace note slashes to the right, decreasing the value moves them to the left.

TIP

You can change the default position of all grace note slashes project-wide in the **Grace Notes** section of the **Notes** page in **Engrave** > **Engraving Options**.

Changing the length of grace note slashes

You can change the length of slashes on grace note stems individually, independently of your project-wide setting.

PROCEDURE

1. In Engrave mode, select the grace notes whose slash length you want to change.

2. In the Properties panel, activate the following properties, individually or together, in the **Grace Notes** group.

   - **Slash length**

   - **Slash protrusion from beam** (beamed grace notes only)

   NOTE

   Grace note slashes seem to disappear when you activate **Slash length**. This is because activating the property resets the value to 0.

3. Change the values in the value fields in any of the following ways:

   - Enter values into the value fields.

   - Click the arrows beside the value fields.

RESULT

Increasing **Slash length** lengthens grace note slashes on both single grace notes and grace note beams, decreasing the value shortens grace note slashes.

Increasing **Slash protrusion from beam** increases how far slashes extend beyond grace note beams, decreasing the value decreases how far slashes extend beyond grace note beams.

TIP

You can change the default appearance of all grace note slashes project-wide in the **Grace Notes** section of the **Notes** page in **Engrave** > **Engraving Options**.

RELATED LINKS

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

Types of holds and pauses

There are three types of holds and pauses in Dorico, 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. 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 182
Changing the appearance/duration of existing holds and pauses on page 527

525

Types of breath marks

There are different types of breath marks available in Dorico. 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
𝄒	✓	V	⸼

RELATED LINKS
Holds and pauses popover on page 182
Changing the appearance/duration of existing holds and pauses on page 527

Types of caesuras

There are different types of caesuras available in Dorico. All caesuras indicate a break in sound, but different types are often needed for different styles of musical scores.

Caesura	Thick caesura	Short caesura	Curved caesura
𝄌	𝄌	𝄎	𝄌
Two diagonal slashes	Two thick diagonal slashes	Two straight, vertical slashes	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
Holds and pauses popover on page 182
Changing the appearance/duration of existing holds and pauses on page 527

General placement conventions for holds and pauses

Holds and pauses are placed above the staff. For staves with multiple voices, fermatas can be placed inverted below the staff.

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.

You can change the minimum distance between fermatas and the staff on the **Holds and Pauses** page in **Engrave** > **Engraving Options**.

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.

You can change the minimum distance between breath marks and the staff, and between breath marks and the next note or rest, on the **Holds and Pauses** page in **Engraving Options**.

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.

You can change the size of the gap to the right of caesuras on the **Holds and Pauses** page in **Engraving Options**.

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.

Caesuras can co-exist with any type of breath mark, but you cannot have a caesura and a fermata at the same rhythmic position.

Changing the appearance/duration of existing holds and pauses

You can change the appearance/duration of existing holds and pauses, including changing their type. For example, you can change a short fermata into a long fermata, and change a fermata into a caesura.

PROCEDURE

1. In Write mode, select the hold or pause whose appearance/duration or type you want to change.

   NOTE

   You can only change the appearance/duration or type of one hold or pause at a time, except when using properties in the **Holds and Pauses** group of the Properties panel.

2. Change the appearance/duration or type of the holds or pauses in any of the following ways:

   - Open the holds and pauses popover by pressing **Shift-H** and enter a hold or pause into the popover.
   - Click a hold or pause in the Holds and Pauses panel.

- Select a type of hold or pause from the appropriate menu for your selected holds or pauses in the **Holds and Pauses** group of the Properties panel: **Fermata duration**, **Caesura appearance**, or **Breath mark appearance**.

NOTE

These menus only appear when the corresponding type of hold or pause is selected. If your selection includes different types of holds and pauses, for example, fermatas and caesuras, no menu is shown.

The Curlew (Britten) fermata is not included in the **Fermata duration** menu, as it only applies to individually selected notes.

RESULT

The appearance/duration or type of the selected hold or pause is changed.

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.

RELATED LINKS

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.

Positions of holds and pauses

You can change the positions of holds and pauses individually and by changing their default positions project-wide. For example, you can override the default position of an individual breath mark to accommodate other items at the same position.

You can move holds and pauses to different rhythmic positions in Write mode. They are positioned by default according to your settings in **Engraving Options**.

You can move holds and pauses graphically in Engrave mode, however, this does not change the rhythmic positions to which they are attached.

You can change the default positions of all holds and pauses project-wide, and values for the minimum gaps around holds and pauses, on the **Holds and Pauses** page in **Engrave** > **Engraving Options**.

RELATED LINKS
Project-wide engraving options for holds and pauses on page 532

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 value in any of the following ways:

   ● Press **Alt-Right Arrow** to move them to the right.

   ● Press **Alt-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.

Moving holds and pauses graphically

You can move holds and pauses graphically without changing the rhythmic positions to which they are attached.

PROCEDURE

1. In Engrave mode, select the holds and pauses you want to move.
2. Move the holds and pauses in any of the following ways:

    - Press **Alt-Right Arrow** to move them to the right.
    - Press **Alt-Left Arrow** to move them to the left.
    - Press **Alt-Up Arrow** to move them upwards.
    - Press **Alt-Down Arrow** to move them downwards.

        TIP

        If you want to move items by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

    - Click and drag them in any direction.

RESULT

The holds and pauses are moved to new graphical positions.

TIP

Start offset in the **Holds and Pauses** group of the Properties panel is activated automatically when you move fermatas and breath marks. You can use this property to move fermatas and breath marks by changing the values in the value fields. However, you cannot move caesuras using this property.

- **Offset X** moves fermatas and breath marks horizontally.
- **Offset Y** moves fermatas and breath marks vertically.

Deactivating the property resets the selected fermatas and breath marks to their default positions.

Changing the placement of fermatas relative to the staff

Fermatas are normally placed above the staff, but you can change their placement relative to the staff individually.

PROCEDURE

1. In Engrave mode, select the fermatas whose placement relative to the staff you want to change.
2. In the Properties panel, activate **Placement** in the **Holds and Pauses** group.
3. Choose one of the following options:

- **Above**
- **Below**

RESULT

The selected fermatas appear above/below the staff.

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. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **Max. fermatas per staff** in the **Holds and Pauses** group.
3. Select one of the following options from the menu:
    - **One per voice**
    - **One per each side of staff**
    - **One per staff**

RESULT

The number of fermatas shown at the selected positions is changed.

TIP

You can change the maximum number of fermatas that can appear on a single staff project-wide on the **Holds and Pauses** page in **Engrave** > **Engraving Options**.

RELATED LINKS
Project-wide engraving options for holds and pauses on page 532

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 531

Project-wide engraving options for holds and pauses

You can find options for the project-wide positions of holds and pauses on the **Holds and Pauses** page in **Engraving Options**.

The options on the **Holds and Pauses** page allow you to change the default positions and placement of holds and pauses, including the placement of fermatas in multiple-voice contexts.

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

- Press **Ctrl/Cmd-Shift-E** in any mode.
- Choose **Engrave** > **Engraving Options** in Engrave mode.

You can then click **Holds and Pauses** in the page list on the left of the dialog.

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.

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.

Traditionally, accidentals are organized following the pattern of the circle of fifths, which is different for sharp keys and flat keys.

In Dorico, key signatures exist within the overarching tonality system for your project. The two tonality systems that come as standard in Dorico are 12-EDO and 24-EDO.

Once you have selected or created a tonality system for your project, you can create custom key signatures and custom accidentals within that tonality system.

RELATED LINKS
General placement conventions for key signatures on page 533
Tonality systems on page 536
Input methods for key signatures on page 145
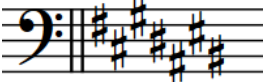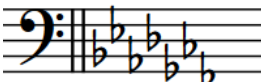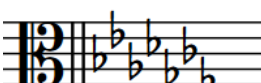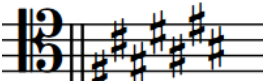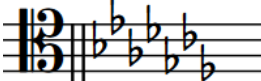
General placement conventions for key signatures

Dorico 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 for all standard Western key signatures. There is an accepted pattern for the placement of accidentals in a key signature, so that they fit inside the staff according to the current clef. The pattern of accidentals is the same in all clefs, apart from the tenor clef, which requires sharp key signatures to follow a different, ascending pattern to ensure the accidentals fit on the staff.

Clef	Arrangement of sharps	Arrangement of flats
Treble		
Bass		
Alto		
Tenor		

NOTE

For custom, non-standard key signatures, you can determine the order in which accidentals appear in the **Edit Custom Key Signature** dialog.

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. They are positioned between clefs and time signatures. Unlike time signatures, key signatures appear at the start of every system in full score and part layouts, even if the key signature has not changed. They are shown on every staff that requires the key signature, but are not shown on staves for unpitched instruments.
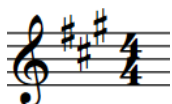
The correct position for key signatures is between clefs and time signatures.

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. However, you can change the default barline shown at key signature changes.
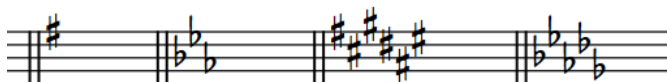
Examples of key signatures positioned after double barlines

A key signature applies until the end of a movement, the end of a piece, or until a key signature change if one occurs before the end of a movement or the end of a piece.

RELATED LINKS
Custom key signatures on page 543
Changing the barline shown at key signature changes on page 384

Types of key signatures

There are four types of key signatures in Dorico, 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 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 73

Tonality systems

The term "tonality system" is used in Dorico 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. For example, standard Western scales with semitone steps have 12-EDO.

● A set of accidentals. This allows you to notate how a note is raised or lowered. This can be a traditional set of accidentals, a set selected from the wide variety available, or a custom set of accidentals of your own design.

● A key signature. This can be a traditional Western key signature, or a custom key signature of your own design.

RELATED LINKS

Equal Division of the Octave (EDO)

EDO stands for Equal Division of the Octave: the number of equal pieces into which an octave is divided. In Dorico, you can create any number of divisions of an octave and design custom key signatures and custom accidentals for each tonality system.

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.

The 12-EDO **Edit Tonality System** dialog shows how these steps are divided across the intervals in the scale. There, you can see how many steps are given to each interval. 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.

To have the smallest step in the tonality system be a quarter tone rather than a semitone, the octave must be divided into twice as many equal divisions as 12-EDO. Therefore, to be able to use quarter tone accidentals in a project, you must choose the **Equal temperament (24-EDO)** tonality system for the project.

Although you can divide the octave into any number of divisions, to be able to show a standard Western key signature, the number of equal divisions in the octave must be divisible by 12.

EDO also allows you to map non-conventional Western pitches on to the seven note names A-G, and create a coherent notation to express that, because there is no limit to how you can divide the octave. For example, Turkish music is traditionally divided in 53-EDO, the division of which is usually spread across the notes A-A with the following number of divisions for each interval: 9-4-9-9-9-4-9.

RELATED LINKS

Changing the tonality system

You can change the tonality system used in your project at key signature changes, including changing to a custom tonality system you have created.

PREREQUISITE

If you want to use a tonality system other than **Equal temperament (12-EDO)** or **Equal temperament (24-EDO)**, you have created a custom tonality system.

PROCEDURE

1. In Write mode, select an item at the position from which you want to change the tonality system.

2. Without deselecting the item, select the tonality system you want from the menu in the **Tonality System** section of the Key Signatures, Tuning Systems, and Accidentals panel.

3. Input a new key signature.

RESULT

The tonality system is changed from the key signature you input until the next key signature with a tonality system change or the end of the flow.

If you selected a tonality system that allows microtonal accidentals, such as **Equal temperament (24-EDO)**, microtonal accidentals become available in the **Accidentals** section of the Key Signatures, Tuning Systems, and Accidentals panel.

RELATED LINKS
Custom tonality systems on page 537
Input methods for key signatures on page 145
Inputting microtonal accidentals on page 359

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. In Dorico, you can also design your own custom accidentals and combine them into custom key signatures as appropriate for your project.

You can find existing tonality systems in your project in the Tonality System section of the Key Signatures, Tuning Systems, and Accidentals panel. You can open this panel by clicking **Key Signatures, Tuning Systems, and Accidentals** in the Notations toolbox in Write mode.

Dorico provides two tonality systems in each project by default: **Equal temperament (12-EDO)** and **Equal temperament (24-EDO)**.
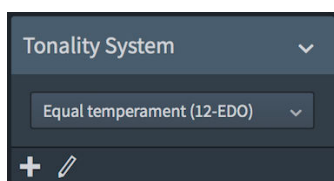
The **Tonality System** section of the Key Signatures, Tuning Systems, and Accidentals panel

You can create custom tonality systems and edit existing tonality systems in the **Edit Tonality System** dialog, which you can open by clicking either of the following buttons in the **Tonality System** action bar:

- **New Tuning System**

  ➕

  Allows you to create a new tonality system.

- **Edit Tuning System**

  ✏️

  Allows you to edit the selected existing tonality system.

RELATED LINKS
Edit Tonality System dialog on page 538
Custom divisions of the octave on page 539
Custom accidentals on page 540
Custom key signatures on page 543

Edit Tonality System dialog

You can create custom tonality systems and edit existing tonality systems in the **Edit Tonality System** dialog.

- You can open the **Edit Tonality System** dialog by clicking either **New Tuning System** or **Edit Tuning System** in the action bar in the **Tonality System** section of the Key Signatures, Tuning Systems, and Accidentals panel.
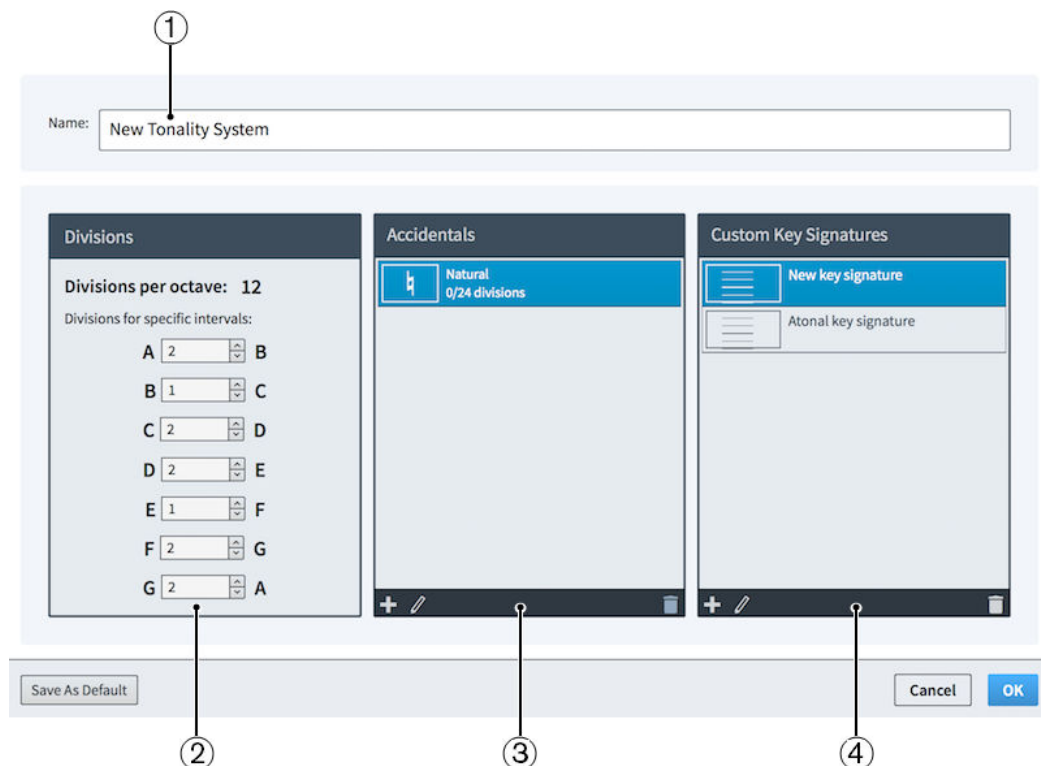
The **Edit Tonality System** dialog contains the following sections:

1 Name

Allows you to enter a name for a new tonality system, or edit the name of an existing custom tonality system you created.

2 Divisions

Allows you to specify how many divisions of the octave you want assigned to each interval.

3 Accidentals

Displays the accidentals currently available for the selected tonality system. The two
buttons at the bottom allow you to edit existing accidentals, and to create new accidentals.

4   Custom Key Signatures

Displays the key signatures currently available for the selected tonality system. The two
buttons at the bottom allow you to edit existing key signatures, and to create new key
signatures.

➕	✏️
New Accidental/New Key Signature button	**Edit Accidental/Edit Key Signature** button

Once you have decided on the number of divisions your octave has, and how many divisions are
assigned to each interval, in the **Divisions** section of the dialog, you can assign existing and
create custom accidentals for each raising/lowering pitch delta you want to notate in the **Edit
Accidental** dialog.

You can arrange these accidentals into a custom key signature in the **Edit Custom Key
Signature** dialog.

RELATED LINKS

Custom divisions of the octave

You can change the number of divisions of the octave for an existing tonality system, or create a
new tonality system with as many divisions of the octave as you like.

In the **Divisions** section of the **Edit Tonality System** dialog, you can change the number of
divisions assigned to each interval. The total number of divisions of an octave, which is shown at
the top of the section, is updated automatically as you change the number of divisions.

The **Divisions** section of the **Edit Tonality System** dialog, as it appears when editing the existing 12-EDO
tonality system.

In Equal temperament, or 12-EDO, the total number of divisions is 12. There are 2 divisions between A and B, 1 division between B and C, and so on. This follows the standard Western pattern which you can also see in the pattern of white and black keys on a keyboard.

Although you can divide the octave into any number of divisions, the number of equal divisions in the octave must be divisible by 12 to be able to show a standard Western key signature in Dorico.

RELATED LINKS

Custom accidentals

Custom accidentals can contain traditional accidental glyphs but also other musical symbols, text, and graphics. This allows you to design custom accidentals that express specific pitch deltas in your custom tonality systems.

You can find all accidentals available in the current tonality system in the **Accidentals** section of the **Edit Tonality System** dialog.
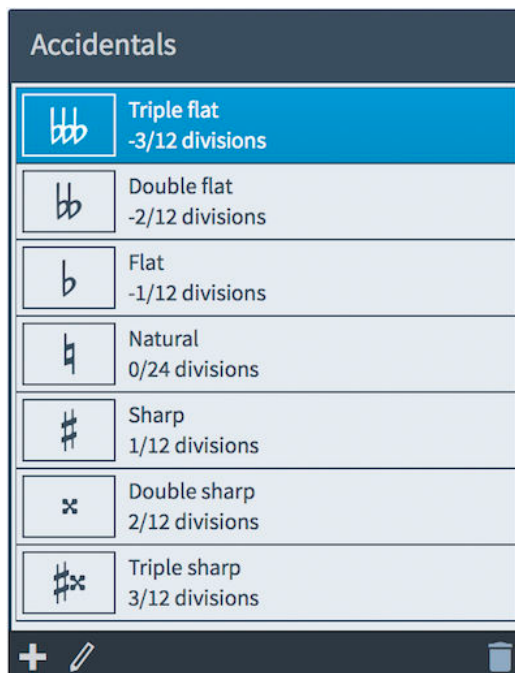
The **Accidentals** section of the **Edit Tonality System** dialog, as it appears when editing the existing 12-EDO tonality system.

You can create new and edit existing custom accidentals in the **Edit Accidental** dialog.

NOTE

You can edit any accidental that is included in either of the default tonality systems that come with Dorico. New tonality systems start with a natural accidental, which you can edit or delete.

RELATED LINKS

Edit Accidental dialog

You can create new and edit existing custom accidentals in the **Edit Accidental** dialog.

● You can open the **Edit Accidental** dialog by clicking either **New Accidental** or **Edit Accidental** in the action bar at the bottom of the **Accidentals** section of the **Edit Tonality System** dialog.
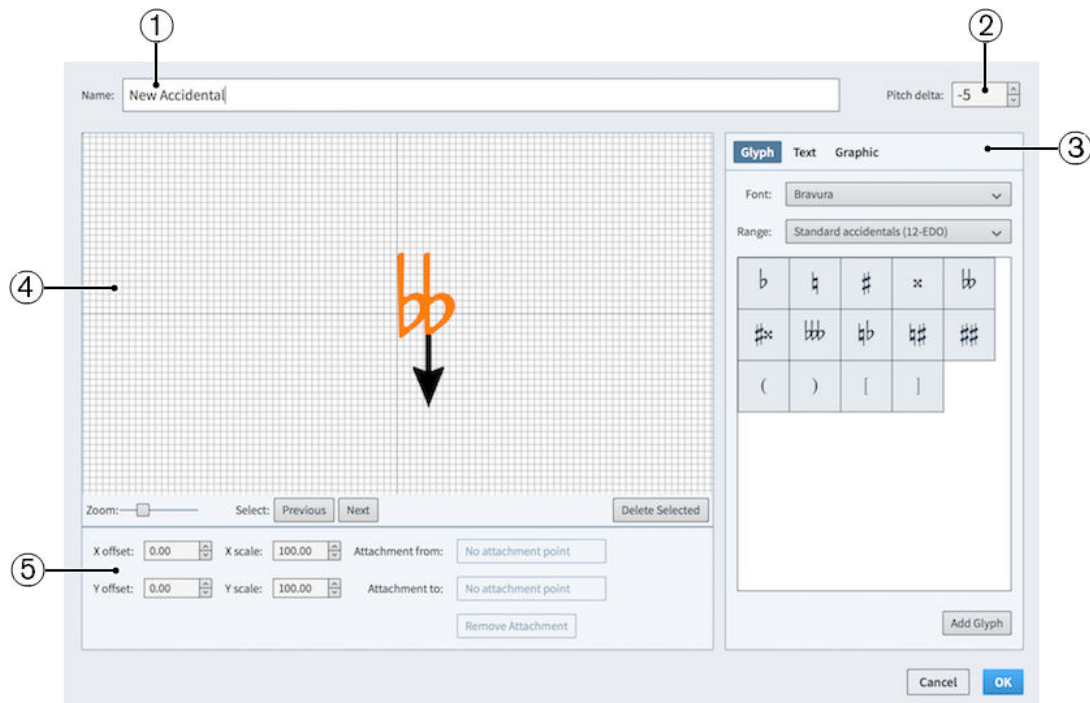
The **Edit Accidental** dialog contains the following sections:

1   Name

Allows you to enter a name for your accidental.

2   Pitch delta

Allows you to set a value for what effect this accidental has on notes to which it is added. For example, a pitch delta of 2 raises notes by two equal divisions of the octave.

3   Accidental component selector

Allows you to choose components to add to your accidental. You can add different types of components by clicking the respective tab titles.

● **Glyph** includes symbols such as ♮ and ♯. You can use different styles of glyphs by selecting different fonts and different ranges from the menus. Click **Add Glyph** to add the selected glyph to the accidental.

> NOTE
>
> A full list of the different ranges of glyphs is available on the SMuFL website.

● **Text** includes numbers and other text. You can use numbers and text from the available **Preset text** list, or select any font available from the menu and enter your preferred text into the text box at the bottom. Click **Add Text** to add the selected text, or input text, to the accidental.

● **Graphic**: Load a new graphic file, or select an existing graphic from the **Select existing** list. You can see a preview of the graphic in the **Preview** box. Click **Add Graphic** to add the selected graphic to the accidental.

4   Editor

Allows you to arrange and edit the components that make up your accidental. You can use the controls at the bottom of the dialog to edit and arrange accidental components.

5   Controls

- **X offset** moves components horizontally. Increasing the value moves components to the right, decreasing the value moves components to the left.

- **Y offset** moves components vertically. Increasing the value moves components upwards, decreasing the value moves components downwards.

- **X scale** changes the width of graphics only. Increasing the value makes graphics wider, decreasing the value makes graphics narrower.

- **Y scale** changes the size of components and the height of graphics. Increasing the value makes components larger, decreasing the value makes components smaller. For graphics only, increasing the value makes graphics taller, decreasing the value makes graphics shorter.

- **Attachment from**: Select the attachment point on the component to the left of the selected component to which the selected component attaches. We recommend that you select a right edge attachment point for **Attachment from**.

- **Attachment to**: Select the attachment point on the selected component which attaches to the component to its left. We recommend that you select a left edge attachment point for **Attachment to**.

There are eight attachment points for glyphs and graphics, and eleven for text, due to the extra space required for letters that go below the baseline. The example diagram helps you visualize how these points relate to accidental components.
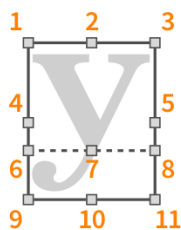
The attachment points have the following names in the **Edit Accidental** dialog:

1   **Top Left**

2   **Top Middle**

3   **Top Right**

4   **Left Middle**

5   **Right Middle**

6   **Baseline Left** (text only)

7   **Baseline Middle** (text only)

8   **Baseline Right** (text only)

9   **Bottom Left**

10   **Bottom Middle**

11   **Bottom Right**

RELATED LINKS

Custom key signatures

Custom key signatures can comprise traditional accidentals in a different order, or custom accidentals you have designed in a specific order for your requirements.

You can find all key signatures available in the current tonality system in the **Custom Key Signatures** section of the **Edit Tonality System** dialog.
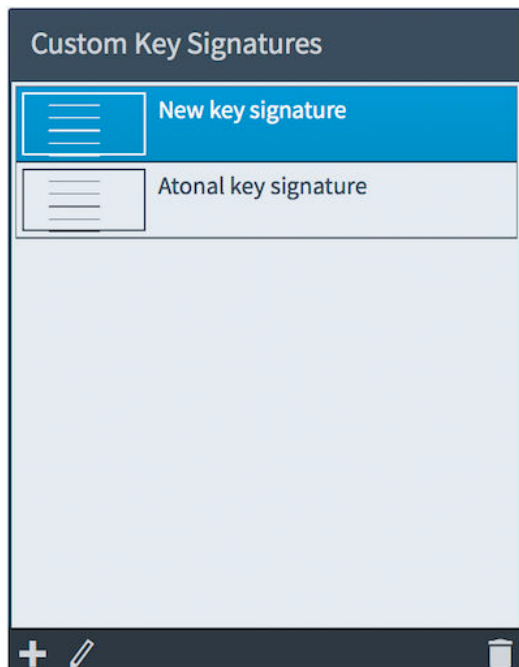
The **Custom Key Signatures** section of the **Edit Tonality System** dialog, as it appears when creating or editing custom tonality systems.

NOTE

If you edit one of the default tonality systems that come with Dorico, no key signatures are available to edit in this section. However, you can create new key signatures within one of the default tonality systems.

You can create new and edit existing custom key signatures for both new and existing tonality systems in the **Edit Custom Key Signature** dialog.

RELATED LINKS

Edit Custom Key Signature dialog

You can create new and edit existing custom key signatures in the **Edit Custom Key Signature** dialog.

- You can open the **Edit Custom Key Signature** dialog by clicking either **New Key Signature** or **Edit Key Signature** in the action bar in the **Custom Key Signatures** section of the **Edit Tonality System** dialog.
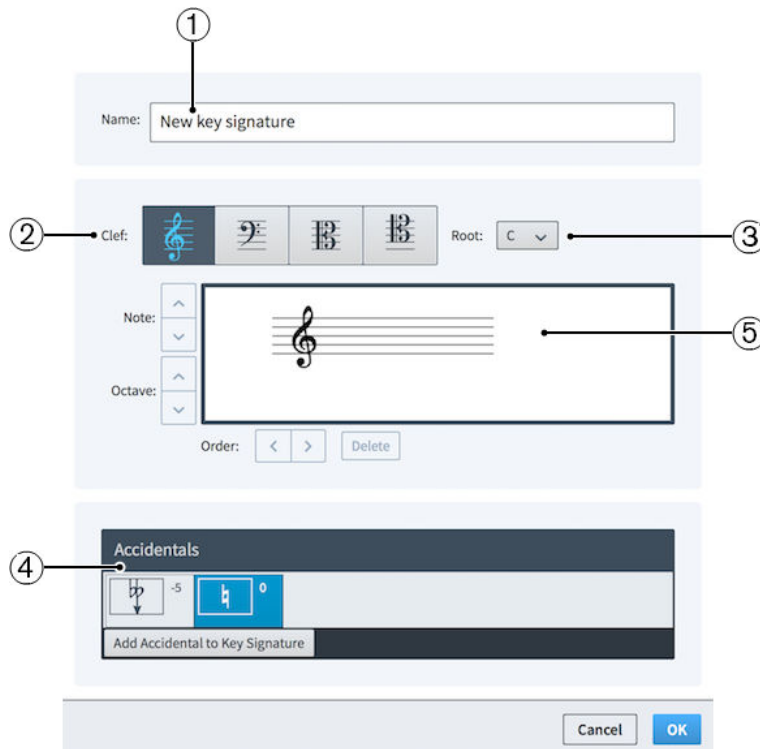
Edit Custom Key Signature dialog

The **Edit Custom Key Signature** dialog contains the following sections:

1   Name

Allows you to enter a name for your key signature.

2   Clef

Shows how your key signature appears in treble clef, bass clef, alto clef, and tenor clef. You can edit your key signature in any of these clefs.

3   Root

Allows you to select the base note of your key signature from the menu.

4   Accidentals

Allows you to add accidentals from your tonality system to the key signature, including custom accidentals you have created in the **Edit Accidental** dialog. Click **Add Accidental to Key Signature** to add the selected accidental to the key signature.

5   Editor

Allows you to arrange accidentals in your preferred order using the **Order** arrow buttons, and change their position on the staff using the **Note** arrow buttons and **Octave** arrow buttons.

RELATED LINKS
Edit Tonality System dialog on page 538
Edit Accidental dialog on page 541

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.

TIP

Instruments that do not usually have key signatures, such as timpani or horn, have a **No key sig** version in Dorico which ensures no key signature is shown for those instruments. You can select **No key sig** versions of instruments when adding/changing instruments in Setup mode.

PROCEDURE

1. In Write mode, select any of the following that you want to delete:

    - Key signatures
    - Key signature signposts of key signatures with no accidentals in the current layout

2. Delete the key signatures in any of the following ways:

    - Press **Backspace** or **Delete**.
    - Choose **Edit** > **Delete**. You can also choose this option from the context menu.

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

Multiple 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 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
Inputting key signatures with the popover on page 147
Inputting key signatures with the panel on page 148

Positions of key signatures

You can change the positions of key signatures individually and by changing their default position project-wide.

You can move key signatures to new rhythmic positions in Write mode. They are positioned according to your settings on the **Key Signatures** and **Spacing Gaps** pages in **Engrave** > **Engraving Options**.

Key signatures in Dorico appear in the correct position by default. You can move key signatures graphically in Engrave mode, but this does not change their rhythmic positions.

If you want to adjust the default position of key signatures relative to notes or barlines, you must change the project-wide values for spacing gaps on the **Spacing Gaps** page in **Engraving Options**.

RELATED LINKS
Project-wide spacing gaps for key signatures on page 546
Moving key signatures graphically on page 547

Project-wide spacing gaps for key signatures

You can change the minimum gaps between objects, including key signatures.

Among the available values on the **Spacing Gaps** page in **Engraving Options**, the following minimum values directly relate to key signatures:

- **Gap after barline before clef, key or time signature**
- **Gap after cancellation naturals**
- **Gap after key signature**
- **Gap after end repeat barline**

NOTE

Other values may have an effect on the position of key signatures, but they also affect other objects.

On the **Key Signatures** page in **Engraving Options**, you can change the following gaps:

- **Gap between accidentals in key signatures**
- **Gap between cancellation naturals**

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

- Press **Ctrl/Cmd-Shift-E** in any mode.
- Choose **Engrave** > **Engraving Options** in Engrave mode.

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 value in any of the following ways:

   - Press **Alt-Right Arrow** to move them to the right.

   - Press **Alt-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
Inputting key signatures with the popover on page 147
Inputting key signatures with the panel on page 148

Moving key signatures graphically

You can make individual changes to the graphical position of key signatures without affecting the positions of any other items.

PROCEDURE

1. In Engrave mode, activate **Note Spacing** in the Formatting panel.

2. Select the square handle above the key signature you want to move.

   A smaller circular handle appears beside the key signature.

3. Select the circular handle.

4. Move the handle in any of the following ways:

- Press **Alt-Right Arrow** to move it to the right.
- Press **Alt-Left Arrow** to move it to the left.

  > TIP
  >
  > If you want to move handles by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

  > NOTE
  >
  > You cannot move note spacing handles with the mouse, you can only move them using the keyboard.

RESULT

The key signature is moved graphically to the right/left.

> TIP
>
> When **Note Spacing** is deactivated, you can also change **Spacing Offset** in the **Key Signatures** group of the Properties panel to move key signatures horizontally. However, this also affects global note spacing at the rhythmic position of the key signature, including moving cancellation naturals.
>
> You can also move cancellation naturals graphically, independently of the subsequent key signature and without affecting the spacing of any other item using the **Cancellation naturals X offset** property.

RELATED LINKS
Note spacing on page 284

Project-wide engraving options for key signatures

You can find options for the project-wide appearance of key signatures on the **Key Signatures** page in **Engraving Options**.

The options on the **Key Signatures** page allow you to change the key signature cancellation style and the spacing gaps between accidentals in key signatures.

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

- Press **Ctrl/Cmd-Shift-E** in any mode.
- Choose **Engrave** > **Engraving Options** in Engrave mode.

You can then click **Key Signatures** in the page list on the left of the dialog.

> TIP
>
> If you want to change the barline shown at key signature changes, you can find this option on the **Barlines** page in **Engraving Options**.

RELATED LINKS
Changing the barline shown at key signature changes on page 384

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.

PROCEDURE

1. In Write mode, make a selection that includes both a key signature change and notes.
2. Choose **Write** > **Transpose**.
   The **Transpose** dialog opens.
3. Adjust the parameters required for your transposition, such as interval and 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

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 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 prefers keys with the same type of accidental as the previous key signature. When choosing key signatures for transposing instruments, Dorico 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 selects an enharmonic equivalent key signature if it has fewer accidentals. However, you can change this setting by deactivating **Prefer enharmonic equivalent key signatures with fewer accidentals** in the **Transposition** section of the **Accidentals** page in **Notation Options**.

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

- Press **Ctrl/Cmd-Shift-N** in any mode.
- Choose **Write** > **Notation Options** in Write mode.
- Choose **Setup** > **Notation Options** in Setup mode.
- Click **Notation Options** on the right of the **Flows** panel in Setup mode.

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

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, 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 88
Splitting flows on page 221
Formatting panel on page 223
Inserting system breaks on page 273

Lyrics

In Dorico, 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.

In Dorico, 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 lyrics according to their type and lyric line by choosing **Edit** > **Filter** > **Lyrics** and choosing a lyric type or lyric line from the menu.

RELATED LINKS

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 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.
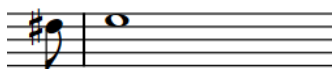
A short note followed by a long note, where the horizontal position of the lyrics is automatically adjusted for legibility

RELATED LINKS

Filters for lyrics

In Dorico, 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 placement relative to the staff.

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 placement relative to the staff.

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.

Types of lyrics

Lyrics are divided into different lyric types in Dorico.

Lyric lines

Lyric lines contain normal lyrics and can be shown with verse numbers.

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.

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. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate/deactivate the following properties, individually or together, in the **Lyrics** group:

   - **Chorus**

   - **Is translation**

RESULT

If you activate **Chorus**, the selected individual lyrics are changed to chorus lyrics.

If you activate **Is translation**, the selected lyrics are changed 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.

If you activate both properties, the selected lyrics are changed to translation lyrics of the chorus.

If you deactivate both properties, the selected lyrics are changed 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
Lyric line numbers on page 563
Showing lyrics in italics on page 567
Changing the line number and type of lyric lines on page 564

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 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
Changing the syllable type of existing lyrics on page 556
Inputting lyrics on page 200

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. You can do this in Write mode and Engrave mode.

2. In the Properties panel, select one of the following options from the **Syllable type** menu in the **Lyrics** group:

    - **Whole Word**

    - **Start**

    - **Middle**

    - **End**

RESULT

Lyrics with a syllable type of **Whole Word** or **End** are followed by a space.

Lyrics with a syllable type of **Start** or **Middle** are followed by a hyphen.

RELATED LINKS
Types of syllables in lyrics on page 555
Inputting lyrics on page 200

Changing the text of existing lyrics

You can change the text of lyrics after they have been input.

PROCEDURE

1. In Write mode, select the lyric you want to change.

> **NOTE**
>
> You can only change one lyric at a time.

2.   Open the lyrics popover in any of the following ways:

     ● Press **Shift-L**.

     ● Double-click the lyric you want to change.

     ● Choose **Write** > **Create Lyrics**.

     ● Click **Lyrics** in the Notations toolbox.

       v1.

     ● Choose **Write** > **Create Lyrics**.

3.   Replace the existing text in the lyrics popover.

4.   Optional: If you want to change other existing lyrics as well, advance the popover in one of the following ways:

     ● Press **Space** to advance the popover to the next note if you entered a complete word, or the final syllable in a multi-syllabic word.

       > **NOTE**
       >
       > Existing lyrics are automatically selected in the popover when you press **Space**.

     ● Press **-** to advance the popover to the next note if you entered one syllable of a multi-syllabic word.

     ● Press **Right Arrow** to move the cursor to the right.

     ● Press **Left Arrow** to move the cursor to the left.

       > **NOTE**
       >
       > The cursor automatically moves to the next or previous lyric or note if you keep pressing the arrow keys.

5.   Press **Return** or **Esc** to close the popover when you have finished changing lyrics.

     > **NOTE**
     >
     > The popover closes automatically when you reach the last note on the staff.

RELATED LINKS
Lyric line numbers on page 563
Inputting lyrics on page 200

Positions of lyrics

Dorico automatically positions lyrics and makes adjustments to accommodate variations in the length of lyrics, including adjusting the horizontal alignment of lyrics in melismatic music. However, you can also move lyrics manually and also change their default positions project-wide.

You can move lyrics to different rhythmic positions in Write mode. They are positioned by default according to your chosen options on the **Lyrics** page in **Engrave** > **Engraving Options**.

You can move individual lyrics graphically in Engrave mode, but this does not change the rhythmic positions to which they are attached.

NOTE

The horizontal position of lyrics is automatically adjusted in Dorico 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.

Moving lyrics graphically in Engrave mode overrides the automatic spacing for the selected lyrics. If you move a lyric whose position was automatically readjusted, the note spacing at that rhythmic position might change.

You can change the default positions of lyrics project-wide on the **Lyrics** page in **Engraving Options**.

The default settings for lyrics on the **Lyrics** page in **Engraving Options** are optimized for scores with comfortable spacing. If your project requires note spacing to be narrower, with less room for each note, change these settings to achieve a clearly legible result without the need for lots of editing in Engrave mode.

For scores that have less horizontal space, the following changes often improve the appearance of lyrics and rhythmic space:

- Make minimum gaps smaller, such as the minimum gap between lyrics and hyphens, in the **Hyphens** section of the **Lyrics** page in **Engraving Options**.
- Increase the amount that lyrics can be adjusted by in the **Spacing** section of the **Lyrics** page in **Engraving Options**.

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

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 value in any of the following ways:

   ● Press **Alt-Right Arrow** to move them to the right.

   ● Press **Alt-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 the right/left according to the current rhythmic grid value.

RELATED LINKS
Moving lyrics graphically on page 559

Moving lyrics graphically

You can move individual lyrics graphically without changing the rhythmic positions to which they apply.

NOTE

Moving lyrics graphically in Engrave mode overrides the automatic spacing of the selected lyrics. If you move a lyric whose position was automatically readjusted, the spacing at that rhythmic position might change.

PROCEDURE

1. In Engrave mode, select the lyrics you want to move.

2. Move the selected lyrics in any of the following ways:

   ● Press **Alt-Right Arrow** to move them to the right.

   ● Press **Alt-Left Arrow** to move them to the left.

   TIP

   If you want to move items by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

   ● Click and drag them to the right/left.

RESULT

The selected lyrics are moved to the right/left.

NOTE

You cannot move lyrics upwards/downwards, as their vertical position is determined by their lyric line number and your project-wide settings in **Engrave** > **Engraving Options**.

TIP

You can change the line number of whole lyric lines, and the placement of whole lyric lines relative to the staff. You can also change the position of lyrics relative to the staff, other lyric lines, and to other objects for all lyrics project-wide in the **Vertical Position** section of the **Lyrics** page in **Engraving Options**.

RELATED LINKS

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.

You cannot change the alignment of lyrics relative to notes project-wide, as the horizontal position of lyrics is automatically adjusted in Dorico to minimize changes to the note spacing.

NOTE

Changing the alignment of lyrics manually overrides the automatic spacing for the selected lyrics. If you change the alignment of a lyric whose position was automatically readjusted, the note spacing at that rhythmic position might change.

PROCEDURE

1. Select the lyrics whose alignment you want to change. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **Lyric text alignment** in the **Lyrics** group.
3. Select one of the following alignment options from the menu:
    - **Left**
    - **Center**
    - **Right**

RESULT
The alignment of the selected lyrics is changed.

RELATED LINKS

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 extend across multiple notes.

Dorico 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.

In Engrave mode, lyric hyphens and lyric extender lines have two square handles, one at the start and one at the end. You can move whole lyric hyphens and lyric extenders lines, and you can also move their handles independently of each other. This allows you to lengthen/shorten lyric

hyphens and extender lines, which for lyric hyphens means increasing/decreasing the length of the space in which lyric hyphens are shown.

Lyric extender line with handles shown

Lyric hyphen with handles shown

RELATED LINKS

Moving lyric extender lines and hyphens

You can move lyric extender lines and hyphens horizontally.

NOTE

You cannot move lyric extender lines or hyphens upwards/downwards, as their vertical position is determined by their lyric line number and your project-wide settings in **Engrave** > **Engraving Options**.

PROCEDURE

1. In Engrave mode, select the lyric extender lines or hyphens that you want to move.
2. Move the lyric extender lines or hyphens in any of the following ways:

   - Press **Alt-Right Arrow** to move them to the right.
   - Press **Alt-Left Arrow** to move them to the left.

     TIP

     If you want to move items by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

   - Click and drag them to the right/left.

RESULT

The selected lyric extender lines or hyphens are moved to the right/left.

NOTE

- The start handles of lyric extender lines are attached to the lyrics from which they extend, and the start handles and end handles of lyric hyphens are attached to the lyrics on each side. If you move either of those lyrics, the corresponding lyric extender line or hyphen handles also move.

- You can change the position of lyric extender lines and hyphens relative to lyrics, to the ends of systems, and to other extender lines and hyphens for all lyric extender lines and hyphens project-wide in the **Extender Lines** and **Hyphens** sections of the **Lyrics** page in **Engraving Options**.

RELATED LINKS

Lengthening/Shortening lyric extender lines and hyphens

You can lengthen/shorten individual lyric extender lines and lyric hyphens. Lengthening/
Shortening lyric hyphens increases/decreases the space in which lyric hyphens are shown.

NOTE

The start handles of lyric extender lines and hyphens are attached to the lyrics from which they
extend. If you move those lyrics, the start handles also move.

PROCEDURE

1. In Engrave mode, select the square handles at one of the following positions on the lyric
   extender lines or hyphens you want to lengthen/shorten:

   - The start of lyric extender lines or hyphens

   - The end of lyric extender lines or hyphens

   TIP

   You can show handles on all items, not just selected items, by choosing **Engrave** > **Show
   Handles** > **Always**. This can make it easier to select individual handles on multiple items.

2. Move the handles in any of the following ways:

   - Press **Alt-Right Arrow** to move them to the right.

   - Press **Alt-Left Arrow** to move them to the left.

     TIP

     If you want to move items by larger increments, you can press **Ctrl/Cmd** as well as
     the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

   - Click and drag them to the right/left.

3. Optional: Repeat steps 1 and 2 for the other handle of the lyric extender lines or hyphens.

RESULT

The length of the selected lyric extender lines is changed. For example, moving the start handle
of a lyric extender line to the right without moving the end handle makes the line shorter.

Lengthening/Shortening lyric hyphens does not change the size or shape of the hyphens
themselves. Instead, you increase/decrease the distance between the handles in which hyphens
can appear.

NOTE

Depending on your settings for the size of gaps relating to hyphens in the **Hyphens** section of
the **Lyrics** page in **Engrave** > **Engraving Options**, more/fewer hyphens can appear in the space
when you lengthen/shorten lyric hyphens.

TIP

The following properties in the **Lyrics** group of the Properties panel are activated if you move the
corresponding handle on lyric extender lines and hyphens:

- **Line Start X** moves the start handles of lyric extender lines and hyphens horizontally.

- **Line End X** moves the end handles of lyric extender lines and hyphens horizontally.

For example, if you move a whole lyric extender line to the right, both handles are moved so both properties are activated. You can also use these properties to move lyric extender lines and hyphens graphically by changing the values in the value fields.

Deactivating the properties resets the selected lyric extender lines and hyphens to their default positions.

RELATED LINKS
Lyric hyphens and lyric extender lines on page 560

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. Delete the lyric line in any of the following ways:
   - Press **Backspace** or **Delete**.
   - Choose **Edit** > **Delete**. You can also choose this option from the context menu.

RESULT
All lyrics in the selected lyric line are deleted.

RELATED LINKS
Filters for lyrics on page 553
Selecting lyrics using filters on page 554
Large selections on page 109

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. Delete the lyrics in any of the following ways:
   - Press **Backspace** or **Delete**.
   - Choose **Edit** > **Delete**.

RESULT
The selected lyrics are deleted.

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, 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.

In Dorico, 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

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. Alternatively, you can activate verse numbers on the **Lyrics** page in **Engrave** > **Engraving Options**.

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.

   NOTE

   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 563
Types of lyrics on page 554
Filters for lyrics on page 553
Selecting lyrics using filters on page 554

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. You can do this in Write mode and Engrave mode.

2. In the Properties panel, change the value for **Lyric number** in the **Lyrics** group in any of the following ways:

   - Enter a value into the value field.

   - Click the arrows beside the value field.

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.

RELATED LINKS
Lyric line numbers on page 563

Changing the placement of lyric lines relative to the staff

You can change the placement of whole lyric lines relative to the staff after they have been input.

PROCEDURE

1. In Write mode, select a lyric in each line whose placement relative to the staff you want to change.

   NOTE

   You can also make a selection and use the lyric filters to select different lyric lines according to their line numbers, and to select lyric lines according to their position relative to the staff.

2. Select the placement relative to the staff 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 placement relative to the staff 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 563
Filters for lyrics on page 553
Selecting lyrics using filters on page 554
Changing the line number and type of lyric lines on page 564

Changing the placement of individual lyrics relative to the staff

You can change the placement of individual lyrics relative to the staff after they have been input.

PROCEDURE

1. Select the lyrics whose placement relative to the staff you want to change. You can do this in Write mode and Engrave mode.

2. In the Properties panel, choose one of the following options for **Line placement** in the **Lyrics** group:

   - **Above**

   - **Below**

RESULT

The placement relative to the staff 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 placement relative to the staff by choosing **Edit** > **Lyrics** > **Placement** and selecting an option from the menu, which avoids collisions.

RELATED LINKS
Lyric line numbers on page 563
Changing the placement of lyric lines relative to the staff on page 565
Changing the line number and type of lyric lines on page 564

Changing the font styles used for lyrics

You can change aspects of the fonts used for the available types of lyrics project-wide.

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Font Styles**.
   The **Edit Font Styles** dialog opens.

2. Select the font you want to change from the **Font style** menu:

   - **Lyrics Font**
   - **Lyrics translation Font**
   - **Lyrics verse numbers Font**
   - **Chorus lyrics Font**
   - **Chorus lyrics translation Font**

3. Activate the following options, individually or together, to change the corresponding aspect of the font:

   - **Font family**
   - **Size**
   - **Style**
   - **Underlined**

4. Optional: Repeat steps 2 and 3 for each font whose style you want to change.

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

RESULT

The font style for the selected lyrics type is changed project-wide.

RELATED LINKS
Edit Font Styles dialog on page 275

Showing lyrics in italics

You can show individual lyrics in an italic font without changing their font style, lyric type, or placement relative to the staff.

PROCEDURE

1. Select the lyrics you want to show in an italic font. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate **Italic** in the **Lyrics** group.

RESULT

The selected lyrics are shown in an italic font.

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.

If you want all normal lyric lines to appear in an italic font project-wide, you can change the font style of the **Lyrics Font**.

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 is optional. You can hide/show verse numbers on all lines of lyrics project-wide and on individually selected lyrics.

In Dorico, verse numbers are only shown before the first lyric in the line by default. Therefore, if you want to show the verse number at the start of subsequent systems, you must show verse numbers on those individual 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 project-wide

You can hide/show verse numbers project-wide.

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Engraving Options**.
   The **Engraving Options** dialog opens.

2. Click **Lyrics** in the page list.

3. In the **Verse Numbers** section, choose one of the following options for **Verse numbers for each line of lyrics**:
   - **Show verse numbers**
   - **Do not show verse numbers**

4. Click **Apply**, then **Close**.

RESULT

Verse numbers are either shown or hidden project-wide.

Changing the punctuation of verse numbers

You can change how verse numbers are punctuated project-wide.

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Engraving Options**.
   The **Engraving Options** dialog opens.

2. Click **Lyrics** in the page list.

3. In the **Verse Numbers** section, choose one of the following options for **Punctuation for verse numbers**:

- **Append period (full stop)**
- **Do not append period (full stop)**

4. Click **Apply**, then **Close**.

RESULT

Verse numbers are shown with/without a period project-wide.

Hiding/Showing verse numbers on individual lyrics

You can hide/show verse numbers on individual lyrics, independently of your project-wide setting, 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. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate/deactivate **Show verse number** in the **Lyrics** group.

3. Activate/Deactivate the corresponding checkbox.

RESULT

Verse numbers are shown before the selected lyrics when both the property and the corresponding checkbox are activated. Verse numbers are not shown when the property is activated but the checkbox is deactivated.

When the property is deactivated, lyrics follow your project-wide setting for hiding/showing verse numbers.

RELATED LINKS
Hiding/Showing verse numbers project-wide on page 568

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

In Dorico, you can hide/show East Asian elision slurs on all applicable lyrics project-wide and on individually selected lyrics.

RELATED LINKS
Hiding/Showing East Asian elision slurs on page 570

Hiding/Showing East Asian elision slurs

You can hide/show East Asian elision slurs for individually selected lyrics, independently of your project-wide setting.

PROCEDURE

1. Select the lyrics on which you want to show East Asian elision slurs. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate/deactivate **Show East Asian elision slur** in the **Lyrics** group.
3. Activate/Deactivate the corresponding checkbox.

RESULT

East Asian elision slurs are shown on the selected lyrics when **Show East Asian elision slur** and the corresponding checkbox are both activated, and hidden when the property is activated but the checkbox is deactivated.

When the property is deactivated, lyrics follow your project-wide setting.

TIP

You can choose to hide/show East Asian elision slurs on all applicable lyrics project-wide on the **Lyrics** page in **Engrave** > **Engraving Options**.

RELATED LINKS
East Asian elision slurs on page 569

Project-wide engraving options for lyrics

You can find options for the project-wide appearance and placement of lyrics on the **Lyrics** page in **Engraving Options**.

The options on the **Lyrics** page allow you to change the default appearance, spacing, and position of lyrics, and the appearance and position of lyric hyphens and lyric extender lines.

There are musical examples for many options to demonstrate how they affect the appearance of your music.

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

- Press **Ctrl/Cmd-Shift-E** in any mode.
- Choose **Engrave** > **Engraving Options** in Engrave mode.

You can then click **Lyrics** in the page list on the left of the dialog.

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, however there are many different designs of noteheads that you can use.

Depending on their duration, notes can have stems that help indicate their duration.

RELATED LINKS
Inputting notes on page 115
Project-wide engraving options for notes on page 571
Note spacing on page 284
Stems on page 711
Changing the notehead design project-wide on page 571
Changing the notehead design of individual noteheads on page 578
Add intervals popover on page 133
Adding notes above/below existing notes on page 133

Project-wide engraving options for notes

There are a number of options for the appearance of notes and noteheads project-wide that you can choose from on the **Notes** page in **Engraving Options**.

The options on this page allow you to change the design, appearance, and position of noteheads, ledger lines, stem flags, and rhythm dots. You can also change the appearance of double whole notes (breves) and the size of grace notes relative to normal notes.

There are musical examples for many options to demonstrate how they affect the appearance of your music.

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

- Press **Ctrl/Cmd-Shift-E** in any mode.
- Choose **Engrave** > **Engraving Options** in Engrave mode.

You can then click **Notes** in the page list on the left of the dialog.

Changing the notehead design project-wide

You can change the notehead design of all noteheads project-wide.

PROCEDURE
1. In Engrave mode, choose **Engrave** > **Engraving Options**.
   The **Engraving Options** dialog opens.
2. Click **Notes** in the page list.
3. In the **Noteheads** section, select one of the following options for **Notehead design**:
   - **Default noteheads** (smaller than **Larger noteheads**)

- **Larger noteheads** (Default)
- **Note names**
- **Figurenotes© colors**

NOTE

This does not change the notehead design of noteheads whose design you have changed individually.

RESULT

The notehead design of all notes project-wide is changed.

NOTE

You can also change the notehead design of individual noteheads, for example, so that selected notes appear with slash noteheads or diamond noteheads.

RELATED LINKS
Changing the notehead design of individual noteheads on page 578

Showing differently shaped noteheads for each scale degree project-wide

You can show each degree of the scale with a different notehead design project-wide.

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Engraving Options**.
   The **Engraving Options** dialog opens.
2. Click **Notes** in the page list.
3. In the **Noteheads** section, select one of the following options for **Shaped noteheads based on scale degree**:
   - **Walker 4-shape**
   - **Walker 7-shape**
   - **Funk 7-shape**
   - **Aikin 7-shape**

RESULT

The notehead design of all noteheads project-wide is changed to show a different notehead design for each degree of the scale, depending on your selection.

NOTE

This does not override the notehead design of noteheads whose design you have changed individually.

RELATED LINKS
Pitch-dependent notehead designs on page 577
Changing the notehead design of individual noteheads on page 578

Showing note names in noteheads project-wide

You can show the note name as a letter in all noteheads project-wide.

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Engraving Options**.
   The **Engraving Options** dialog opens.

2. Click **Notes** in the page list.

3. In the **Noteheads** section, choose **Note names** for **Notehead design**.

   NOTE

   This does not change the notehead design of noteheads whose design you have changed individually.

RESULT

The notehead design of all noteheads not overridden individually is changed to show the note name inside noteheads.

NOTE

To ensure legibility, you can increase the staff size of layouts in your project.

RELATED LINKS
Changing the notehead design of individual noteheads on page 578
Staff size on page 702
Changing the staff size in layouts on page 702

Notehead designs

There are a number of different notehead designs that you can use for individual noteheads in Dorico.

- You can find the available notehead designs by choosing **Edit** > **Notehead** > **[Notehead type]** > **[Notehead design]**.

Notehead design appearance	Notehead design name
	Larger Noteheads
	Default Noteheads
	Large Circled Noteheads

Notehead design appearance	Notehead design name
	Circled Noteheads
	Slashed Noteheads (Bottom Left to Top Right)
	Slashed Noteheads (Top Left to Bottom Right)

Cross noteheads

Notehead design appearance	Notehead design name
	Circle X Noteheads
	Large X and Diamond Noteheads
	Ornate X Noteheads
	Plus Noteheads
	With X Noteheads
	X Noteheads
	X and Circle X Noteheads
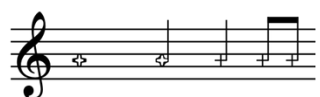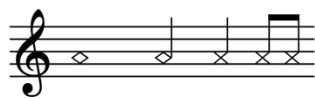
Notehead design appearance	Notehead design name
	X and Diamond Noteheads

Triangular noteheads

Notehead design appearance	Notehead design name
	Large Arrow Down Noteheads
	Large Arrow Up Noteheads
	Triangle Down Noteheads
	Triangle Left Noteheads
	Triangle Right Noteheads
	Triangle Up Noteheads

Diamond noteheads

Notehead design appearance	Notehead design name
	Diamond Noteheads
	Old-Style Diamond Noteheads

Notehead design appearance	Notehead design name
	White Diamond Noteheads
	Wide Diamond Noteheads

Slash noteheads

Notehead design appearance	Notehead design name
	Muted Slash Noteheads
	Oversized Slash Noteheads
	Slash Noteheads
	Small Slash Noteheads
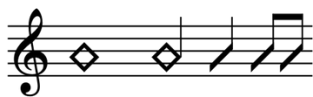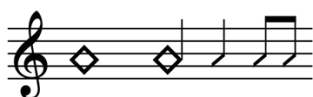
Round and square noteheads

Notehead design appearance	Notehead design name
	Moon Noteheads
	Rectangular Noteheads
	Round White with Dot Noteheads
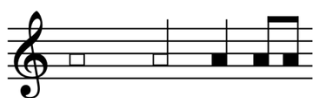
RELATED LINKS

Pitch-dependent notehead designs

Pitch-dependent noteheads use different notehead designs or different notehead colors depending on the pitch of notes. There are a number of different pitch-dependent notehead designs available in Dorico.

● You can find the available notehead designs by choosing **Edit** > **Notehead** > **[Notehead type]** > **[Notehead design]**.

TIP

You can choose to use a pitch-dependent notehead design for all noteheads project-wide on the **Notes** page in **Engrave** > **Engraving Options**.

Scale degree noteheads

Notehead design appearance	Notehead design name
	Aikin 7-shape Noteheads
	Funk 7-shape Noteheads
	Walker 4-shape Noteheads
	Walker 7-shape Noteheads

Pitched noteheads

Notehead design appearance	Notehead design name
	Figurenotes© noteheads
	Pitch name noteheads

RELATED LINKS

Changing the notehead design of individual noteheads

You can change the notehead design of individual noteheads. For example, cross noteheads might be used to indicate where players should produce pitchless sounds, such as air sounds on wind instruments.

PROCEDURE

1. Select the noteheads whose design you want to change. You can do this in Write mode and Engrave mode.

2. Choose **Edit** > **Notehead** > **[Notehead type]** > **[Notehead design]**.

   For example, to change the notehead design of the selected notes to X noteheads, choose **Edit** > **Notehead** > **Crosses** > **X Noteheads**.

   TIP

   You can also choose these options from the context menu.

RESULT

The notehead design of the selected notes is changed.

NOTE

You can also change the notehead design for all noteheads project-wide.

RELATED LINKS
Changing the notehead design project-wide on page 571

Moving notes rhythmically

You can move notes, including grace notes, to different rhythmic positions along staves after they have been input.

PROCEDURE

1. In Write mode, select the notes you want to move.

2. Move the selected notes according to the current rhythmic grid value in any of the following ways:

   - Press **Alt-Right Arrow** to move them to the right.

   - Press **Alt-Left Arrow** to move them to the left.

RESULT

The selected notes are moved to new rhythmic positions according to the current rhythmic grid value. 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.

RELATED LINKS
Rhythmic grid on page 105

Changing the size of notes

You can change the size of notes individually using the default sizes for notes in cues or grace notes.

TIP

- You can change the size of all notes project-wide by changing the notehead design on the **Notes** page in **Engrave** > **Engraving Options**. However, these options offer less flexibility than changing the size of notes individually.

- If you want to change the size of notes because you want them to be grace notes, or because you want them to be cues, you can input them as either grace notes or cues instead.

PROCEDURE

1. Select the notes whose size you want to change. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate **Scale** in the **Common** group.

3. Select one of the following options from the menu:

    - **Normal**

    - **Grace**

    - **Cue**

    - **Cue grace**

RELATED LINKS

Changing the custom scale size of notes

You can change the size of notes according to a custom scale if you want to change the size of notes to a size other than those available from the **Scale** menu in the **Common** group of the Properties panel.

NOTE

If you want to change the size of notes because you want them to be grace notes, or because you want them to be cues, you can input them as either grace notes or cues instead.

PROCEDURE

1. Select the notes whose custom scale size you want to change. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate **Custom Scale** in the **Common** group.

3. Change the **Custom Scale** percentage value in any of the following ways:

    - Enter a value into the value field.

● Click the arrows beside the value field.

RESULT

The size of the notes is changed according to the percentage change.

NOTE

If you have also activated **Scale**, the percentage change for **Custom Scale** is based on the selected size option for **Scale**.

RELATED LINKS
Inputting grace notes on page 128
Inputting cues on page 216
Notehead designs on page 573

Changing the width of ledger lines

You can change the width of ledger lines on individual notes, for example, to allow notes with short durations to be spaced more tightly and still be legible.

PROCEDURE

1. In Engrave mode, select the notes whose ledger line width you want to change.
2. In the Properties panel, activate **Ledger line** in the **Notes and Rests** group.
3. Change the values in the **Ledger line L** and **R** value fields in any of the following ways:

   ● Enter values in the value fields.

   ● Click the arrows beside the value fields.

RESULT

The width of the ledger lines is changed in the following ways:

● Increasing **Ledger line L** makes the left side of ledger lines longer, decreasing the value makes the left side of ledger lines shorter.

● Increasing **Ledger line R** makes the right side of ledger lines longer, decreasing the value makes the right side of ledger lines shorter.

TIP

You can change the width of all ledger lines project-wide on the **Notes** page in **Engrave** > **Engraving Options**.

RELATED LINKS
Project-wide engraving options for notes on page 571

Changing the consolidation of rhythm dots

You can change how rhythm dots in multiple voices are consolidated at individual rhythmic positions, independently of your project-wide setting.

PROCEDURE

1. In Engrave mode, select the notes whose rhythm dot consolidation you want to change.
2. In the Properties panel, activate **Rhythm dot consolidation** in the **Notes and Rests** group.

3. Select one of the following options from the menu:

- **None**
- **Allowed**
- **Unisons only**
- **Aggressive**

RESULT

The consolidation of rhythm dots for the selected notes is changed.

TIP

You can change how rhythm dots in multiple voices are consolidated project-wide on the **Notes** page in **Engrave** > **Engraving Options**.

RELATED LINKS
Project-wide engraving options for notes on page 571
Rhythm dot consolidation on page 809

Specifying on which string individual notes are played

You can specify on which string individually selected notes are played when notes are in the staves of string instruments, such as violins or cellos. 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. You can do this in Write mode and Engrave mode.

NOTE

If selecting multiple notes at once, select notes only in staves of the same instrument type. For example, select multiple Cs in Violin 1 and Violin 2 staves.

2. In the Properties panel, activate **String** in the **Notes and Rests** group.

3. Select 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 600
Changing the direction of string fingering shift indicators on page 511

Deleting notes

You can delete notes from your project without deleting other items, such as dynamics, octave lines, or playing techniques.

PROCEDURE

1. In Write mode, select the notes you want to delete.

2. Delete the notes in any of the following ways:

   - Press **Backspace** or **Delete**.

   - Choose **Edit** > **Delete**. You can also choose this option from the context menu.

RESULT

The selected notes are deleted from your project and are replaced by implicit rests as appropriate.

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 deleted. 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.

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 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, the term "ornaments" refers to ornament symbols and trill glyphs that are input above notes.
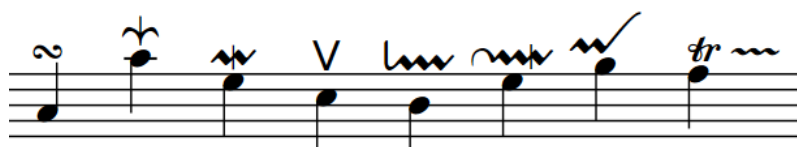
Some of the ornaments available in Dorico

General placement conventions for ornaments

Ornaments, including trills, are placed above the notes to which they apply. They are only placed below the staff when there are multiple voices on the staff.

Ornaments and trills are positioned outside of slurs by default. Similarly, they are positioned further from noteheads than articulations.

The center of ornaments should align with the center of the notehead to which they apply.

Trills are aligned differently, as the left side of trill glyphs should align with the left edge of the notehead to which the trill applies.

Dorico automatically positions ornaments correctly according to their type, and attaches them to their notehead.

You can change the default positions and styles of ornaments and trills on the **Ornaments** page in **Engrave** > **Engraving Options**.

RELATED LINKS

Changing the intervals of ornaments

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.

PROCEDURE

1. Select the ornaments whose intervals you want to change. You can do this in Write mode and Engrave mode.
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 in any of the following ways:
    -   Enter a value into the value field.
    -   Click the arrows beside the value field.

RESULT
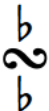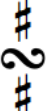
The properties change the interval of the selected ornaments in the following ways:

-   0 or 4 and above shows no accidental.
-   1 shows a flat.
-   2 shows a natural.
-   3 shows a sharp.

NOTE

-   Some ornaments do not show accidentals either above or below, depending on their type.
-   You can change the position of ornament accidentals relative to all trills project-wide on the **Ornaments** page in **Engrave** > **Engraving Options**.

EXAMPLE

No accidentals	Flats above and below	Naturals above and below	Sharps above and below

Changing the position of ornament accidentals relative to trills

You can change where ornament accidentals are positioned relative to individual trills, independently of your project-wide setting.

Ornament accidentals indicate the interval of trills by telling the performer which notes to include in the ornament. For example, a trill on an E with a sharp ornament accidental indicates the performer trills between E and F♯, rather than between E and F.

PROCEDURE

1. Select the trills whose ornament accidental position you want to change. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **Accidental position** in the **Trills** group.
3. Select one of the following options from the menu:

   - **Above**

     ♯
     𝑡𝑟 〰

   - **Below**

     𝑡𝑟 〰
     ♯

   - **On the right**

     𝑡𝑟 ♯〰
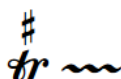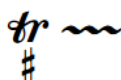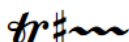
RESULT

The position of ornament accidentals relative to the selected trills is changed.

TIP

You can change the default position of ornament accidentals relative to all trills project-wide on the **Ornaments** page in **Engrave** > **Engraving Options**.

Changing the speed of trills

You can indicate different speeds for trills, and indicate a change of speed within a single trill by changing the height and frequency of the waves in their extension lines.

PROCEDURE

1. Select the trills whose speed you want to change. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate the following properties, individually or together, in the **Trills** group:

   - **Start speed**

   - **End speed**

3. Select one of the following options from each property menu:

- **Slow**
- **Normal**
- **Fast**

RESULT

The speed of the selected trills is changed.

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

Lengthening/Shortening trills rhythmically

You can lengthen/shorten trills after they have been input. Multiple ornaments can exist at the same rhythmic position, 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:

- Press **Shift-Alt-Right Arrow** to lengthen them by the current rhythmic grid value.
- Press **Shift-Alt-Left Arrow** to shorten them by the current rhythmic grid value.
- Press **Ctrl/Cmd-Shift-Alt-Right Arrow** to lengthen a single trill to the next notehead.
- Press **Ctrl/Cmd-Shift-Alt-Left Arrow** to shorten a single trill to the previous notehead.

  NOTE

  - You can only lengthen/shorten trills by the current rhythmic grid value when multiple trills are selected.
  - When using the keyboard, you can only move the end of trills. You can move the start of trills by moving the whole trill, or by clicking and dragging the start handle.

- 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 value or to the next/previous notehead, whichever is closer.

Multiple trills are lengthened/shortened according to the current rhythmic grid value.

> **NOTE**
>
> Key commands lengthen/shorten items by moving their end only.

RELATED LINKS

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. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate/deactivate **Has trill line** in the **Trills** group.

3. Activate/Deactivate the corresponding checkbox.

RESULT

Trill extension lines are shown when the checkbox is activated, and hidden when the checkbox is deactivated.

When the property is deactivated, trills follow your project-wide setting.

> **TIP**
>
> You can hide/show trill extension lines on all trills project-wide on the **Ornaments** page in **Engrave** > **Engraving Options**.

Positions of ornaments

You can change the positions of ornaments individually and by changing their default positions project-wide. For example, you can override the default position for individual ornaments if you want them to be positioned higher or lower at certain positions.

You can move ornaments to different rhythmic positions in Write mode. They are positioned by default according to your settings in **Engraving Options**.

You can move ornaments graphically in Engrave mode, however this does not change the rhythmic positions to which they are attached.

You can change the default positions of all ornaments project-wide on the **Ornaments** page in **Engrave** > **Engraving Options**.

RELATED LINKS

Moving ornaments rhythmically

You can move ornaments to new rhythmic positions.

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:

     ●   Press **Alt-Right Arrow** to move them to the right.

     ●   Press **Alt-Left Arrow** to move them to the left.

     ●   Click and drag the ornament to the right/left to snap it to different rhythmic
         positions.

RESULT

A single ornament is moved to the next or previous notehead on that staff.

Multiple ornaments are moved according to the current rhythmic grid value.

RELATED LINKS
Moving ornaments graphically on page 588

Moving ornaments graphically

You can move ornaments graphically without changing the rhythmic positions to which they
apply. You can also move the start/end handles of trills independently of each other, meaning
you can lengthen/shorten trills graphically.

PROCEDURE

1.   In Engrave mode, select one of the following that you want to move:

     ●   Ornaments or trills

     ●   Individual handles on trills

     TIP

     You can show handles on all items, not just selected items, by choosing **Engrave** > **Show
     Handles** > **Always**. This can make it easier to select individual handles on multiple items.

2.   Move the ornaments or handles in any of the following ways:

     ●   Press **Alt-Right Arrow** to move them to the right.

     ●   Press **Alt-Left Arrow** to move them to the left.

     ●   Press **Alt-Up Arrow** to move them upwards.

     ●   Press **Alt-Down Arrow** to move them downwards.

         TIP

         If you want to move items by larger increments, you can press **Ctrl/Cmd** as well as
         the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

     ●   Click and drag them in any direction.

RESULT

The selected items are moved graphically, without affecting the rhythmic positions to which they are attached.

TIP

Offset in the **Common** group of the Properties panel is activated automatically when you move ornaments.

- **Offset X** moves ornaments horizontally.
- **Offset Y** moves ornaments vertically.

The following properties in the **Trills** group of the Properties panel are activated automatically when you move trills:

- **Start offset** moves whole trills. **X** moves them horizontally, **Y** moves them vertically.
- **End offset X** moves the end of trill extension lines horizontally.

For example, if you move a whole trill to the right, both handles are moved so both properties are activated. You can also use these properties to move ornaments/trills and lengthen/shorten trills graphically by changing the values in the value fields.

Deactivating the properties resets the selected ornaments and trills to their default positions.

Changing the placement of ornaments relative to the staff

Ornaments are usually placed above the staff, but they are placed below the staff for down-stem voices when there are multiple voices on the staff. You can change the placement of ornaments individually.

PROCEDURE

1. Select the ornaments whose placement relative to the staff you want to change. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate **Placement** in the corresponding group for the selected ornaments:
   - **Ornaments**
   - **Trills**

3. Choose one of the following options:
   - **Above**
   - **Below**

RESULT

The placement of the selected ornaments is changed.

Changing the position of ornaments relative to slurs

Ornaments are positioned outside of slurs by default. You can change the position of ornaments relative to slurs individually.

PROCEDURE

1. In Engrave mode, select the ornaments whose slur-relative position you want to change.

2. In the Properties panel, activate **Slur-relative position** in the corresponding group for the selected ornaments:
   - **Ornaments**

- **Trills**

3. Choose one of the following options:

  - **Inside**

  - **Outside**

RESULT

The selected ornaments are positioned either inside or outside of slurs.

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, independently of your project-wide setting.

PROCEDURE

1. Select the trills whose start position you want to change. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate **Start position** in the **Trills** group.

3. Choose one of the following options:

  - **Notehead**

  - **Accidental**

RESULT

The start position of the selected trills is changed.

TIP

You can change the start position of all trills project-wide on the **Ornaments** page in **Engrave** > **Engraving Options**.

RELATED LINKS
Project-wide engraving options for ornaments on page 590

Project-wide engraving options for ornaments

You can find options for the project-wide appearance and position of ornaments on the **Ornaments** page in **Engraving Options**.

The options on the **Ornaments** page allow you to change the position of trills relative to accidentals, noteheads, and trill extension lines. You can also set the minimum distance between ornaments and the staff and noteheads.

There are musical examples for many options to demonstrate how they affect the appearance of your music.

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

- Press **Ctrl/Cmd-Shift-E** in any mode.

- Choose **Engrave** > **Engraving Options** in Engrave mode.

You can then click **Ornaments** in the page list on the left of the dialog.

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 with wavy lines similar to trill extension 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.

Dorico offers the following types of arpeggio signs:

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.
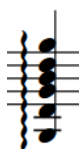
Default up arpeggio   Default down arpeggio   Default non arpeggio
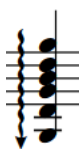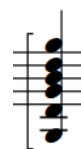
It is most common for up arpeggios to be shown with nothing at the top end, because chords are usually arpeggiated upwards, and for down arpeggios to be shown with an arrow at the bottom, so this is the default in Dorico. However, it is also accepted practice to show up arpeggios with an arrow at the top if down arpeggios are also used in the same piece of music.

You can show both up arpeggios and down arpeggios with one of three ends in Dorico:

- Nothing
- Arrow
- Swash
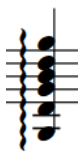
Up arpeggio with nothing at the end

Up arpeggio with an arrow at the end
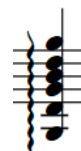
Up arpeggio with a swash at the end

RELATED LINKS
Input methods for ornaments, arpeggio signs, and glissando lines on page 185

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 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 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.

RELATED LINKS
Project-wide engraving options for arpeggio signs on page 597

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. You can do this in Write mode and Engrave mode.
2. In the Properties panel, select one of the following options from the **Arpeggio type** menu in the **Arpeggios** group:

   - **Non arpeggio**
   - **Up arpeggio**
   - **Down arpeggio**

RESULT

The type of the selected arpeggio signs is changed.

RELATED LINKS
Arpeggio signs on page 591

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, independently of your project-wide settings.

PROCEDURE

1. Select the arpeggio signs of any direction whose ends you want to change. You can do this in Write mode and Engrave mode.

    NOTE

    You cannot change the ends of non arpeggio signs.

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.

TIP

You can change the default appearance of the ends of all arpeggio signs project-wide on the **Arpeggio Signs** page in **Engrave** > **Engraving Options**.

EXAMPLE
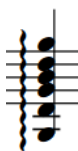
Up arpeggio sign with nothing at the end

Up arpeggio sign with an arrow at the end
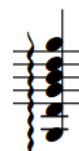
Up arpeggio sign with a swash at the end

RELATED LINKS

Length of arpeggio signs

Dorico automatically adjusts the length of arpeggio signs when the pitches of the notes in the voices to which the sign applies change, or when you add notes to the chords or delete notes from the chords.

You can change how far arpeggio signs extend beyond the outer notes in all chords project-wide on the **Arpeggio Signs** page in **Engrave** > **Engraving Options**. You can set different values for when notes are on staff lines and in staff spaces.

You can also lengthen/shorten individual arpeggio signs.

Lengthening/Shortening arpeggio signs

You can lengthen/shorten individual arpeggio signs manually. For example, you might lengthen an arpeggio sign on a chord with a small pitch range so the arpeggio sign is more clearly visible.

PROCEDURE

1. In Engrave mode, select the square handles at one end of the arpeggio signs you want to lengthen/shorten.

    TIP

    You can show handles on all items, not just selected items, by choosing **Engrave** > **Show Handles** > **Always**. This can make it easier to select individual handles on multiple items.

2. Lengthen/Shorten the arpeggio signs by moving the handles in any of the following ways:

    - Press **Alt-Up Arrow** to move them upwards.
    - Press **Alt-Down Arrow** to move them downwards.

      TIP

      If you want to move handles by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Up Arrow**.

    - Click and drag them upwards/downwards.

RESULT

The selected arpeggio signs are lengthened/shortened graphically.

TIP

The following properties in the **Arpeggios** group of the Properties panel are activated automatically when you move the corresponding end of arpeggio signs:

- **Top Y offset** moves the handles at the top of arpeggio signs.
- **Bottom Y offset** moves the handles at the bottom of arpeggio signs.

For example, if you move a whole arpeggio sign, both handles are moved so both properties are activated. You can also use these properties to lengthen/shorten arpeggio signs graphically by changing the values in the value fields.

Deactivating the properties resets the selected arpeggio signs to their default positions.

TIP

You can change how far arpeggio signs extend beyond the outer notes in all chords project-wide on the **Arpeggio Signs** page in **Engrave** > **Engraving Options**.

Positions of arpeggio signs

You can change the position of arpeggio signs individually and by changing their default positions project-wide. For example, you can make individual arpeggio signs extend further than the default length if they appear too short at certain positions.

You can move arpeggio signs to different rhythmic positions in Write mode. They are positioned by default according to your settings in **Engraving Options**.

You can move arpeggio signs graphically in Engrave mode, however, this does not change the rhythmic positions to which they are attached.

You can change the default position of all arpeggio signs project-wide on the **Arpeggio Signs** page in **Engrave** > **Engraving Options**.

RELATED LINKS

Moving arpeggio signs rhythmically

You can move arpeggio signs to new rhythmic positions after they have been input.

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-Right Arrow** to move them to the right.
   - Press **Alt-Left Arrow** to move them to the left.

   NOTE

   You cannot move arpeggio signs rhythmically with the mouse.

RESULT

Arpeggio signs are moved to the right/left, according to the current rhythmic grid value.

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 value.

You can change the rhythmic grid if you want to move arpeggio signs to notes at other rhythmic positions.

NOTE

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.

Moving arpeggio signs graphically

You can move arpeggio signs graphically without changing the rhythmic positions to which they apply.

PROCEDURE

1. In Engrave mode, select the arpeggio signs you want to move.

2. Move the arpeggio signs in any of the following ways:

- Press **Alt-Right Arrow** to move them to the right.

- Press **Alt-Left Arrow** to move them to the left.

- Press **Alt-Up Arrow** to move them upwards.

- Press **Alt-Down Arrow** to move them downwards.

  TIP

  If you want to move items by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

- Click and drag them in any direction.

RESULT

The selected arpeggio signs are moved graphically, without affecting the rhythmic positions to which they apply.

TIP

The following properties in the **Arpeggios** group of the Properties panel are activated automatically when you move the corresponding part of arpeggio signs:

- **Top Y offset** moves the top of arpeggio signs vertically.

- **Bottom Y offset** moves the bottom of arpeggio signs vertically.

- **X offset** moves whole arpeggio signs horizontally.

For example, if you move a whole arpeggio sign upwards, both handles are moved, so **Top Y offset** and **Bottom Y offset** are both activated. You can also use all three properties to move arpeggio signs graphically by changing the values in the value fields.

Deactivating the properties resets the selected arpeggio signs to their default position.

RELATED LINKS
Lengthening/Shortening arpeggio signs on page 594

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. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate/deactivate **Arpeggio before grace notes** in the **Arpeggios** group.

RESULT

The selected arpeggio signs are shown before grace notes when the property is activated, and after grace notes when the property is deactivated.

Project-wide engraving options for arpeggio signs

You can find options for the project-wide appearance and position of arpeggio signs on the **Arpeggio Signs** page in **Engraving Options**.

The options on this page allow you to change the design, appearance, and precise position of arpeggio signs.

There are musical examples for many options to demonstrate how they affect the appearance of your music.

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

- Press **Ctrl/Cmd-Shift-E** in any mode.
- Choose **Engrave** > **Engraving Options** in Engrave mode.

You can then click **Arpeggio Signs** in the page list on the left of the dialog.

Arpeggios in playback

You can find options to control the playback of all arpeggios project-wide in the **Arpeggio Signs** section of the **Timing** page in **Playback Options**.

For example, you can control whether arpeggiation starts on the beat or ends on the beat, and the speed of arpeggiation.

You can set a default arpeggio length, expressed as a fraction of a quarter note (crotchet) at 120 bpm. It can be helpful to set arpeggio lengths using this measurement instead of defining arpeggios as a fraction of their notated rhythm, as otherwise arpeggios in very slow music would play back much slower than most people intend.

As well as setting a default length for arpeggios, you can also set minimum and maximum values for the length of arpeggios, expressed as a fraction of the notated value of the arpeggio. This is to ensure all notes with arpeggio signs can be heard within their notated duration.

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

- Press **Ctrl/Cmd-Shift-P** in any mode.
- Choose **Play** > **Playback Options** in Play mode.

NOTE

You can also use properties in the **Arpeggios Playback** group of the Properties panel to override the default playback options for individual arpeggio signs.

RELATED LINKS

Changing arpeggio playback relative to the beat individually

You can change whether individual arpeggios are played before their notated position or after their notated position, independently of your project-wide settings.

PROCEDURE

1. Select the arpeggio signs whose playback relative to the beat you want to change. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **Playback position** in the **Arpeggios Playback** group.
3. Choose one of the following options:
   - **Start on beat**

- **Ends on beat**

RESULT

The beat-relative position of the selected arpeggios in playback is changed.

TIP

You can change the playback of all arpeggios relative to the beat project-wide on the **Timing** page in **Play** > **Playback Options**.

EXAMPLE
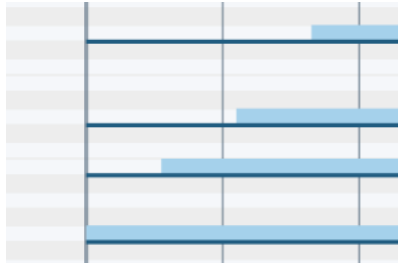
Arpeggio starting on the beat   Arpeggio ending on the beat
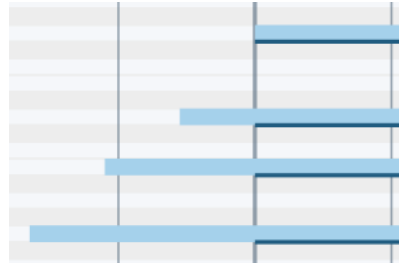
RELATED LINKS

Changing the playback duration of arpeggios individually

You can change the duration of individual arpeggios in playback, independently of your project-wide settings.

The duration of arpeggios is expressed as a fraction of the notated rhythm of chords. For example, an arpeggio on a quarter note (crotchet) chord with a note offset value of 1/2 lasts an eighth note (quaver), whereas with a note offset value of 1/8 it lasts a 32nd note.

PROCEDURE

1. Select the arpeggio signs whose playback offset you want to change. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **Note offset** in the **Arpeggios Playback** group.
3. Change the value in any of the following ways:

    - Enter a value into the value field.
    - Click the arrows beside the value field.
4. Save the new value in any of the following ways:

    - Press **Return**.
    - Click outside of the value field.

RESULT

The playback duration of the selected arpeggios is changed. This overrides your project-wide settings for the duration of arpeggios for the selected arpeggios.

EXAMPLE
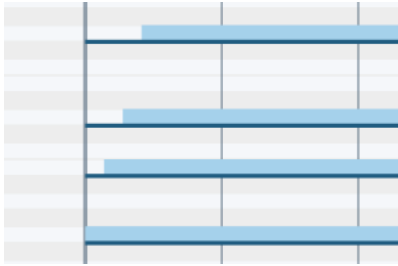
Arpeggiated chord with a note offset value of 1/8
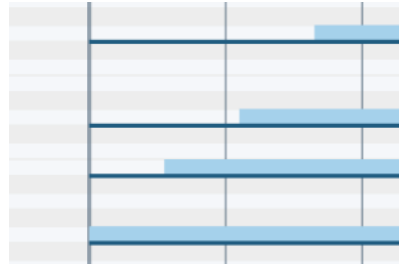
Arpeggiated chord with a note offset value of 1/2

RELATED LINKS
Arpeggios in playback on page 597

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 wavy 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, and you can easily change their style after they have been input.
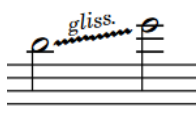
An example glissando line with text shown and a wavy line
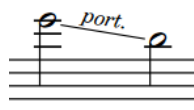
An example portamento line with text shown and a straight line

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 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 across a system break or page break, then that text is shown on every part of the glissando line. By default, the start position and end position of each segment matches the original start point and end point of the whole glissando line.

In Dorico, you can make detailed adjustments to the default positions of glissando lines on the **Glissando Lines** page in **Engrave** > **Engraving Options**. You can also adjust the start/end positions of individual glissando lines in Engrave mode.

Glissando lines across empty bars

In Dorico, 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 shows notes or rests in every bar.

Once you have input a glissando line between the selected notes, you can hide/show any implicit rests between them.

NOTE

If there are any explicit rests between the notes at each end of the glissando line, you must first turn them into implicit rests.

EXAMPLE
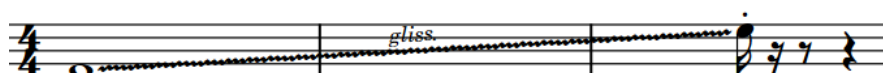
A glissando line across multiple bars with no rests shown between the two notes

RELATED LINKS

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, independently of your project-wide setting.

PROCEDURE

1. Select the glissando lines whose style you want to change. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate **Glissando style** in the **Glissando Lines** group.

3. Choose one of the following options:

   - **Straight line**

   - **Wavy 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 change the default style for all glissando lines project-wide on the **Glissando Lines** page in **Engrave** > **Engraving Options**.

RELATED LINKS
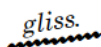
Changing glissando line text

Glissando lines can be shown with text or without text. You can change the text of glissando lines individually, independently of your project-wide setting.
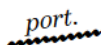
PROCEDURE

1. Select the glissando lines whose text you want to change. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate **Glissando text** in the **Glissando Lines** group.

3. Select one of the following options from the menu:
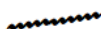
- **Gliss**

- **Port**

- **No text**

RESULT

The text shown on the selected glissando lines is changed.

TIP

You can change the text shown on all glissando lines project-wide on the **Glissando Lines** page in **Engrave** > **Engraving Options**.

RELATED LINKS

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. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate **Glissando text shown** in the **Glissando Lines** group.

3. Choose one of the following options:

- **Show if sufficient space**
- **Always show**

RESULT

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 gaps between individual noteheads by adjusting note spacing in Engrave mode.

RELATED LINKS

Moving glissando lines graphically

You can move individual glissando lines graphically without changing the rhythmic positions to which they are attached. You can move each end of glissando lines independently, meaning you can also adjust the angle and graphical length of individual glissando lines.

If glissando lines cross system and frame breaks, you can move each glissando line segment independently.

NOTE

You cannot move glissando lines rhythmically. If you want to change the rhythmic positions of glissando lines, you must delete them from their original positions and input new glissando lines at the new positions.

PROCEDURE

1. In Engrave mode, select one of the following that you want to move:

- Whole glissando lines, or glissando line segments
- Individual handles on glissando lines

TIP

You can show handles on all items, not just selected items, by choosing **Engrave** > **Show Handles** > **Always**. This can make it easier to select individual handles on multiple items.

2. Move the glissando lines or handles in any of the following ways:

- Press **Alt-Right Arrow** to move them to the right.
- Press **Alt-Left Arrow** to move them to the left.
- Press **Alt-Up Arrow** to move them upwards.
- Press **Alt-Down Arrow** to move them downwards.

> **TIP**
>
> If you want to move items by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

- Click and drag them in any direction.

RESULT

The selected glissando lines or handles are moved graphically, without affecting the rhythmic positions to which they are attached.

> **TIP**
>
> The following properties in the **Glissando Lines** group of the Properties panel are activated automatically when you move the corresponding glissando line handle:
>
> - **Start offset** moves start glissando line handles. **X** moves them horizontally, **Y** moves them vertically.
>
> - **End offset** moves end glissando line handles. **X** moves them horizontally, **Y** moves them vertically.
>
> For example, if you move a whole glissando line, both handles are moved so both properties are activated. You can also use these properties to move and lengthen/shorten glissando lines graphically by changing the values in the value fields.
>
> Deactivating the properties resets the selected glissando lines to their default positions.

RELATED LINKS

Changing the default angles of glissando lines project-wide

In Dorico, the endpoints of glissando lines are automatically positioned beside noteheads. When glissando lines cover a small pitch range, the angle of the line can be quite shallow. You can change the values for the minimum spans of glissando lines covering a small pitch range in different contexts project-wide.

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Engraving Options**.
   The **Engraving Options** dialog opens.

2. Click **Glissando Lines** in the page list.

3. In the **Vertical Position** section, change the values for the positions of glissando lines in the contexts relevant to your project.
   For example, you can increase the minimum span of glissando lines between notes in the same staff space.

4. Click **Apply**, then **Close**.

RESULT

The default positions and angles of glissando lines are changed.

> **TIP**
>
> You can make graphical adjustments to the positions of individual glissando lines in Engrave mode.

Changing the angles of glissando lines individually

You can adjust the angles of individual glissando lines in Engrave mode by moving the handles at each end of glissando lines in any direction.

PROCEDURE

1. In Engrave mode, select the square handles at the start/end of the glissando lines whose angles you want to change.

   TIP

   You can show handles on all items, not just selected items, by choosing **Engrave** > **Show Handles** > **Always**. This can make it easier to select individual handles on multiple items.

2. Move the handles in any of the following ways:

   - Press **Alt-Right Arrow** to move them to the right.
   - Press **Alt-Left Arrow** to move them to the left.
   - Press **Alt-Up Arrow** to move them upwards.
   - Press **Alt-Down Arrow** to move them downwards.

     TIP

     If you want to move handles by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

   - Click and drag them in any direction.

3. Optional: Repeat steps 1 and 2 for the other glissando line handles.

RESULT

The angles of the selected glissando lines are changed.

NOTE

You can also use the **Start offset** and **End offset** properties in the **Glissando Lines** group of the Properties panel in Engrave mode to adjust the angles and graphical lengths of glissando lines.

Deactivating the properties resets the selected glissando lines to their default positions.

Project-wide engraving options for glissando lines

You can find options for the project-wide appearance and position of glissando lines on the **Glissando Lines** page in **Engraving Options**.

The options on the **Glissando Lines** page allow you to change the style, appearance, and thickness of glissando lines. You can also set precise positions for the endpoints of glissando lines relative to noteheads.

There are musical examples for many options to demonstrate how they affect the appearance of your music.

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

- Press **Ctrl/Cmd-Shift-E** in any mode.
- Choose **Engrave** > **Engraving Options** in Engrave mode.

You can then click **Glissando Lines** in the page list on the left of the dialog.

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, 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, meaning you can change the page numbers in each layout independently of the others. For example, you can change the page numbers in the score but show the default page numbers in the parts.

Page numbers in Dorico 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 numbers, you can change the type of number together with the page number.

RELATED LINKS

Moving page numbers in master pages

In order to change where page numbers are shown, you must move the text frames that contain page numbers. The most efficient way to do this is to move the text frames containing page numbers in master page formats.

PROCEDURE

1. In Engrave mode, double-click a master page pair whose page number position you want to change in the **Master Pages** section of the Pages panel.

2. In the master page editor, select the text frames that contain page numbers.

3. Move the text frames in any of the following ways:

   - Press **Alt-Right Arrow** to move them to the right.

   - Press **Alt-Left Arrow** to move them to the left.

   - Press **Alt-Up Arrow** to move them upwards.

   - Press **Alt-Down Arrow** to move them downwards.

     TIP

     If you want to move items by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

   - Click and drag them in any direction.

4. Click **Close Master Page Editor** to save your changes.

RESULT

The selected text frames are moved.

TIP

When you move text frames, values for **Left**, **Top**, **Right**, and **Bottom** in the **Frames** group of the Properties panel are changed to reflect the distance of the corresponding edge of the frame from the page margin, but the values are only visible if the corresponding constraint is locked.

You can also use these properties to move text frames by changing the values in the value fields.

- **Right/Left** move the right/left edges of frames horizontally.

- **Top/Bottom** move the top/bottom edges of frames vertically.

You can lock/unlock constraints for each text frame in the **Frames** section of the Formatting panel.

RELATED LINKS

Page number paragraph styles

The paragraph style for page numbers controls all aspects of their appearance, including their font, size, and horizontal alignment. You can edit the existing page number paragraph style, and create additional page number paragraph styles, in the **Paragraph Styles** dialog.

- You can open the **Paragraph Styles** dialog in Engrave mode by choosing **Engrave** > **Paragraph Styles**.

Dorico offers a single paragraph style for page numbers by default, but you can create other paragraph styles for page numbers. For example, if you want page numbers to appear bold and

centered at the tops of pages in full score layouts but appear italic and on the outer edges of pages in part layouts, you can create a new paragraph style based on the existing **Page Number** paragraph style, but rename it and change the settings.

RELATED LINKS
Paragraph Styles dialog on page 276
Text editor options in Engrave mode on page 281
Changing the paragraph style of text on page 283
Creating paragraph styles based on other styles on page 278

Changing the page number numeral style

Page numbers can appear as Arabic numbers or Roman numerals. You can change the numeral style of page numbers project-wide in each layout independently.

PROCEDURE

1. In Setup mode, choose **Setup** > **Layout Options**.
   The **Layout Options** dialog opens.
2. In the **Layouts** list, select the layouts whose page number numeral style you want to change in one of the following ways:
   - Click **Select All**.
   - Click **Select All Full Score Layouts**.
   - Click **Select All Part Layouts**.
   - Click **Select All Custom Score Layouts**.
   - **Ctrl/Cmd**-click individual layouts.
   - **Shift**-click adjacent layouts.

   By default, the layout currently open in the music area is selected when you open the dialog.
3. Select **Page Setup** from the **Category** menu.
4. In the **Initial Page Number** 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 project-wide in the selected layouts.

You can change settings for other layouts before closing the dialog.

Changing the page number numeral style for individual pages

Page numbers can appear as Arabic numbers or Roman numerals. You can change the numeral style for individual page numbers.

PROCEDURE

1. In Engrave mode, in the music area, open the layout whose page number numeral style you want to change.
2. In the **Pages** section of the Pages panel, select a page.
3. Open the **Page Number Change** dialog in any of the following ways:

- Right-click in the **Pages** section and choose **Insert Page Number Change** from the context menu.

- Click **Insert Page Number Change**.

  #

4. In the **Page Number Change** dialog, enter the number of the page from which you want to change the page number numeral style in the **From page** field.

5. Select the numeral style you want from the following options for **Sequence type**:

   - **Number**

   - **Roman numeral**

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

RESULT

The page number numeral style is changed until the next page number change or the end of the project, whichever comes first.

RELATED LINKS
Inserting page number changes on page 239

Changing when initial page numbers are shown

You can change when initial page numbers are shown for each layout independently of other layouts. 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. In Setup mode, choose **Setup** > **Layout Options**.
   The **Layout Options** dialog opens.

2. In the **Layouts** list, select the layouts in which you want to change when initial page numbers are shown in one of the following ways:

   - Click **Select All**.

   - Click **Select All Full Score Layouts**.

   - Click **Select All Part Layouts**.

   - Click **Select All Custom Score Layouts**.

   - Ctrl/Cmd-click individual layouts.

   - Shift-click adjacent layouts.

   By default, the layout currently open in the music area is selected when you open the dialog.

3. Select **Page Setup** from the **Category** menu.

4. In the **Initial Page Number** 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

The visibility of page numbers is changed project-wide in the selected layouts.

TIP

You can change settings for other layouts before closing the dialog.

RELATED LINKS
Page Number Change dialog on page 240
Inserting page number changes on page 239
Inputting frames on page 244

Showing page numbers on individual pages

You can change when page numbers are shown on individual pages, independently of your project-wide setting for showing page numbers for each layout.

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. In the music area, open the layout in which you want to change when page numbers are shown.

2. In the **Pages** section of the Pages panel, select a page.

3. Open the **Page Number Change** dialog in any of the following ways:

- Right-click in the **Pages** section and choose **Insert Page Number Change** from the context menu.

- Click **Insert Page Number Change**.

  `#`

4. In the **Page Number Change** dialog, enter the number of the page from which you want to change the visibility of page numbers in the **From page** field.

5. Optional: Change the value for **First page number**.

First page number is 1 by default. If you do not want to change the page number together with changing the visibility of page numbers, enter the existing page number in this field.

6. Select one of the following options from the **Visibility** menu:

- **Always shown**
- **Always hidden**
- **Not on first page**

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

RESULT

The visibility of page numbers is changed from the page number specified until the next page number change with a different setting or the end of the project, whichever comes first.

For example, if you want to see page numbers up to page 3 but hide page numbers from page 4, enter 4 for **From page**, enter 4 for **First page number**, and select **Always hidden** for **Visibility**.

RELATED LINKS

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 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, 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, hooks, and continuation lines.

RELATED LINKS
Input methods for pedal lines, retakes, and pedal level changes on page 192
Pedal lines in playback on page 632
Sustain pedal retakes and pedal level changes on page 614
Pedal line start signs, hooks, and continuation lines on page 625
Pedal line start, continuation, and restorative text on page 630

General placement conventions for 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 change how pedal lines appear project-wide on the **Pedal Lines** page in **Engrave** > **Engraving Options**.

RELATED LINKS
Project-wide engraving options for pedal lines on page 625
Pedal line start, continuation, and restorative text on page 630
Pedal line start signs, hooks, and continuation lines on page 625

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 provides clear representations of pedal retakes and level changes.

NOTE

You can only add pedal retakes and level changes to sustain pedal lines.

EXAMPLE
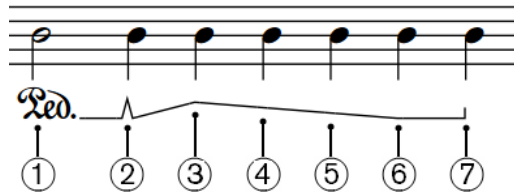
Example pedal line with retake and level changes

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

Sustain pedal lines in Engrave mode

When you select sustain pedal lines in Engrave mode, handles appear at the start/end of each pedal line, and on any retakes or pedal level changes on the line. These handles allow you to move each part of the pedal line independently, and to change the pedal levels at the start, end, and at each retake or pedal level change.

A sustain pedal with a retake in Engrave mode

There are two handles for the start of the pedal line, three for retakes and pedal level changes, and three for the end of the pedal line.

NOTE

Sostenuto and *una corda* pedal lines only have a single handle at their start/end, which allows you to move their start/end positions graphically, but only horizontally.

You can move each handle with the keyboard, with the mouse, and using the Properties panel. Each handle corresponds to a property in either the **Pedal Lines** group or the **Pedal Line Retakes** group of the Properties panel.

NOTE

Pedal levels cannot be lower than **0** or higher than **1**.

- **1** is fully depressed.

- **0** is not depressed.

Start of sustain pedal lines

There are two handles at the start of pedal lines.

- The left handle moves the start point of the pedal line. You can move this handle to the right/left.

- The right handle changes the start pedal level of the pedal line. You can move this handle upwards/downwards. This changes the angle of the pedal continuation line in relation to the next retake or pedal level change, or the end of the pedal line.

Pedal level changes and retakes
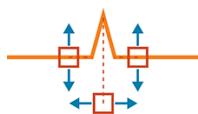
- The left handle changes the pedal level before the retake. You can move this handle upwards/downwards.

- The right handle changes the pedal level after the retake. You can move this handle upwards/downwards.

- The bottom handle corresponds to the position of the pedal level change or retake. You can move this handle to the right/left.

End of sustain pedal lines
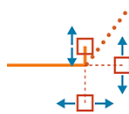
- The top handle changes the hook length. You can move this handle upwards/downwards.

- The right handle changes the pedal level at the end of the pedal line. You can move this handle upwards/downwards.

- The bottom handle moves the end point of the pedal line. You can move this handle to the right/left.

RELATED LINKS
Moving pedal lines graphically on page 622

Adding retakes and pedal level changes to existing pedal lines with the popover

You can add retakes and pedal level changes to existing sustain pedal lines using the playing techniques popover.

PREREQUISITE
You have input a sustain pedal line.

NOTE

You cannot add retakes and pedal level changes to *sostenuto* or *una corda* pedal lines.

PROCEDURE

1. In Write mode, select an item at the rhythmic position where you want the retake or pedal level change to apply.

2. Open the playing techniques popover in any of the following ways:

    ● Press **Shift**-**P**.

    ● Choose **Write** > **Create Playing Technique**.

3. Enter the appropriate short-hand for the retake or pedal level change you want into the popover. For example, enter ^ or **retake** for a retake.

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

RESULT

The retake or pedal level change is input at the selected rhythmic position.

RELATED LINKS

Adding retakes and pedal level changes to existing pedal lines with the panel

You can add retakes and pedal level changes to existing sustain pedal lines using the Playing Techniques panel.

PREREQUISITE

You have input a sustain pedal line.

NOTE

You cannot add retakes and pedal level changes to *sostenuto* or *una corda* pedal lines.

PROCEDURE

1. In Write mode, select an item at the rhythmic position where you want the retake or pedal level change to apply.

2. Input the retake or pedal level change you want in one of the following ways:

    ● Click the retake or pedal level change you want in the **Keyboard** section of the Playing Techniques panel.

    ● Choose **Edit** > **Pedal Lines** > **[Retake or pedal level change]**. You can also choose this option from the context menu.

RESULT

The retake or pedal level change is input at the selected rhythmic position.

NOTE

If nothing is selected in the score, you can click a retake or pedal level change in the **Keyboard** section of the Playing Techniques panel, and then click at the rhythmic position where you want to input the retake or pedal level change.

RELATED LINKS

Changing the type of pedal line retakes

You can change existing retakes on sustain pedal lines to pedal level changes and vice versa.

For example, if you do not want the pedal to be released completely between the old and new levels, change the type to **Change Level** instead of **Retake**.

PROCEDURE

1. In Engrave mode, select the retake or pedal level change whose type you want to change.

2. In the Properties panel, activate **Retake type** in the **Pedal Line Retakes** group.

3. Choose the type you want from the following options:

- **Retake**
- **Change Level**

RESULT

The type of pedal line retake is changed.

NOTE

The appearance of the new type of pedal line retake depends on the pedal levels already set on each side. For example, a retake notch is only shown on one side of the retake if the pedal level on the other side is set to 0.

Changing the start level of pedal lines

You can change the start level of individual sustain pedal lines by moving start level handles upwards/downwards.

PROCEDURE

1. In Engrave mode, select the right handles on the start signs whose start pedal levels you want to change.

TIP

You can show handles on all items, not just selected items, by choosing **Engrave** > **Show Handles** > **Always**. This can make it easier to select individual handles on multiple items.

2. Move the start level handles in any of the following ways:

- Press **Alt-Up Arrow** to move them upwards.
- Press **Alt-Down Arrow** to move them downwards.
- Press **Ctrl/Cmd-Alt-Up Arrow** to snap the level to 0 (not depressed).
- Press **Ctrl/Cmd-Alt-Down Arrow** to snap the level to 1 (fully depressed).
- Click and drag the handles upwards/downwards to the level you want.

RESULT

The start level of the selected pedal line is changed.

TIP

Start level in the **Pedal Lines** group of the Properties panel is activated when you change the start level of pedal lines.

You can also use this property to change the start level of pedal lines by changing the value in the value field. For example, 1 is fully depressed and 0 is not depressed.

Deactivating the property resets the selected pedal lines to their default start level.

RELATED LINKS

Changing pedal levels at retakes and pedal level changes

You can change both the start level and end level of individual sustain pedal lines at retakes and pedal level changes by moving the corresponding handles upwards/downwards.

The end level is the pedal level immediately before the retake or pedal level change occurs, and the start level is the pedal level immediately after the retake or pedal level change occurs.

PROCEDURE

1. In Engrave mode, select one of the handles on the retakes or pedal level changes whose start/end pedal level you want to change.

    - Select the left handle to change the end pedal level.

    - Select the right handle to change the start pedal level.

    TIP

    You can show handles on all items, not just selected items, by choosing **Engrave** > **Show Handles** > **Always**. This can make it easier to select individual handles on multiple items.

2. Move the start level handles in any of the following ways:

    - Press **Alt-Up Arrow** to move them upwards.

    - Press **Alt-Down Arrow** to move them downwards.

    - Press **Ctrl/Cmd-Alt-Up Arrow** to snap the level to 0 (not depressed).

    - Press **Ctrl/Cmd-Alt-Down Arrow** to snap the level to 1 (fully depressed).

    - Click and drag the handles upwards/downwards to the level you want.

3. Optional: Repeat steps 1 and 2 for any other handles.

RESULT

The pedal levels of the selected retakes or pedal level changes are changed.

TIP

The following properties in the **Pedal Lines** group of the Properties panel are activated when you change the corresponding level at retakes and pedal level changes:

- **Start level at retake**

- **End level at retake**

You can also use these properties to change the corresponding level at retakes and pedal level changes by changing the values in the value fields. For example, **1** is fully depressed and **0** is not depressed.

Deactivating the properties resets the selected pedal lines to their default start/end levels.

RELATED LINKS

Changing the end level of pedal lines

You can change the end level of individual sustain pedal lines by moving end level handles upwards/downwards.

PROCEDURE

1. In Engrave mode, select the right handles on the end hooks whose end pedal levels you want to change.

   TIP

   You can show handles on all items, not just selected items, by choosing **Engrave** > **Show Handles** > **Always**. This can make it easier to select individual handles on multiple items.

2. Move the end level handles in any of the following ways:

   - Press **Alt-Up Arrow** to move them upwards.
   - Press **Alt-Down Arrow** to move them downwards.
   - Press **Ctrl/Cmd-Alt-Up Arrow** to snap the level to 0 (not depressed).
   - Press **Ctrl/Cmd-Alt-Down Arrow** to snap the level to 1 (fully depressed).
   - Click and drag the handles upwards/downwards to the level you want.

RESULT

The end levels of the selected pedal lines are changed.

TIP

End level in the **Pedal Lines** group of the Properties panel is activated when you change the end level of pedal lines.

You can also use this property to change the end level of pedal lines by changing the value in the value field. For example, **1** is fully depressed and **0** is not depressed.

Deactivating the property resets the selected pedal lines to their default end level.

RELATED LINKS

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 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 for pedal lines on page 193

Positions of pedal lines

You can change the positions of pedal lines individually and by changing their default positions project-wide. For example, you can override the default position for individual pedal lines to be further away from the staff if notes at those positions require more vertical space below the staff.

You can move pedal lines to different rhythmic positions in Write mode. They are positioned by default according to your settings in **Engraving Options**.

You can move pedal lines graphically in Engrave mode. However, this does not change the rhythmic positions to which they are attached.

NOTE

You cannot move retakes or pedal level changes rhythmically. You must remove them and input a new retake or pedal level change at the position you want.

You can change the default positions of all pedal lines project-wide on the **Pedal Lines** page in **Engrave** > **Engraving Options**. For example, you can change values for the minimum distances between pedal lines and staves, pedal lines and other pedal lines, and the position of pedal lines relative to noteheads and grace notes.

RELATED LINKS
Project-wide engraving options for pedal lines on page 625
Moving pedal lines rhythmically on page 621
Moving pedal lines graphically on page 622
Lengthening/Shortening pedal lines on page 624
Input methods for pedal lines, retakes, and pedal level changes on page 192
Adding retakes and pedal level changes to existing pedal lines with the popover on page 616
Adding retakes and pedal level changes to existing pedal lines with the panel on page 617

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 or pedal level changes independently of the pedal line, you must first remove them from their original positions and input new retakes or pedal level changes 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:

    ● Press **Alt-Right Arrow** to move them to the right.

    ● Press **Alt-Left Arrow** to move them to the left.

    ● Click and drag the pedal line to the right/left.

RESULT

A single pedal line is moved to the next/previous notehead on that staff.

Multiple pedal lines are moved according to the current rhythmic grid value.

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

Moving pedal lines graphically

You can move pedal lines, retakes, and pedal level changes graphically without changing the rhythmic positions to which they apply. You can also move the start/end of pedal lines independently, meaning you can lengthen/shorten them graphically.

NOTE

You can only change the angle of pedal lines by changing the level.

PROCEDURE

1. In Engrave mode, select one of the following:

    ● The pedal lines you want to move.

    ● The start/end handles of the pedal lines whose start/end you want to move.

    ● The bottom handles of the retakes and pedal level changes you want to move.

    TIP

    You can show handles on all items, not just selected items, by choosing **Engrave** > **Show Handles** > **Always**. This can make it easier to select individual handles on multiple items.

    NOTE

    ● You can move multiple pedal lines together, but only upwards/downwards.

    ● You can move handles on multiple pedal lines together, but only to the right/left.

2. Move the pedal lines or handles in any of the following ways:

- Press **Alt-Right Arrow** to move pedal lines and handles to the right.
- Press **Alt-Left Arrow** to move pedal lines and handles to the left.
- Press **Alt-Up Arrow** to move whole pedal lines upwards.
- Press **Alt-Down Arrow** to move whole pedal lines downwards.

  TIP

  If you want to move items by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

- Click and drag them in any direction.

RESULT

The selected pedal lines or handles are moved to new graphical positions.

TIP

The following properties in the **Pedal Lines** group of the Properties panel are activated automatically when you move pedal lines in the corresponding directions:

- **Start X offset** moves the start of pedal lines horizontally.
- **End X offset** moves the end hooks of pedal lines horizontally.
- **Y offset** moves whole pedal lines vertically.

X offset in the **Pedal Line Retakes** group of the Properties panel is activated automatically when you move pedal retakes or pedal level changes horizontally.

For example, if you move a whole pedal line to the right, both handles are moved, so **Start X offset** and **End X offset** are both activated. You can also use all of these properties to move pedal lines, retakes, and pedal level changes, and lengthen/shorten pedal lines graphically, by changing the values in the value fields.

Deactivating the properties resets the selected pedal lines to their default positions.

RELATED LINKS
Lengthening/Shortening pedal lines on page 624
Sustain pedal lines in Engrave mode on page 615

Changing the position of pedal lines relative to grace notes individually

You can change the start/end positions of individual pedal lines relative to grace notes, independently of your project-wide settings.

PROCEDURE

1. Select the pedal lines whose position relative to grace notes you want to change. You can do this in Write mode and Engrave mode.

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.

TIP

- You can adjust the precise position of pedal lines in further detail in Engrave mode.

- You can change the position of all pedal lines relative to grace notes project-wide on the **Pedal Lines** page in **Engrave** > **Engraving Options**.

EXAMPLE

Pedal line starting/ending before grace notes

Pedal line starting/ending after grace notes

RELATED LINKS
Project-wide engraving options for pedal lines on page 625
Moving pedal lines graphically on page 622

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:

    - Press **Shift-Alt-Right Arrow** to lengthen them by the current rhythmic grid value.

    - Press **Shift-Alt-Left Arrow** to shorten them by the current rhythmic grid value.

    - Press **Ctrl/Cmd-Shift-Alt-Right Arrow** to snap the end of a single pedal line to the next notehead.

    - Press **Ctrl/Cmd-Shift-Alt-Left Arrow** to snap the end of a single pedal line to the previous notehead.

      NOTE

      - You can only lengthen/shorten pedal lines according to the current rhythmic grid value 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 of the pedal line to the right/left.

RESULT

Single pedal lines are lengthened/shortened according to the current rhythmic grid value or to the next/previous notehead, whichever is closer.

Multiple pedal lines are lengthened/shortened according to the current rhythmic grid value.

TIP

You can move pedal lines graphically in Engrave mode, including changing their graphical length.

RELATED LINKS

Project-wide engraving options for pedal lines

You can find options for the project-wide appearance and position of pedal lines on the **Pedal Lines** page in **Engraving Options**.

The options on the **Pedal Lines** page allow you to change the symbol shown at the start of each type of pedal line, the appearance of pedal line symbols on subsequent systems, the appearance of pedal continuation lines, and the width of retake notches. You can also set precise values for the gaps between pedal lines and the staff or other objects.

There are musical examples for many options to demonstrate how they affect the appearance of your music.

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

- Press **Ctrl/Cmd-Shift-E** in any mode.

- Choose **Engrave** > **Engraving Options** in Engrave mode.

You can then click **Pedal Lines** in the page list on the left of the dialog.

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, you can change the appearance of each part of pedal lines both individually and for all pedal lines project-wide. For example, you can show all pedal lines with a glyph as their start sign, but change the start sign of an individual pedal line to show text instead.

You can select any whole pedal line in Write mode and change most aspects of their appearance according to the type of pedal line, such as their continuation line or start sign.

For sustain pedals only, you can select each segment of a sustain pedal independently in Engrave mode, and set different properties for each segment. Sustain pedal lines have independent segments on each separate system on which they appear.

TIP

If you are changing the appearance of many pedal lines, it might be easier to change the corresponding project-wide settings on the **Pedal Lines** page in **Engrave** > **Engraving Options**.

RELATED LINKS

Changing the start sign appearance of pedal lines

You can change the appearance of the start of pedal lines individually, independently of your project-wide settings. Pedal lines can show variations of the traditional pedal line glyph, use other symbols, or show text.

PROCEDURE

1. Select the pedal lines whose start sign appearance you want to change. You can do this in Write mode and Engrave mode.

    NOTE

    The pedal lines you select must be the same type, for example, only sustain pedal lines.

2. In the Properties panel, activate **Sign appearance** in the **Pedal Lines** group.

3. Select one of the options from the menu.

    The options are different according to the type of pedal line selected.

RESULT

The start sign appearance of the selected pedal lines is changed.

TIP

● Deactivating **Sign appearance** returns the selected pedal lines to your default setting for start sign appearance.

● You can change the default start sign appearance of all pedal lines project-wide on the **Pedal Lines** page in **Engrave** > **Engraving Options**.

RELATED LINKS
Project-wide engraving options for pedal lines on page 625

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. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate the following properties, individually or together, in the **Pedal Lines** group:

    ● **Line start hook**

    ● **Line end hook**

3. Select one of the following options from each menu:

    ● **No Hook**

    ● **Vertical Hook**

    ● **Slant Hook**

- **Inverse Hook**

RESULT

The hook type at the start/end of the selected pedal lines is changed.

TIP

You can change the default appearance of all pedal lines project-wide on the **Pedal Lines** page in **Engrave** > **Engraving Options**.

Lengthening/Shortening pedal line hooks

You can change the length of hooks shown at the start/end of pedal lines individually, independently of each other and independently of your project-wide settings.

For example, if you have a pedal line with a hook at the start/end, you can make the end hook longer without changing the length of the start hook.

NOTE

This only applies to pedal lines that have a hook as their start sign and/or end sign.

PROCEDURE

1. In Engrave mode, select the top handle at the start/end of the pedal lines whose hooks you want to lengthen/shorten.

   TIP

   You can show handles on all items, not just selected items, by choosing **Engrave** > **Show Handles** > **Always**. This can make it easier to select individual handles on multiple items.

2. Move the hook handles in any of the following ways:

   - Press **Alt-Up Arrow** to move them upwards.
   - Press **Alt-Down Arrow** to move them downwards.

     TIP

     If you want to move handles by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Up Arrow**.

   - Click and drag them upwards/downwards.

RESULT

The length of the selected pedal line hooks is changed.

TIP

The following properties in the **Pedal Lines** group of the Properties panel are activated automatically when you move the corresponding pedal line hook:

- **Start hook length** changes the length of hooks at the start of pedal lines.
- **End hook length** changes the length of hooks at the end of pedal lines.

You can also use these properties to lengthen/shorten pedal line hooks by changing the values in the value fields.

Deactivating the properties resets the selected pedal lines to their default hook length.

TIP

You can change the default hook length for all pedal lines project-wide by changing the value for **Hook length** in the **Design** section of the **Pedal Lines** page in **Engrave** > **Engraving Options**. This value applies to hooks at the start/end of pedal lines.

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, independently of your project-wide settings.

PROCEDURE

1. Select the pedal lines whose continuation line type you want to change. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate **Continuation type** in the **Pedal Lines** group.

3. Select one of the following continuation types from the menu:
   - **Line**
   - **Sign at End**
   - **Sign at End and Dashed Line**
   - **None**

RESULT

The continuation line type of the selected pedal lines is changed.

NOTE

You can change the continuation type for all pedal lines project-wide on the **Pedal Lines** page in **Engrave** > **Engraving Options**. You can choose different continuation types for each pedal type, for example, you can have a line for sustain pedal lines and just a sign at the end for *una corda* pedal lines.

Lengthening/Shortening gaps and dashes in pedal continuation lines

You can change the length of dashes and the gaps between dashes in individual dashed pedal continuation lines, independently of your project-wide settings.

NOTE

This only applies to pedal lines with dashed continuation lines.

PROCEDURE

1. In Engrave mode, select the pedal lines whose dashes you want to change.

2. In the Properties panel, activate the following properties, individually or together, in the **Pedal Lines** group.
   - **Dash length**
   - **Dash gap length**

3. Change the values in the value fields in any of the following ways:
   - Enter values into the value fields.
   - Click the arrows beside the value fields.

RESULT

Increasing **Dash length** makes dashes in pedal continuation lines longer, decreasing the value makes dashes shorter.

Increasing **Dash gap length** makes gaps between dashes in pedal continuation lines longer, decreasing the value makes gaps shorter.

TIP

You can find options that change the default dash length and default gap length for all dashed pedal continuation lines project-wide by clicking **Advanced Options** in the **Design** section of the **Pedal Lines** page in **Engrave** > **Engraving Options**.

Changing the line width of pedal lines

You can change the thickness of continuation lines individually, independently of your project-wide settings.

PROCEDURE

1. In Engrave mode, select the pedal lines whose continuation line thickness you want to change.

2. In the Properties panel, activate **Line width** in the **Pedal Lines** group.

The value resets to **0** automatically when you first activate the property.

3. Change the value in the value field in any of the following ways:

- Enter a value into the value field.

- Click the arrows beside the value field.

RESULT

Increasing **Line width** makes pedal continuation lines thicker, decreasing the value makes pedal continuation lines thinner.

TIP

You can change the default thickness for all pedal continuation lines project-wide in the **Design** section of the **Pedal Lines** page in **Engrave** > **Engraving Options**.

Parenthesizing pedal line continuation signs

You can show individual pedal line continuation signs with/without parentheses, independently of your project-wide setting. Pedal line continuation signs are shown by default at the start of new systems when pedal lines continue across system breaks.

PROCEDURE

1. Select the pedal lines whose continuation sign appearance you want to change. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate **Show continuation sign in parentheses** in the **Pedal Lines** group.

3. Activate/Deactivate the corresponding checkbox.

RESULT

Continuation signs are shown with parentheses when the checkbox is activated, and without parentheses when the checkbox is deactivated.

When the property is deactivated, pedal lines follow your project-wide setting.

TIP

You can change the default appearance of all pedal line continuation signs project-wide in the **Design** section of the **Pedal Lines** page in **Engrave** > **Engraving Options**.

Pedal line start, continuation, and restorative text

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.

You can change the design of all pedal lines project-wide according to their type in the **Design** section of the **Pedal Lines** page in **Engraving Options**, and you can change the appearance of individual pedal lines, independently of your project-wide settings.

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 a new system, 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 text shown in pedal lines

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 override. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate **Text** in the **Pedal Lines** group.

3. Enter the text you want into the value field.

4. Save your changes in any of the following ways:

    ●   Press **Return**.

    ●   Click outside of the value field.

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.

Changing the pedal line continuation text shown

You can change the text shown at the start of new systems when pedal lines cross system breaks.

NOTE

This only applies to pedal lines that use text as their start sign.

PROCEDURE

1. Select the pedal lines whose continuation text you want to override. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate **Continuation text** in the **Pedal Lines** group.

3. Enter the text you want into the value field.

4. Save your changes in any of the following ways:

   - Press **Return**.
   - Click outside of the value field.

RESULT

The continuation text shown at the start of new 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.

Changing the restorative text shown in una corda pedal lines

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

This only applies 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 override. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate **Restorative text** in the **Pedal Lines** group.

3. Enter the text you want into the value field.

4. Save your changes in any of the following ways:

   - Press **Return**.

- Click outside of the value field.

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.

The three piano pedals send MIDI controllers as follows:

- Sustain pedal lines send MIDI controller 64 (Sustain).
- *Sostenuto* pedal lines send MIDI controller 66 (Sostenuto).
- *Una corda* pedal lines send MIDI controller 67 (Soft Pedal).

Some piano VST instruments, such as Pianoteq and Garritan CFX Concert Grand, support partial depression of the sustain pedal. Consult the manufacturer's documentation for more information.

Playback Options

You can find options for how Dorico plays back pedaling on the **Pedal Lines** page in **Playback Options**.

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

- Press **Ctrl/Cmd-Shift-P** in any mode.
- Choose **Play** > **Playback Options** in Play mode.

You can control the following parameters of pedal line playback:

- The length of the initial pedal depression
- The length of a retake in the middle of a pedal line
- The length of the final pedal release
- Whether initial depressions and retakes are played before or after the onset of the notes or chords at their rhythmic positions

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, 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.

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 in 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.
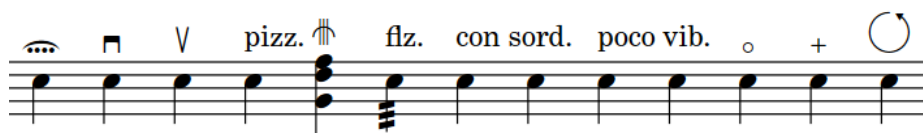
Some of the playing techniques in Dorico

RELATED LINKS

General placement conventions for playing techniques

Playing techniques, both as text and symbols, are placed above the staff. 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 placed below the staff.
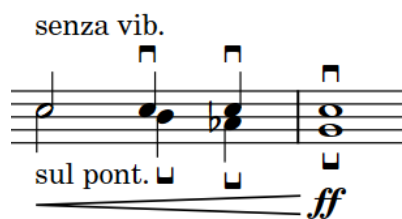
Placement of playing techniques with two voices on the same staff

Playing technique texts use a plain font, neither bold nor italic, so they are not confused with expressive text and dynamics.

NOTE

This does not apply to pedal lines, as they use a separate font style to other playing techniques.

RELATED LINKS
Pedal lines on page 613
Pedal line start, continuation, and restorative text on page 630

Positions of playing techniques

You can change the positions of playing techniques individually and by changing their default positions project-wide. For example, you can override the default position for individual playing techniques if you want extra space for other instructions at those positions.

You can move playing techniques to different rhythmic positions in Write mode. They are positioned by default according to your settings in **Engraving Options**.

You can move playing techniques graphically in Engrave mode, however this does not change the rhythmic positions to which they are attached.

You can change the default positions of all playing techniques project-wide on the **Playing Techniques** page in **Engrave** > **Engraving Options**.

RELATED LINKS
Project-wide engraving options for playing techniques on page 637
Moving playing techniques rhythmically on page 634
Moving playing techniques graphically on page 635

Moving playing techniques rhythmically

You can move playing techniques to new rhythmic positions after they have been input.

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.

2. Move the playing techniques in any of the following ways:

    ●   Press **Alt-Right Arrow** to move them to the right.

    ●   Press **Alt-Left Arrow** to move them to the left.

    ●   Click and drag the playing technique to the right/left to the notehead you want.

RESULT

A single playing technique is moved to the next or previous notehead on that staff.

Multiple playing techniques are moved according to the current rhythmic grid value.

RELATED LINKS
Moving pedal lines rhythmically on page 621

Moving playing techniques graphically

You can move playing techniques graphically without changing the rhythmic positions to which they apply.

NOTE

These steps do not apply to pedal lines.

PROCEDURE

1. In Engrave mode, select the playing techniques you want to move.

2. Move the playing techniques in any of the following ways:

    ● Press **Alt-Right Arrow** to move them to the right.

    ● Press **Alt-Left Arrow** to move them to the left.

    ● Press **Alt-Up Arrow** to move them upwards.

    ● Press **Alt-Down Arrow** to move them downwards.

    TIP

    If you want to move items by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

    ● Click and drag them in any direction.

RESULT

The selected playing techniques are moved to new graphical positions.

TIP

Start offset in the **Playing Techniques** group of the Properties panel is activated automatically when you move playing techniques.

● **Start offset X** moves playing techniques horizontally.

● **Start offset Y** moves playing techniques vertically.

You can also use this property to move playing techniques by changing the values in the value fields.

Deactivating the property resets the selected playing techniques to their default positions.

RELATED LINKS
Moving pedal lines graphically on page 622

Changing the placement of playing techniques relative to the staff

You can change the placement of individual playing techniques relative to the staff.

These steps do not apply to pedal lines.

PROCEDURE

1. Select the playing techniques whose placement relative to the staff you want to change. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate **Placement** in the **Playing Techniques** group.

3. Choose one of the following options:

- **Above**
- **Below**

RESULT

The selected playing techniques appear above/below the staff.

RELATED LINKS
Moving playing techniques graphically on page 635
Moving pedal lines graphically on page 622

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.

These steps do not apply to pedal lines.

PROCEDURE

1. Select the playing techniques to which you want to add text. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate **Alternative text** in the **Playing Techniques** group.

3. Enter the text you want into the value field.

4. Save your changes in any of the following ways:

- Press **Return**.
- Click outside of the value field.

RESULT

The text you entered into the value field is shown directly after text playing technique, and directly above symbol playing techniques.

EXAMPLE

Alternative text added to text playing technique
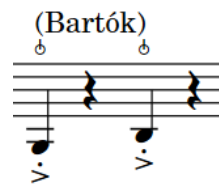
Alternative text added to symbol playing technique

RELATED LINKS

Project-wide engraving options for playing techniques

You can find options for the project-wide appearance and position of playing techniques on the **Playing Techniques** page in **Engraving Options**.

The options on the **Playing Techniques** page allow you to change the distance between playing techniques and the staff, the arrangement of multiple text playing techniques at the same rhythmic position, and playing technique continuation styles.

There are musical examples for many options to demonstrate how they affect the appearance of your music.

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

● Press **Ctrl/Cmd-Shift-E** in any mode.

● Choose **Engrave** > **Engraving Options** in Engrave mode.

You can then click **Playing Techniques** in the page list on the left of the dialog.

Playing techniques in playback

Each playing technique you can create in Write mode corresponds to a technique that you can map in the **Expression Maps** editor.

● You can open the **Expression Maps** dialog in Play mode by choosing **Play** > **Expression Maps**.

The **Expression Maps** dialog shows you which playing techniques, shown in a list on the left of the dialog, you can apply to each software instrument. This list includes combined playing techniques, which allows multiple playing techniques to be applied to notes simultaneously.

In the **Techniques** section of the dialog, you can edit existing techniques. You can also create new combinations of playing techniques in the **Technique Combinations** dialog. For example, you can combine **Pizzicato** and **Tremolo** to allow the pizzicato and tremolo techniques to be applied to the same note simultaneously.

When you input a playing technique in Write mode, the expression map looks for that playing technique. If it cannot be found, the playing technique applied either remains the same as the previous technique or reverts to the natural technique.

You can see which playing techniques are being applied 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, that could be because you are 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.

RELATED LINKS
Expression Maps dialog on page 320
Technique Combinations dialog on page 324

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, rehearsal marks follow an automatic sequence, ensuring there are never duplicate rehearsal marks.

In Dorico, 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

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.
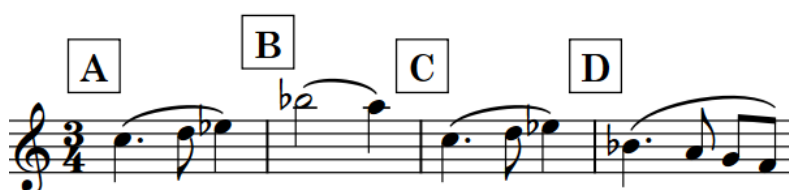
Rehearsal marks should be positioned above barlines, and not below the system. Although you can input rehearsal marks at rhythmic positions within a bar in Dorico, this is not common practice. Depending on the style of music and the context, it can be helpful to input a double barline beneath each rehearsal 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.

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 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 203
Input methods for bars and barlines on page 155
Changing the rehearsal mark enclosure type on page 645

Positions of rehearsal marks

You can change the positions of rehearsal marks individually and by changing their default positions project-wide. For example, you can override the default position for individual rehearsal marks when other items at those positions require extra space.

You can move rehearsal marks to different rhythmic positions in Write mode. They are positioned by default according to your settings in **Engraving Options**.

You can move rehearsal marks graphically in Engrave mode, however this does not change the rhythmic positions to which they are attached.

You can change the default positions of all rehearsal marks project-wide, and set values for the minimum distances between rehearsal marks and staves, and rehearsal marks and other items, on the **Rehearsal Marks** page in **Engrave** > **Engraving Options**.

Rehearsal marks are categorized as system objects in Dorico, 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 in your project independently of other layouts, for example, if you want rehearsal marks to appear at multiple vertical positions in each system.

RELATED LINKS
Project-wide engraving options for rehearsal marks on page 644
Moving rehearsal marks rhythmically on page 641
Moving rehearsal marks graphically on page 641
Changing the positions of system objects on page 708

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**-**Right Arrow** to move them to the right.
   - Press **Alt**-**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 value.

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.

Moving rehearsal marks graphically

You can move rehearsal marks graphically, without changing the rhythmic positions to which they are attached.

PROCEDURE

1. In Engrave mode, select the rehearsal marks you want to move.

2. Move the rehearsal marks in any of the following ways:

   - Press **Alt**-**Right Arrow** to move them to the right.
   - Press **Alt**-**Left Arrow** to move them to the left.
   - Press **Alt**-**Up Arrow** to move them upwards.
   - Press **Alt**-**Down Arrow** to move them downwards.

     TIP

     If you want to move items by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd**-**Alt**-**Left Arrow**.

   - Click and drag them in any direction.

RESULT

The graphical positions of the selected rehearsal marks are changed.

TIP

Start offset in the **Rehearsal Marks** group of the Properties panel is activated automatically when you move rehearsal marks.

- **Start offset X** moves rehearsal marks horizontally.

- **Start offset Y** moves rehearsal marks vertically.

You can also use this property to move rehearsal marks by changing the values in the value fields.

Deactivating the property resets the selected rehearsal marks to their default positions.

Deleting rehearsal marks

You can delete rehearsal marks in full score and part layouts.

NOTE

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. Delete the rehearsal marks in any of the following ways:

    - Press **Backspace** or **Delete**.

    - Choose **Edit** > **Delete**. You can also choose this option from the context menu.

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.

RELATED LINKS
Changing the rehearsal mark sequence type on page 643

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. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate **Index** in the **Rehearsal Marks** group.

3. Change the value in the value field in any of the following ways:

- Enter a value into the value field.

- Click the arrows beside 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.

RELATED LINKS

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, 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.

NOTE

You can change which type of sequence is used project-wide on the **Rehearsal Marks** page in **Engraving Options**.

PROCEDURE

1. Select the rehearsal mark whose sequence type you want to change. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate **Sequence type** in the **Rehearsal Marks** group.

3. Select one of the following options from the menu:

   - **Letters**

   - **Numbers**

   - **Bar numbers**

RESULT

The selected rehearsal mark now displays a letter, a number, or the current bar number.

If it is the first rehearsal mark in either the letters sequence or the numbers sequence in the flow, it shows either A or 1. If there are already rehearsal marks in either the letters sequence or the numbers sequence in the flow, it shows the next letter or number according to the index.

NOTE

You can change the index of a rehearsal mark sequence independently of other rehearsal mark sequences. However, you cannot change the bar number sequence using this method.

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. You can do this in Write mode or Engrave mode.

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.   Save your changes in any of the following ways:

    ●   Press **Return**.

    ●   Click outside of the value field.

RESULT

The text you entered into the value field is added to the selected rehearsal marks as a prefix or a suffix.

TIP

You can add a custom prefix/suffix to all rehearsal marks project-wide on the **Rehearsal Marks** page in **Engrave** > **Engraving Options**.

Project-wide engraving options for rehearsal marks

You can find options for the project-wide appearance and position of rehearsal marks on the **Rehearsal Marks** page in **Engraving Options**.

For example, you can change the sequence type of rehearsal marks, their default positions, and whether they are shown in enclosures.

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

●   Press **Ctrl/Cmd-Shift-E** in any mode.

●   Choose **Engrave** > **Engraving Options** in Engrave mode.

You can then click **Rehearsal Marks** in the page list on the left of the dialog.

Changing the rehearsal mark enclosure type

Rehearsal marks are usually shown in an enclosure, which can be a rectangle or a circle. You can change the enclosure type of all rehearsal marks project-wide.

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Engraving Options**.
   The **Engraving Options** dialog opens.

2. Click **Rehearsal Marks** in the page list.

3. In the **Enclosure** section, choose one of the following options for **Enclosure type**:
   - **Rectangle**
   - **Circle**
   - **No enclosure**

RESULT

The enclosure type of all rehearsal marks in your project is changed. The default size of the enclosure is relative to the font size of the rehearsal marks, but your padding values also determine the size and shape of the enclosure.

EXAMPLE

Rehearsal mark with a rectangle enclosure

Rehearsal mark with a circle enclosure

Rehearsal mark with no enclosure

Rehearsal mark enclosure size and padding values

You can change the default shape and size of rehearsal mark enclosures on the **Rehearsal Marks** page in **Engraving Options**. You can change the minimum dimensions, line thickness, and padding values of rehearsal mark enclosures.

All enclosures

Enclosure line thickness

Sets the thickness of enclosure lines for both rectangle and circle enclosures. The default is 1/8 of a space. The examples have a thickness of 1/2 a space.

Rectangle rehearsal mark enclosure

The figure shows a rectangle rehearsal mark enclosure with default settings. The minimum height and minimum width are both 4 spaces, horizontal padding is 3/4 of a space, and minimum bottom and minimum top padding are both 1/8 of a space.

Minimum width

Sets a minimum value for the width of enclosures. In this example, the value was increased from 4 spaces to 8 spaces.

B

Minimum height

Sets a minimum value for the height of enclosures. In this example, the value was increased from 4 spaces to 8 spaces.

B
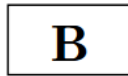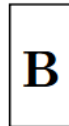
Left and right padding between text and enclosure

Sets the value for the distance between the two sides of the enclosure and the rehearsal mark within it. In this example, the value was increased from 3/4 of a space to 3 spaces.

B

Top padding between text and enclosure

Sets the value for the distance between the top line of the enclosure and the rehearsal mark within it. In this example, the value was increased from 1/2 a space to 2 spaces.

B
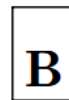
Bottom padding between text and enclosure

Sets the value for the distance between the bottom line of the enclosure and the rehearsal mark within it. In this example, the value was increased from 1/8 of a space to 2 spaces.

B
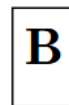
Circle rehearsal mark enclosure

The figure shows a circle rehearsal mark enclosure with default settings. The minimum diameter is 4 spaces, and the minimum padding is 1/4 of a space.

B

Minimum diameter

Sets a minimum value for the diameter of the enclosure. In this example, the value was increased from 4 spaces to 8 spaces.
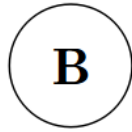
Minimum padding between text and enclosure

Sets the value for the distance between the enclosure line and the rehearsal mark within it. In this example, the value was increased from 1/4 of a space to 2 spaces.
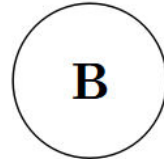
Changing the rehearsal mark font style

You can change the font style used for all rehearsal marks project-wide.

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Font Styles**.
    The **Edit Font Styles** dialog opens.

2. Select **Rehearsal Mark Font** from the **Font style** menu.

3. Activate the following options, individually or together, to change the corresponding aspect of the font:

    - **Font family**

    - **Size**

    - **Style**

    - **Underlined**

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

RESULT

The rehearsal mark font style is changed project-wide.

RELATED LINKS
Edit Font Styles dialog on page 275
Project-wide engraving options for rehearsal marks on page 644

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 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 a number that indicates on which repeat the segment is to be played.

A repeat ending with three possible endings

Dorico allows you to create repeat endings containing any number of segments, and allows you to control which segments are used for each playthrough. For example, you might want a repeat ending with two segments but four total playthroughs, where the first two playthroughs use the first repeat ending segment and the final two playthroughs use the second repeat ending segment.

In Dorico, 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
Inputting repeat endings on page 204
Adding additional repeat endings on page 205
Dividing playthroughs across repeat ending segments on page 649
System objects on page 707
Changing the positions of system objects on page 708

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 repeats you want to change. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate **No. times played** in the **Repeat Endings** group.

3. Change the value in the value field in any of the following ways:

- Enter a value into the value field.
- Click the arrows beside the value field.

NOTE

You cannot have fewer repeats than the number of segments.

RESULT

The total number of repeats in the selected repeat endings is changed. This is updated automatically in the layout.

By default, Dorico automatically adds any repeats not already assigned to specific segments to the final closed segment.

AFTER COMPLETING THIS TASK

Once you have set the total number of repeats, you can then change which segment is used for each playthrough.

RELATED LINKS

Dividing playthroughs across repeat ending segments

You can control how the total number of playthroughs is divided across the different segments in individual repeat endings.

PROCEDURE

1. In Engrave mode, select an individual segment in the repeat ending structure whose included playthroughs you want to change.
2. In the Properties panel, activate **Times played for segment** in the **Repeat Endings** group.
3. Enter the number of each playthrough that you want to include in the selected segment.

   For example, for a repeat ending with six playthroughs, enter **4,5,6** to include the 4th, 5th, and 6th playthroughs in the second segment.

RESULT

The playthroughs included in the selected segment are changed.

EXAMPLE
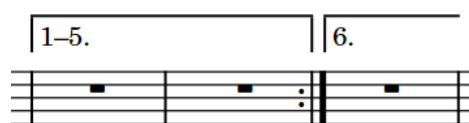
Default distribution of repeats   Customized distribution of repeats
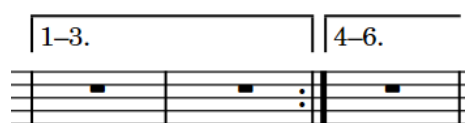
Project-wide engraving options for repeat endings

You can find options controlling the project-wide design, position, and appearance of repeat ending segments on the **Repeat Endings** page in **Engraving Options**.

The options on the **Repeat Endings** page allow you to change the ends of repeat ending lines, the appearance of numbers and hooks, and the default position of repeat endings.

There are musical examples for many options to demonstrate how they affect the appearance of your music.

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

- Press **Ctrl/Cmd-Shift-E** in any mode.
- Choose **Engrave** > **Engraving Options** in Engrave mode.

You can then click **Repeat Endings** in the page list on the left of the dialog.

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.

TIP

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-Right Arrow** to lengthen the final segment.
- Press **Shift-Alt-Left Arrow** to shorten the final segment.

RELATED LINKS
Moving repeat endings graphically on page 652

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 change the positions of repeat endings individually and by changing their default positions project-wide. For example, you can override the default position for individual repeat endings if the musical material at those positions requires more vertical space.

You can move repeat endings to different rhythmic positions in Write mode. They are positioned by default according to your settings in **Engraving Options**.

You can move each repeat ending segment graphically in Engrave mode and independently of other segments in the repeat ending, however, this does not change the rhythmic positions to which they are attached.

You can change the default appearance and position of all repeat endings project-wide on the **Repeat Endings** page in **Engrave** > **Engraving Options**.

Repeat endings are categorized as system objects in Dorico, 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 in your project independently of other layouts, for example, if you want repeat endings to appear at multiple vertical positions in each system.

RELATED LINKS
Project-wide engraving options for repeat endings on page 649
Moving repeat endings rhythmically on page 651
Moving repeat endings graphically on page 652
System objects on page 707
Changing the positions of system objects on page 708

Moving repeat endings rhythmically

You can move repeat endings to different rhythmic positions after they have been input.

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-Right Arrow** to move it to the right.

    ● Press **Alt-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.

RELATED LINKS

Moving repeat endings graphically

You can move repeat endings graphically without changing their rhythmic positions. You can also move the start/end of repeat ending segments independently, meaning you can lengthen/shorten them graphically.

PROCEDURE

1. In Engrave mode, select one of the following that you want to move:

    ● Repeat ending segments

    ● Individual handles on repeat ending segments

    TIP

    You can show handles on all items, not just selected items, by choosing **Engrave** > **Show Handles** > **Always**. This can make it easier to select individual handles on multiple items.

2. Move the repeat ending segments or handles in any of the following ways:

    ● Press **Alt-Right Arrow** to move them to the right.

    ● Press **Alt-Left Arrow** to move them to the left.

    ● Press **Alt-Up Arrow** to move them upwards.

    ● Press **Alt-Down Arrow** to move them downwards.

    TIP

    If you want to move items by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

    ● Click and drag them in any direction.

RESULT

The selected repeat ending segments or handles are moved graphically.

TIP

The following properties in the **Repeat Endings** group of the Properties panel are activated automatically when you move repeat ending segments in the corresponding directions:

● **Start X offset** moves start repeat ending segment handles horizontally.

● **End X offset** moves end repeat ending segment handles horizontally.

● **Y offset** moves whole repeat ending segments vertically.

For example, if you move a whole repeat ending segment to the right, both handles are moved, so **Start X offset** and **End X offset** are both activated. You can also use all three properties to move and lengthen/shorten repeat endings graphically by changing the values in the value fields.

Deactivating the properties resets the selected repeat ending segments to their default positions.

Repeat endings in Engrave mode

In Engrave mode, you can change the appearance of repeat endings and repeat ending segments individually, independently of your project-wide settings on the **Repeat Endings** page in **Engraving Options**.

In Engrave mode, each segment in repeat endings has two square handles.

You can select and move each handle independently.

TIP

You can show handles on all items, not just selected items, by choosing **Engrave** > **Show Handles** > **Always**. This can make it easier to select individual handles on multiple items.

Deleting repeat endings

You can delete repeat endings without deleting notes and other items to which they apply.

PROCEDURE

1. In Write mode, select the repeat endings you want to delete.
2. Delete the repeat endings in any of the following ways:
   - Press **Backspace** or **Delete**.
   - Choose **Edit** > **Delete**. You can also choose this option from the context menu.

RESULT

The selected repeat endings are deleted.

NOTE

Any repeat barlines input as part of the deleted repeat endings are not deleted automatically.

Changing the text shown in repeat endings

You can replace the text shown in individual segments in repeat endings, which by default shows the playthrough numbers for the segment, with custom text.

PROCEDURE

1. In Engrave mode, select the repeat ending segments whose text you want to change.

2. In the Properties panel, activate **Custom text** in the **Repeat Endings** group.

3. Enter the text you want into the value field.

4. Save your changes in any of the following ways:

- Press **Return**.
- Click outside of the value field.

RESULT

The text shown in the selected segments is changed.

Deactivating **Custom text** restores the default text for the selected repeat ending segments.

NOTE

Deactivating properties permanently deletes any custom text entered.

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, independently of your project-wide settings.

PROCEDURE

1. Select the repeat endings whose final segment appearance you want to change. You can do this in Write mode and Engrave mode.

NOTE

In Engrave mode, you can select any segment in the repeat ending.

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.

TIP

You can change the appearance of final segments in all repeat endings project-wide in the **Segments** section of the **Repeat Endings** page in **Engrave** > **Engraving Options**.

RELATED LINKS
Project-wide engraving options for repeat endings on page 649

Lengthening/Shortening repeat ending hooks

You can lengthen/shorten the hooks in repeat endings individually, independently of your project-wide settings.

NOTE

You cannot change the hook length of an individual segment in a repeat ending. Changing the hook length affects the whole repeat ending.

PROCEDURE

1. In Engrave mode, select the repeat endings whose hooks you want to lengthen/shorten.
2. In the Properties panel, activate **Hook length** in the **Repeat Endings** group.
3. Change the value in the value field in any of the following ways:

   - Enter a value into the value field.
   - Click the arrows beside the value field.

RESULT

Increasing the value makes repeat ending hooks longer. Decreasing the value makes repeat ending hooks shorter.

TIP

You can change the default length of all repeat ending hooks project-wide on the **Repeat Endings** page in **Engrave** > **Engraving Options**.

RELATED LINKS
Project-wide engraving options for repeat endings on page 649

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.

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 automatically fills the gaps between notes with implicit rests of the appropriate duration. Therefore, it is usually not necessary to input rests in Dorico.

RELATED LINKS

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 660
Turning explicit rests into implicit rests on page 658

Implicit vs. explicit rests

Implicit rests are automatically shown around 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 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, 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.
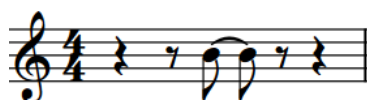
A quarter note input at the fourth eighth note of the bar in a 4/4 time signature has two implicit rests, a quarter and an eighth, at the start of the bar.

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 124
Forcing the duration of notes/rests on page 125
Turning explicit rests into implicit rests on page 658
Hiding/Showing rests after the last note in voices on page 809
Hiding/Showing rests before the first note in voices on page 808
Showing rest colors on page 659

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. Turn the selected explicit rests into implicit rests in any of the following ways:

   • Press **Backspace** or **Delete**.

   • Choose **Edit** > **Delete**. You can also choose this option from the context menu.

RESULT

The selected explicit rests are now implicit rests. You can check this by showing rest colors.

RELATED LINKS
Showing rest colors on page 659
Hiding/Showing rests after the last note in voices on page 809
Hiding/Showing rests before the first note in voices on page 808

Per-flow notation options for rests

There are a number of options for how rests are positioned and notated, and when rests are shown project-wide that you can choose from on the **Rests** page in **Notation Options**.

For example, you can change whether bar rests are shown in additional voices, when dotted rests are permitted, and the default positions of rests in different contexts.

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

• Press **Ctrl/Cmd-Shift-N** in any mode.

• Choose **Write** > **Notation Options** in Write mode.

• Choose **Setup** > **Notation Options** in Setup mode.

• Click **Notation Options** on the right of the **Flows** panel in Setup mode.

   ⚙

You can then select **Rests** from the **Category** menu.

Project-wide engraving options for rests

You can find options for the project-wide appearance of rests on the **Rests** page in **Engraving Options**.

The options on the **Rests** page allow you to change the style, appearance, and precise position of rests, including multi-bar rests during flows and multi-bar rests at the end of flows. For example, the default appearance of multi-bar rests at the end of flows is to show "tacet al fine", but you can show the total bar count instead.

There are musical examples for many options to demonstrate how they affect the appearance of your music.

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

- Press **Ctrl/Cmd-Shift-E** in any mode.

- Choose **Engrave** > **Engraving Options** in Engrave mode.

You can then click **Rests** in the page list on the left of the dialog.

RELATED LINKS

Changing the appearance of multi-bar rests at the end of flows project-wide

You can change the appearance of multi-bar rests that extend to the end of flows in all layouts project-wide. By default, multi-bar rests that extend to the end of flows show "tacet al fine" above the staff instead of the total bar count.

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Engraving Options**.

   The **Engraving Options** dialog opens.

2. Click **Rests** in the page list.

3. In the **Multi-bar Rests** section, choose one of the following options for **Multi-bar rests that extend to the end of the flow**:

   - **Show tacet al fine**

   - **Show bar count**

4. Click **Apply**, then **Close**.

Showing rest colors

You can show implicit rests and explicit rests in different colors.

PROCEDURE

- Choose **View** > **Note and Rest Colors** > **Implicit Rests**.

  - A tick is shown beside **Implicit Rests** in the menu when rest colors are shown.

  - No tick is shown beside **Implicit Rests** in the menu when rest colors are not shown.

RESULT

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.

Once you have identified rests as explicit rests, you can delete them. The implicit rests that replace them now respect the **Starts voice** and **Ends voice** properties.

EXAMPLE

Rests colored black, as they appear without implicit rests shown

Rests colored gray to indicate implicit rests

Hiding/Showing rests

You can hide/show implicit rests by suppressing all rests before/after notes, up to the start/end of the flow.

PROCEDURE

1. Select the notes before/after which you want to hide/show rests. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate/deactivate the following properties, individually or together, in the **Notes and Rests** group:

   - **Starts voice**

   - **Ends voice**

RESULT

Implicit rests are hidden before/after the selected notes when the properties are activated, and shown when the properties are deactivated.

If rests are not hidden when you activate either property, it might be because there are explicit rests in the bar. You must turn explicit rests into implicit rests before you can hide them.

TIP

You can also suppress implicit rests in any gaps between different voices that might occur in the middle of a flow.

This requires you to set **Ends voice** on the last note of the first voice, and **Starts voice** on the first note of the second voice, if the gap between those notes spans multiple barlines.

Deleting rests

You can delete both implicit rests and explicit rests.

NOTE

If you want to delete rests because multiple rests of the same duration appear at the same position in multiple-voice contexts, you can choose to consolidate these rests in the **Rest positioning** section of the **Rests** page in **Notation Options**.

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 setting the properties for **Starts voice** and **Ends voice** in the **Notes and Rests** group of the Properties panel so that no rests are shown where you removed them.

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

Moving individual 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.

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 consolidates rests in multiple-voice contexts.

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. You can do this in Write mode and Engrave mode.

2. Activate **Rest pos.**.

3. Change the value in the value field in any of the following ways:

- Enter a value into the value field.

- Click the arrows beside the value field.

RESULT

Increasing the value moves rests upwards. Decreasing the value moves rests downwards.

If there are multiple voices on the staff with rests of the same duration, multiple rests are now shown.

TIP

- You can choose to show all rests in every voice or only show one rest for all voices in the **Rest positioning** section of the **Rests** page in **Notation Options**.

- You can change the horizontal position of rests, and the spacing around them, in Engrave mode when **Note Spacing** is activated, in the same ways as changing the position of notes.

RELATED LINKS

Notation Options dialog on page 110
Note spacing on page 284
Adjusting note spacing at individual rhythmic positions on page 291
Adjusting the spacing of individual notes/items independently of their rhythmic positions on page 292

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.

TIP

You can change the placement of accent, marcato, stress, and unstress articulations relative to slurs in the **Slurs** section of the **Articulations** page in **Engrave** > **Engraving Options**.

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
General placement conventions for slurs on page 663
Inputting slurs on page 208
Ties on page 735
Project-wide engraving options for articulations on page 369

General placement conventions for slurs

The placement of slurs relative to the staff, 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

You can set your preference for whether slurs follow the stem direction, or always appear above notes, on the **Slurs** page in **Engrave** > **Engraving Options**.

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, 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.

You can change where slurs attach to stems by adjusting **Vertical offset from end of stem** in the **Endpoint Positioning** section of the **Slurs** page in **Engrave** > **Engraving Options**.

RELATED LINKS
Slur endpoint position relative to other items on page 667

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.

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

You can choose whether all slurs start on the first/last note in tie chains, and end on the first/last note in tie chains, on the **Slurs** page in **Engrave** > **Engraving Options**. There are different options for slurs between normal notes and slurs starting on grace notes.

RELATED LINKS
Changing the position of slurs relative to tie chains on page 665

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, independently of your project-wide settings, for example, to save vertical space.

PROCEDURE

1. Select the slurs whose position relative to tie chains you want to change. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate the following properties, individually or together, in the **Slurs** group:

    *   **Start pos. in tie chain**

    *   **End pos. in tie chain**

3. Choose one of the following options for each property:

    *   **First note**

    *   **Last note**

RESULT

The position of the selected slurs relative to tie chains is changed.

TIP

You can change the default position of all slurs relative to tie chains project-wide on the **Slurs** page in **Engrave** > **Engraving Options**. There are different options for slurs between normal notes and slurs starting on grace notes.

RELATED LINKS
Project-wide engraving options for slurs on page 667
Slur position relative to tie chains on page 664

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.

You can adjust the values for the different parameters of the special placement rules. For example, you can change the vertical and horizontal offsets for the right-hand end of a grace note slur relative to the standard, full-sized notehead to which it is attached in the **Grace Notes** section of the **Slurs** page in **Engrave** > **Engraving Options**.

NOTE

These rules do not apply when slurs attach to a standard note at any rhythmic position beyond the note immediately following the grace note.

Due to the general placement conventions of grace notes, slurs in Dorico 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

You can change the automatic placement of grace note slurs by changing the stem direction of a grace note, changing the direction of a slur, and using the slur handles in Engrave mode to adjust the position of a slur in finer detail.

RELATED LINKS
Changing the curvature direction of slurs on page 684
Changing the stem direction of notes on page 714
General placement conventions for grace notes on page 517
Slurs in Engrave mode on page 675
Moving slurs and slur handles graphically on page 677

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 automatically ensures slur endpoints do not touch staff lines, manual adjustments might be necessary to position the arcs of slurs correctly.

You can set a value for the minimum distance between slur endpoints and staff lines in the **Avoiding Collisions** section of the **Slurs** page in **Engrave** > **Engraving Options**. The default position of slur endpoints relative to staff lines is 1/4 space above/below, to ensure the start/end points do not touch the staff line.

RELATED LINKS
Project-wide engraving options for slurs on page 667
Changing the height of slurs on page 681

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.

You can change the vertical and horizontal offsets for the endpoints of slurs in the **Endpoint Positioning** section of the **Slurs** page in **Engraving Options**. However, you might also need to reduce the value for **Minimum gap inside slur curvature to avoid collisions** in the **Avoiding Collisions** section, as endpoints cannot be closer to noteheads than this value.

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.

You can position slur endpoints closer to articulations by reducing the value for **Minimum gap inside slur curvature to avoid collisions** in the **Avoiding Collisions** section of the **Slurs** page in **Engraving Options**.

NOTE

Changing this value affects the position of slur endpoints project-wide. You may find it more appropriate to move slur endpoints relative to articulations individually in Engrave mode.

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.

You can change this by increasing/decreasing the value for **Minimum vertical gap between two slurs starting or ending on the same note** in the **Avoiding Collisions** section of the **Slurs** page in **Engraving Options**.

To make slurs appear closer to tied notes, you can adjust the values for slur endpoint position relative to noteheads.

RELATED LINKS

Project-wide engraving options for slurs

You can find options for the project-wide appearance, position, and placement of slurs on the **Slurs** page in **Engraving Options**.

The options on the **Slurs** page allow you to change the direction, style, height, and thickness of slurs. You can also set precise values for the positions of slurs relative to noteheads, stems, grace notes, and ties, and change the collision avoidance behavior of cross-staff slurs.

There are musical examples for many options to demonstrate how they affect the appearance of your music.

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

- Press **Ctrl/Cmd-Shift-E** in any mode.
- Choose **Engrave** > **Engraving Options** in Engrave mode.

You can then click **Slurs** in the page list on the left of the dialog.

RELATED LINKS
Cross-staff and cross-voice slurs on page 668

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 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
Inputting cross-staff and cross-voice slurs on page 668
Lengthening/Shortening slurs on page 671
Moving slurs rhythmically on page 670

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. Input a slur in any of the following ways:

   - Press **S**.
   - Click **Slur** in the Notes panel.

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.

TIP

You can change the curvature direction of individual slurs.

RELATED LINKS
Cross-staff and cross-voice slurs on page 668
Changing the curvature direction of slurs on page 684

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 and your settings on the **Slurs** page in **Engrave** > **Engraving Options**, inner slurs may appear on the opposite side of the staff to the outer slur.

A phrase with nested slurs

If you want to change the default distance between the endpoints of nested slurs, you can increase/decrease the project-wide value for **Minimum vertical gap between two slurs starting or ending on the same note** in the **Avoiding Collisions** section of the **Slurs** page in **Engraving Options**.

You can input nested slurs in the same ways as inputting standard slurs, and Dorico makes automatic adjustments to their positioning to avoid collisions if you have not activated **Disable auto curve adjustment** in the **Slurs** group of the Properties panel in Engrave mode.

RELATED LINKS
Inputting nested slurs during step input on page 669
Adding nested slurs to existing notes on page 670
Disabling slur collision avoidance for individual slurs on page 688

Inputting nested slurs during step input

You can input nested slurs directly during step 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. Start two slurs from the currently selected note in any of the following ways:
   - Press **S** twice.

- Click **Slur** twice in the Notes panel.

  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.

   The inner slur ends on the currently selected note.

5. Continue inputting notes.

6. Optional: Start/End other inner slurs.

7. Press **Shift-S** again.

   The outer slur ends on the currently selected note.

RELATED LINKS
[Nested slurs](#) on page 669

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**.

3. Select the notes within the outer slur that you want to place under an inner slur.

4. Press **S**.

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 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 687

Moving slurs rhythmically

You can move slurs to new rhythmic positions after they have been input. They are positioned according to your project-wide settings on the **Slurs** page in **Engraving Options**.

PROCEDURE

1. In Write mode, select the slurs you want to move.

> **NOTE**
>
> When using the mouse, you can only move one slur rhythmically at a time.

2. Move the slurs to the next or previous noteheads on the staff in any of the following ways:

   - Press **Alt-Right Arrow** to move them to the next notehead on the staff.
   - Press **Alt-Left Arrow** to move them to the previous notehead on the staff.
   - Click and drag the slur to the right/left.

RESULT

The slurs are moved to the next or previous noteheads on the staff.

> **NOTE**
>
> The rhythmic duration of slurs is usually maintained. However, depending on the rhythms they cross as they move, slurs may cover longer/shorter durations than before they were moved.
>
> You can adjust the shape and position of individual slurs graphically in Engrave mode.

RELATED LINKS

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-Right Arrow** to lengthen the slur to the next notehead.
   - Press **Shift-Alt-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 slur is lengthened/shortened.

Linked slurs across multiple staves

Slurs of the same duration at the same rhythmic position on multiple staves are linked together automatically. This happens only 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.

Linking slurs together

Dorico 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.

RELATED LINKS
Linked slurs across multiple staves on page 672

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
Linked slurs across multiple staves on page 672

Slur segments

A standard slur consists of one segment. You can make more elaborate shapes with slurs with multiple segments, for example, to allow you to create more complex slur shapes than are possible with a single curved segment.

Adding more segments to a slur by default creates evenly spaced waves within its length. Therefore, having more segments makes each wave shorter.
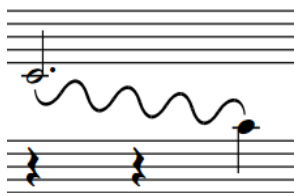
Slur with eight segments

In Engrave mode, you can move each segment graphically, independently of the other segments in the slur, as each segment has its own set of five square handles. These allow you to form slurs into unusual and complicated shapes.

NOTE

You may find that you need more segments than there are curves in your planned shape, as in many cases you need a segment for each significant change of angle. In Dorico, you can increase/decrease the number of segments in a slur at any time.
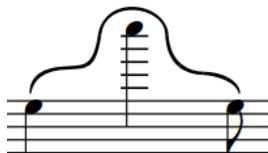
An unusual slur shape created using five segments.
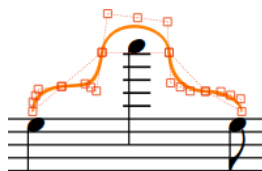
The same slur, showing the positions of the handles of all five segments.

RELATED LINKS
Changing the number of segments in individual slurs on page 674
Moving slurs and slur handles graphically on page 677
Slurs in Engrave mode on page 675
Multi-segment slurs in Engrave mode on page 675

Changing the number of segments in individual slurs

You can change the number of segments in individual slurs, for example, to allow you to create slurs with unusual shapes.

PROCEDURE

1. In Engrave mode, select the slurs whose number of segments you want to change.

2. In the Properties panel, activate **Number of segments** in the **Slurs** group.

3. Change the value in the value field in any of the following ways:

    ● Enter a value into the value field.

    ● Click the arrows beside the value field.

RESULT

Increasing the value increases the number of slur segments. Decreasing the value decreases the number of slur segments.

AFTER COMPLETING THIS TASK

You can adjust the shape of slur segments in more detail using their handles.

NOTE

Handles on multi-segment slurs are connected to the corresponding type of handle on adjacent segments. Moving handles causes any connected handles to move the same amount in the opposite direction.

RELATED LINKS
Slur segments on page 673
Multi-segment slurs in Engrave mode on page 675
Moving slurs and slur handles graphically on page 677

Slurs in Engrave mode

In Engrave mode, each slur has five square handles that you can move independently. When using slur handles to edit slurs in Engrave mode, each handle adjusts the corresponding part of the slur but can also affect the positions of other handles on the slur.
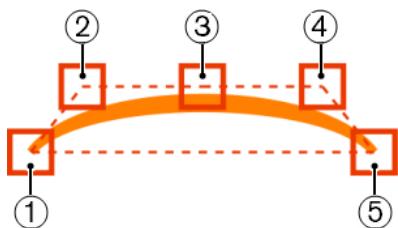
Slurs have the following handles in Engrave mode:

1   Left endpoint

2   Left control point

3   Slur height

4   Right control point

5   Right endpoint

For example, moving the left endpoint moves the start of a slur, but the rest of the handles stay in their existing positions. However, moving the right control point also causes the slur height handle to move. This gives you fine control over the shape of ties, while ensuring the end result remains curved and smooth.

NOTE

Multi-segment slurs have additional links between control point handles that affect how they move in relation to other handles moving.

You can move these handles to change the shape of slurs with the keyboard, with the mouse, and by using properties in the **Slurs** group of the Properties panel.

RELATED LINKS
Slur shoulder offset on page 682
Slur height on page 680
Multi-segment slurs in Engrave mode on page 675

Multi-segment slurs in Engrave mode

In Engrave mode, each segment in multi-segment slurs, such as S-shaped slurs, has handles just like standard slurs. This allows you to edit each segment of multi-segment slurs independently as if they were separate slurs, but in order to maintain a consistent shape, moving certain handles causes other handles to move simultaneously.

Multi-segment slurs have the following handles in Engrave mode:
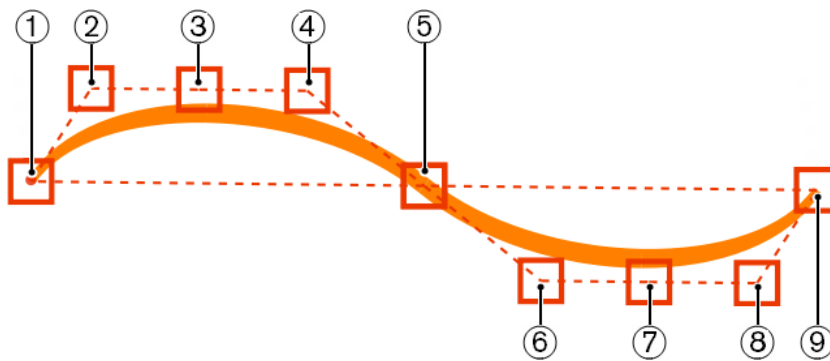
1   Left endpoint

2   Left control point

3   Slur height

4   Right control point

5   Center control point

6   Left control point

7   Slur height

8   Right control point

9   Right endpoint

You can select and move each handle in the same ways as for standard slurs, however, handles on multi-segment slurs are connected between adjacent segments. Moving a connected control point causes the control point at the start/end of the next/previous segment to move the same amount in the opposite direction. This avoids tight corners, ensuring that multi-segment slurs are always as smoothly and symmetrically curved as possible.

In multi-segment slurs, right control points are connected to the left control point in the adjacent segment. If there is no adjacent segment, the right/left control points next to the right/left endpoints can be moved independently. For example, in the labelled diagram, the control point 4 is connected to control point 6, but control points 2 and 8 are not connected to another control point.

Similarly, moving the slur height handle causes the slur height handle on any adjacent segments to move the same amount in the opposite direction. For example, if you move the slur height handle on the middle segment of a slur with three segments, all three slur height handles are moved.

EXAMPLE

The left control point is selected.
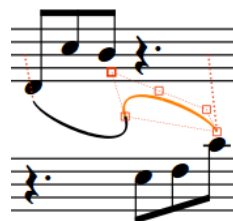
Moving the selected left control point upwards and to the left causes the right control point on the adjacent segment to move downwards and to the right.

Moving slurs and slur handles graphically

You can move whole slurs and individual slur handles graphically, for example, if you want to change the shape of individual slurs or move individual slur endpoints. This only changes the appearance of slurs, and does not change the rhythmic positions to which they are attached.

PROCEDURE

1. In Engrave mode, select the whole slurs or individual slur handles you want to move in any of the following ways:

   - **Ctrl/Cmd**-click multiple slurs.

   - Select a whole slur and press **Tab** to cycle through the handles until the one you want to move is selected.

   - Click the handle you want to move.

   - **Ctrl/Cmd**-click individual handles on multiple slurs.

   TIP

   You can show handles on all items, not just selected items, by choosing **Engrave** > **Show Handles** > **Always**. This can make it easier to select individual handles on multiple items.

2. Move the slurs or handles in any of the following ways:

   - Press **Alt-Right Arrow** to move handles to the right.

   - Press **Alt-Left Arrow** to move handles to the left.

   - Press **Alt-Up Arrow** to move slurs or handles upwards.

   - Press **Alt-Down Arrow** to move slurs or handles downwards.

     TIP

     If you want to move items by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

   - Click and drag the slurs upwards/downwards.

   - Click and drag the handles in any direction.

   NOTE

   You cannot move whole slurs to the right/left, you can only move them upwards/downwards.

3. Optional: Repeat steps 1 and 2 for any other slurs or slur handles you want to move.

RESULT

The selected slurs or slur handles are moved. Depending on the handles you selected, this can change the shape of the corresponding slurs.

TIP

The following properties in the **Slurs** group of the Properties panel are activated automatically when you move the corresponding slur handles:

- **Start offset** moves the left endpoints of slurs. **X** moves them horizontally, **Y** moves them vertically.

- **End offset** moves the right endpoints of slurs. **X** moves them horizontally, **Y** moves them vertically.

- **Start handle offset** moves the left control points of slurs. **X** moves them horizontally, **Y** moves them vertically.

- **End handle offset** moves the right control points of slurs. **X** moves them horizontally, **Y** moves them vertically.

For example, if you move a whole slur upwards and to the right, all of its handles are moved so all properties are activated. You can also use these properties to change the shape of individual slurs by changing the values in the value fields.

Deactivating the properties resets the corresponding handles on the selected slurs to their default positions.

RELATED LINKS
Slur height on page 680
Slur shoulder offset on page 682

Changing the angle of slurs

You can change the angle or rotation of individual slurs without affecting their overall shape.

This is useful, for example, if you want one end of a slur to start higher after a system break than its default position, as you can change the rotation of the slur while keeping all slur handles on the slur in the same positions relative to each other.

PROCEDURE

1. In Engrave mode, select an endpoint on the slurs whose angle you want to change.

TIP

- You can select individual handles on multiple slurs by holding down **Ctrl/Cmd** and clicking.
- You can show handles on all items, not just selected items, by choosing **Engrave** > **Show Handles** > **Always**. This can make it easier to select individual handles on multiple items.

2. **Alt**-click and drag the endpoints in any direction.

NOTE

You cannot use the keyboard to change the angles of individual slurs.

RESULT

The angle or rotation of the selected slurs is changed without affecting their shape.

EXAMPLE

Endpoint moved without holding **Alt**

Endpoint moved while holding **Alt**

Changing the thickness of slurs

You can change the thickness of individual slurs, independently of your project-wide settings. You can also change the thickness of the middle of slurs independently of the ends of slurs.

PROCEDURE

1. In Engrave mode, select the slurs whose thickness you want to change.

2. In the Properties panel, activate the following properties, individually or together, in the **Slurs** group:

   - **End thickness**

   - **Middle thickness**

3. Change the values in the value fields in any of the following ways:

   - Enter values into the value fields.

   - Click the arrows beside the value fields.

RESULT

Increasing the values makes the corresponding part of the selected slurs thicker, decreasing the values makes the corresponding part of the selected slurs thinner.

TIP

- Deactivating the properties returns the corresponding part of the selected slurs to their default thickness.

- You can change the default thickness of all slurs project-wide on the **Slurs** page in **Engrave** > **Engraving Options**.

RELATED LINKS
Project-wide engraving options for slurs on page 667

Short slurs that cover large pitch ranges

When short slurs span large pitch ranges, they are significantly rotated to compensate. This can make the ends of short slurs appear too angular.

You can move the control point handles of slurs to improve their curves.

Of the three examples, the middle slur has the smoothest curve. The handles on the slur in the example have been moved poorly, making the curve far too angular.

In the bottom row, the positions of the handles are shown to indicate how the curve above was created.

Short slur spanning a large pitch range, without adjustment

The same slur with some shape adjustment, making the curve smoother

The same slur again with poor adjustment, making the curve too angular

| Default slur handle placement | Slur handle placement to create the corresponding slur | Slur handle placement to create the corresponding slur |

TIP

When adjusting slur ends, you can achieve the best results using the following guidelines:

- The control point at the lower end of the slur does not extend outside the width of the slur, as marked by its neighboring endpoint.

- The control point at the higher end of the slur does not form an angle greater than 90 degrees relative to the endpoints. You can use the dashed lines to help you judge this.

You can adjust the shape of short slur ends in different ways:

- Project-wide, by increasing the value for **Offset shoulders by fraction of half length of short slur**, which you can find by clicking **Advanced Options** in the **Design** section of the **Slurs** page in **Engrave** > **Engraving Options**.

- Individually, by activating **Start handle offset** and **End handle offset** in the Properties panel in Engrave mode, and changing their **X** values.

- Individually, by moving the handles of slurs in Engrave mode.

RELATED LINKS
Slurs in Engrave mode on page 675
Project-wide engraving options for slurs on page 667
Moving slurs and slur handles graphically on page 677

Slur height

The height of slurs determines how far above/below notes slurs extend vertically.

You can change values for the heights of all slurs project-wide on the **Slurs** page in **Engraving Options**. You can also change the height of individual slurs in Engrave mode.

Increasing the height of slurs makes them extend further from the staff. This gives them a rounder shape, which takes up more vertical space. Where vertical space is limited, there should be a balance between how curved slurs are, which can help readability for players, and ensuring staves do not overlap.

| A long slur with default height | A long slur with increased height |

| A long flat slur with default height | A long flat slur with increased height |

> **TIP**
>
> You can find options that change project-wide values for the height of short slurs, short flat slurs, long slurs, and long flat slurs by clicking **Advanced Options** in the **Design** section of the **Slurs** page in **Engrave** > **Engraving Options**.

RELATED LINKS

Changing the height of slurs

You can change the height of individual slurs independently of your project-wide settings, for example, to reduce the height of a particularly long slur.

PROCEDURE

1. In Engrave mode, select the slur height (middle) handle of the slurs whose height you want to change.

   > **TIP**
   >
   > You can show handles on all items, not just selected items, by choosing **Engrave** > **Show Handles** > **Always**. This can make it easier to select individual handles on multiple items.

2. Move the slur height handles in any of the following ways:

   - Press **Alt-Up Arrow** to move them upwards.
   - Press **Alt-Down Arrow** to move them downwards.

     > **TIP**
     >
     > If you want to move handles by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Up Arrow**.

   - Click and drag them upwards/downwards.

RESULT

The height of the selected slurs is changed.

> **NOTE**
>
> - To maintain a visually pleasing and symmetrical curve when changing the height of slurs manually, you may need to move slur height handles to the right/left by a small amount, as well as upwards/downwards.
> - Moving slur height handles to the right/left affects the shape of the whole slur.
> - You can find options controlling the default height of all slurs project-wide by clicking **Advanced Options** in the **Design** section of the **Slurs** page in **Engrave** > **Engraving Options**. There are separate settings for short slurs and long slurs.

RELATED LINKS

Slur shoulder offset

Slur shoulders affect the angles of the curves of slurs as they taper towards an endpoint, because the tapered ends often approach noteheads at a steeper angle than that of a slur's arch.

Increasing the shoulder offset makes the onset of the curve shallower, whereas decreasing the shoulder offset makes the onset steeper. The shoulder offset must therefore be balanced with the height of the slur in order to achieve the ideal curved shape.

A long slur with default shoulder offset of 1/5

A long slur with increased shoulder offset of 1.5

A long slur with decreased shoulder offset of 1/2

You can change the project-wide settings for the shoulder offset of slurs and the shoulder offset of flat slurs by changing the values of the following options, which you can find by clicking **Advanced Options** in the **Design** section of the **Slurs** page in **Engraving Options**.

- **Offset shoulders by fraction of half length of short slur**
- **Offset shoulders by fraction of half length of long slur**
- **Offset shoulders by fraction of half length of flat slur**

You can adjust the shoulders of individual slurs in Engrave mode.

RELATED LINKS
Slur height on page 680
Changing the shoulder offset of slurs on page 682

Changing the shoulder offset of slurs

You can adjust the shoulders of individual slurs, independently of your project-wide settings, by moving their control point handles. You can move each control point independently.

PROCEDURE

1. In Engrave mode, select one of the control point handles on each of the slurs whose shoulders you want to adjust in any of the following ways:

    - Select a whole slur and press **Tab** to cycle through the handles until the one you want to move is selected.
    - Click the handle you want to move.
    - **Ctrl/Cmd**-click individual handles on multiple slurs.

    TIP

    You can show handles on all items, not just selected items, by choosing **Engrave** > **Show Handles** > **Always**. This can make it easier to select individual handles on multiple items.

2. Move the handles in any of the following ways:

    - Press **Alt-Right Arrow** to move them to the right.
    - Press **Alt-Left Arrow** to move them to the left.
    - Press **Alt-Up Arrow** to move them upwards.
    - Press **Alt-Down Arrow** to move them downwards.

> **TIP**
>
> If you want to move handles by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

- Click and drag them in any direction.

3. Optional: Repeat steps 1 and 2 for the other control point handle on the slurs whose shoulders you want to adjust.

RESULT

The shoulder offset of the selected slurs is changed.

> **TIP**
>
> The following properties in the **Slurs** group of the Properties panel are activated automatically when you move the corresponding slur handles:
>
> - **Start handle offset** moves the left control points of slurs. **X** moves them horizontally, **Y** moves them vertically.
>
> - **End handle offset** moves the right control points of slurs. **X** moves them horizontally, **Y** moves them vertically.
>
> You can also use these properties to change the shoulder offset of individual slurs by changing the values in the value fields.
>
> Deactivating the properties resets the corresponding handles on the selected slurs to their default positions.

> **TIP**
>
> You can find options controlling the default shoulder offset of all slurs project-wide by clicking **Advanced Options** in the **Design** section of the **Slurs** page in **Engrave** > **Engraving Options**. There are separate settings for short slurs and long slurs.

RELATED LINKS

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.

NOTE

You can adjust the precise shapes of individual slurs, and each slur segment, in Engrave mode using the square handles on each slur.

RELATED LINKS
Slurs in Engrave mode on page 675
Moving slurs and slur handles graphically on page 677

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, independently of your project-wide settings.

PROCEDURE

1. Select the slurs whose curvature direction you want to change. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate **Direction** in the **Slurs** group.

3. Choose one of the following options:

   - **Up**
   - **Down**
   - **Up/Down** (mirrored S-shape)
   - **Down/Up** (S-shape)

RESULT

The curvature direction of the selected slurs is changed.

TIP

- You can adjust the precise shapes of slurs, and each slur segment, in Engrave mode using the handles on each slur.

- You can change the default curvature direction behavior of all slurs project-wide on the **Slurs** page in **Engrave** > **Engraving Options**.

RELATED LINKS
Slur curvature direction on page 683
Slurs in Engrave mode on page 675
Moving slurs and slur handles graphically on page 677

Slur styles

There are different styles of slurs available in Dorico, 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.
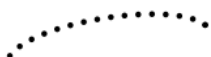
Half-dashed start

>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.
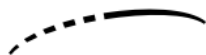
Half-dashed end

>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.
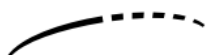
Editorial

>Slurs appear as solid black lines, but with a smaller vertical line intersecting them exactly halfway along their length. Used to show that slurs were added by the editor and was not present in the original source.
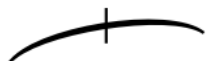
NOTE

You can set the precise parameters of each of these options project-wide on the **Slurs** page in **Engrave** > **Engraving Options**. For example, you can change the length and width of the stroke in **Editorial** slurs, the diameter of dots and length of dashes, and the sizes of the gaps between dots and dashes.

RELATED LINKS

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. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate **Style** in the **Slurs** group.

3. Select one of the following options from the menu:

   - **Solid**
   - **Dashed**
   - **Dotted**
   - **Half-dashed start**
   - **Half-dashed end**
   - **Editorial**

RELATED LINKS
Slur styles on page 685

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, independently of your project-wide setting.

Short slurs, that is, slurs between only a few notes, can look odd as flat slurs, so it may not be appropriate to select the flat curvature style project-wide. However, it would likewise be unusual only to use flat slurs once or twice in a project.

NOTE

We recommend that you avoid changing the curvature style for only one or two slurs in a project. It can be more effective to modify them rather than changing their curvature style, for example, by making an individual slur thicker/thinner, adjusting the shoulder offset of slurs, or adjusting their height using their slur height handles in Engrave mode.

PROCEDURE

1. Select the slurs whose curvature style you want to change. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate **Curvature style** in the **Slurs** group.

3. Choose one of the following options:

   - **Curved**
   - **Flat**

RESULT

The curvature style of the selected slurs is changed.

TIP

You can change the curvature style of all slurs project-wide in the **Design** section of the **Slurs** page in **Engrave** > **Engraving Options**.

Slur collision avoidance

By default, Dorico automatically adjusts the shape and position of slurs to avoid collisions with items under their arc.

This means that if a notehead under a slur is either higher than the others under a slur curving upwards, or lower than the others under a slur curving downwards, the curvature of the slur is adjusted to avoid the collision and keep the notehead under the slur. You can manually disable collision avoidance for individual slurs.

In the **Avoiding Collisions** section of the **Slurs** page in **Engrave** > **Engraving Options**, you can choose options for how slurs are adjusted to avoid collisions, such as choosing a balance between changing the shape of slurs to compensate or moving the endpoints of a slur, and how asymmetrical slurs are allowed to be.

Slur with collision avoidance activated (default)   Slur with collision avoidance deactivated

Collision avoidance for cross-staff slurs

In the **Avoiding Collisions** section of the **Slurs** page in **Engrave** > **Engraving Options**, you can activate/deactivate collision avoidance for cross-staff slurs.

This avoids collisions, but due to the increased complexity in positioning slurs across staves, further manual adjustment in Engrave mode might be required.

NOTE

This setting does not apply to S-shaped slurs between staves, which do not have any collision avoidance.

Slurs bisecting flat accidentals

According to conventions in published music, slurs can bisect the stems of flat accidentals, but not sharps or naturals, to save vertical space.

You can choose not to allow slurs to bisect flat signs, or alter the maximum amount of the stems of flat signs that can protrude above slurs, on the **Slurs** page in **Engraving Options**.

Disabling slur collision avoidance for individual slurs

You can stop individual slurs from automatically adjusting to avoid collisions, independently of your project-wide settings.

PROCEDURE

1. In Engrave mode, select the slurs for which you want to deactivate collision avoidance.

2. In the Properties panel, activate **Disable auto curve adjustment** in the **Slurs** group.

RESULT

Slurs do not avoid collisions when the property is activated.

Deactivating **Disable auto curve adjustment** allows the selected slurs to avoid collisions again.

RELATED LINKS
Slur collision avoidance on page 687

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.

In Engrave mode, you can move and edit each slur part separately. This allows you to adjust the start/end height of each slur part independently on each system.

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.

RELATED LINKS
Slurs in Engrave mode on page 675
Moving slurs and slur handles graphically on page 677

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.

You can change these values on the **Timing** page in **Play** > **Playback Options**.

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
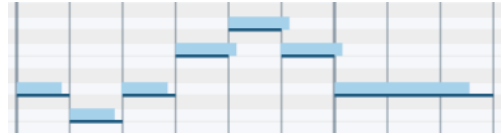
The same phrase in the piano roll in Play mode

RELATED LINKS

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.
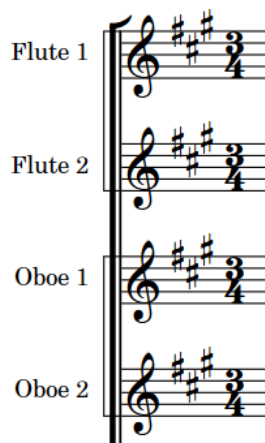
Examples of staff labels on the first system in a flow

In Dorico, 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 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, which is shown at the top left of the first pages 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 automatically. If the player changes instrument partway through a system, the name of the new instrument is shown at its entry 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 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, you can improve the accuracy of the automatic instrument selection by changing instrument names in the Cubase score editor to the same English instrument names that Dorico uses before exporting the file.

Instrument names in staff labels

Staff labels use the instrument names set for each instrument, and instruments with the same instrument names are automatically numbered. 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 or short instrument names in each layout independently.

- **Full** staff labels use full instrument names.

- **Abbreviated** staff labels use short instrument names.

You can change the full and short instrument names for each instrument in the **Edit Instrument Names** dialog in Setup mode.

NOTE

Changing instrument names does not change the name shown at the top of each part layout, as that uses the layout name of the player. You can change the layout name in Setup mode.

It is usual to number instruments when there are multiple players holding the same type of instrument. For example, if there are four horn players in an orchestra, they are usually called Horn 1, Horn 2, Horn 3, and Horn 4.

In Dorico, instruments are automatically numbered. This also applies to players holding multiple instruments. 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

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 wanted the second flute to double second piccolo rather than first piccolo, you can swap the piccolo parts so that the player holding Flute 2 also holds Piccolo 2.

Staff label fonts

Staff label use paragraph styles to format their fonts, including their alignment and formatting. When staff labels are split, such as when the instrument name and instrument number have different vertical positions, you can format each part separately.

In Dorico, there are three default paragraph styles for staff labels:

- **Staff Labels**

  The default style used for staff labels that have the instrument name and number aligned and together. It is also used for the group labels on divisi staves and for instrument names aligned between multiple identical instruments.

- **Staff Labels (Inner)**

  Used for individual staves within divisi groups and for instrument numbers when instrument names are aligned between multiple identical instruments.

- **Staff Labels (Percussion Grid)**

  Used for percussion kits in layouts using the grid presentation.

You can edit each paragraph style independently of each other, for example, if you want outer staff labels to be left-aligned but inner staff labels to be right-aligned, in the **Paragraph Styles** dialog.

TIP

You can further edit the appearance and alignment of staff labels on divisi staves at each individual divisi change.

Project-wide engraving options for staff labels

You can find options for the project-wide appearance and position of staff labels on the **Staff Labels** page in **Engraving Options**.

For example, you can change the distance between staff labels and the systemic barline, whether instruments are numbered using Arabic or Roman numerals, and whether vocal staff labels are uppercase or title case.

There are musical examples for many options to demonstrate how they affect the appearance of your music.

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

- Press **Ctrl/Cmd-Shift-E** in any mode.

- Choose **Engrave** > **Engraving Options** in Engrave mode.

You can then click **Staff Labels** in the page list on the left of the dialog.

NOTE

You can change the length of staff labels shown on systems for each layout independently on the **Staves and Systems** page in **Setup** > **Layout Options**.

RELATED LINKS

Changing the staff label numbering style

You can change the staff label numbering style of solo and section players independently, for example, if you want solo players to use Arabic numbers, such as "2", and section players to use Roman numerals, such as "II".

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Engraving Options**.
   The **Engraving Options** dialog opens.

2. Click **Staff Labels** in the page list.

3. Choose one of the following options for **Numbering style for solo players**:

   - **Arabic numerals**

   - **Roman numerals**

4. Choose one of the following options for **Numbering style for section players**:

   - **Arabic numerals**

   - **Roman numerals**

5. Click **Apply**, then **Close**.

RESULT

Instruments held by solo and section players use the selected numbering style in all layouts project-wide.

Showing vocal staff labels in uppercase/title case

You can show the staff labels on vocal staves entirely in uppercase or in title case.

Many European publishers prefer vocal staves to have entirely uppercase staff labels, but this is not true of all publishers.

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Engraving Options**.
   The **Engraving Options** dialog opens.

2. Click **Staff Labels** in the page list.

3. For **Labels for vocal staves**, choose one of the following options:

   - **Shown in uppercase**

   - **Shown in title case**

4. Click **Apply**, then **Close**.

RESULT

Staff labels on all vocal staves project-wide use either uppercase or title case letters.

Changing the length of staff labels project-wide

You can show full, abbreviated, or no instrument names in staff labels project-wide depending on their context in each layout independently.

By default in full score layouts, full staff labels are shown on the first system of each flow and abbreviated staff labels are shown on subsequent systems. By default in part layouts, staff labels are not shown on any systems.

PROCEDURE

1. In Setup mode, choose **Setup** > **Layout Options**.
The **Layout Options** dialog opens.

2. In the **Layouts** list, select the layouts in which you want to change the length of instrument names in staff labels in one of the following ways:

- Click **Select All**.
- Click **Select All Full Score Layouts**.
- Click **Select All Part Layouts**.
- Click **Select All Custom Score Layouts**.
- **Ctrl/Cmd**-click individual layouts.
- **Shift**-click adjacent layouts.

By default, the layout currently open in the music area is selected when you open the dialog.

3. Select **Staves and Systems** from the **Category** menu.

4. 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

The staff labels are changed project-wide in the selected layouts.

TIP

You can change both full and short instrument names in the **Edit Instrument Names** dialog.

NOTE

Your per-layout settings for staff labels apply to each flow, not the whole project. For example, if you want to show full staff labels on the first system in the first flow in your project, but do not

want to show full staff labels on the first system of subsequent flows, you must change the staff labels at the start of each subsequent flow individually.

Changing the minimum indent for systems with staff labels

You can change the default minimum indent for all systems that show staff labels project-wide to optimize horizontal space. You can have different minimum indents in each layout independently.

PROCEDURE

1.   In Setup mode, choose **Setup** > **Layout Options**.

     The **Layout Options** dialog opens.

2.   In the **Layouts** list, select the layouts whose minimum indent for systems with staff labels you want to change in one of the following ways:

     ●   Click **Select All**.

     ●   Click **Select All Full Score Layouts**.

     ●   Click **Select All Part Layouts**.

     ●   Click **Select All Custom Score Layouts**.

     ●   **Ctrl/Cmd**-click individual layouts.

     ●   **Shift**-click adjacent layouts.

     By default, the layout currently open in the music area is selected when you open the dialog.

3.   Select **Staves and Systems** from the **Category** menu.

4.   In the **Staff Labels** section, change the value for **Minimum indent for systems with staff labels** in any of the following ways:

     ●   Enter a value into the value field.

     ●   Click the arrows beside the value field.

5.   Click **Apply**, then **Close**.

RESULT

The minimum indent on all systems that show staff labels is changed project-wide in the selected layouts.

Changing the length of staff labels at specific positions

You can change whether staff labels at specific points show full, abbreviated, or no instrument names, independently of your per-layout settings. For example, if you want full staff labels at the start of the first flow but abbreviated staff labels at the start of subsequent flows, or if you want

to show staff labels in choral music only on systems that contain more complicated parts, solo lines, or divisi lines.

PREREQUISITE

You have inserted a system/frame break at the position from which you want to change the length of instrument names in staff labels.

Signposts are shown for system/frame breaks.

PROCEDURE

1. In Engrave mode, select the system/frame break signpost at the position where you want to change the staff labels.

2. In the Properties panel, activate **Staff labels** in the **Format** group.

3. Select one of the following options from the menu:
   - **Full**
   - **Abbreviated**
   - **None**

RESULT

The length of the instrument names shown in the staff labels at the system break is changed. Horizontal spacing is automatically adjusted so the system fills the width of the music frame.

Deactivating the property returns any selected system break signposts to your per-layout settings.

EXAMPLE

Full staff labels shown   No staff labels shown

RELATED LINKS

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 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.

You can change the option for **Show transposition** to **Follow Layout Options** in the **Edit Instrument Names** dialog for each instrument.

RELATED LINKS
Edit Instrument Names dialog on page 68
Changing instrument names on page 70
Hiding/Showing instrument transpositions in staff labels on page 697

Hiding/Showing instrument transpositions in staff labels

You can hide/show instrument transpositions in staff labels in each layout in your project independently. For example, you can hide instrument transpositions in staff labels in full score layouts but show them in part layouts.

PROCEDURE

1. In Setup mode, choose **Setup** > **Layout Options**.
   The **Layout Options** dialog opens.

2. In the **Layouts** list, select the layouts in which you want to hide/show instrument transpositions in staff labels in one of the following ways:
   - Click **Select All**.
   - Click **Select All Full Score Layouts**.
   - Click **Select All Part Layouts**.
   - Click **Select All Custom Score Layouts**.
   - **Ctrl/Cmd**-click individual layouts.
   - **Shift**-click adjacent layouts.

   By default, the layout currently open in the music area is selected when you open the dialog.

3. Select **Staves and Systems** from the **Category** menu.

4. 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 project-wide in the selected layouts when the corresponding checkbox is activated, and hidden when the corresponding checkbox is deactivated. For example, if you want to show instrument transpositions in full staff labels but hide them in abbreviated staff labels, you can activate **Show in full staff labels** and deactivate **Show in abbreviated staff labels**.

RELATED LINKS
Instrument transpositions in staff labels on page 696
Changing instrument names on page 70

Changing the position of instrument transpositions in full staff labels

You can change the position of instrument transpositions in staff labels. They can be shown before/after instrument names in each layout independently of other layouts.

PROCEDURE

1. In Setup mode, choose **Setup** > **Layout Options**.

    The **Layout Options** dialog opens.

2. In the **Layouts** list, select the layouts whose instrument transposition position you want to change in one of the following ways:

    - Click **Select All**.
    - Click **Select All Full Score Layouts**.
    - Click **Select All Part Layouts**.
    - Click **Select All Custom Score Layouts**.
    - **Ctrl/Cmd**-click individual layouts.
    - **Shift**-click adjacent layouts.

    By default, the layout currently open in the music area is selected when you open the dialog.

3. Select **Staves and Systems** from the **Category** menu.

4. 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 project-wide in the selected layouts.

TIP

You can change settings for other layouts before closing the dialog.

RELATED LINKS

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

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. Staff labels for grids use a smaller font and a different paragraph style than normal staff labels.	
Single-line instruments	Multiple instrument names: one for each kit instrument, positioned beside the corresponding single-line staff. Staff labels for single-line instruments use the same font as for normal 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 and 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 normal instruments.

NOTE

Smaller staff labels for each line in grid presentations use the **Staff Labels (Percussion Grid)** paragraph style. You can edit this paragraph style in the **Paragraph Styles** dialog.

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 higher/lower than can 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 you can change various aspects of staves in **Setup** > **Layout Options**.

RELATED LINKS
Project-wide layout options for staves on page 700
Clefs on page 443
Octave lines on page 448
Percussion kit presentation types on page 788

Project-wide layout options for staves

You can change settings that affect staves project-wide independently for each layout.

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
Changing the staff size in layouts on page 702
System objects on page 707
Changing the positions of system objects on page 708
Hiding/Showing empty staves on page 268
Showing system dividers on page 701
Edit Font Styles dialog on page 275
Brackets and braces on page 422

Showing system dividers

You can show system dividers between systems in flows that include a set minimum number of players. You can change whether system dividers are shown, and change the minimum number of players for which system dividers are shown, in each layout independently.

A system divider between two systems in a string quartet

PROCEDURE

1. In Setup mode, choose **Setup** > **Layout Options**.
    The **Layout Options** dialog opens.

2. In the **Layouts** list, select the layouts in which you want to show system dividers in one of the following ways:

    - Click **Select All**.
    - Click **Select All Full Score Layouts**.
    - Click **Select All Part Layouts**.
    - Click **Select All Custom Score Layouts**.
    - **Ctrl/Cmd**-click individual layouts.
    - **Shift**-click adjacent layouts.

3. Select **Staves and Systems** from the **Category** menu.

4. In the **System Dividers** section, activate **Show system dividers for flows with at least [X] players**.

5. Optional: Change the minimum number of players for which you want to show system dividers in any of the following ways:

    - Enter a value into the value field.
    - Click the arrows beside the value field.

6. Optional: Choose one of the following options for **Appearance**:

- **Default**

- **Long**

- **Extra long**

7. Click **Apply**, then **Close**.

RESULT

System dividers are shown between systems in the selected layouts in every flow that contains the minimum number of players you set.

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 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, 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 707

Changing the staff size in layouts

You can change the staff size project-wide for each layout in your project. 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. In Setup mode, choose **Setup** > **Layout Options**.
The **Layout Options** dialog opens.

2. In the **Layouts** list, select the layouts whose staff size you want to change in one of the following ways:

- Click **Select All**.
- Click **Select All Full Score Layouts**.
- Click **Select All Part Layouts**.
- Click **Select All Custom Score Layouts**.
- **Ctrl/Cmd**-click individual layouts.
- **Shift**-click adjacent layouts.

By default, the layout currently open in the music area is selected when you open the dialog.

3. Select **Page Setup** from the **Category** menu.

4. In the **Space Size** section, select one of the following values from the **Rastral size** menu:

- **Size 0 (9.2 mm)**
- **Size 1 (7.9 mm)**
- **Size 2 (7.4 mm)**
- **Size 3 (7.0 mm)**
- **Size 4 (6.5 mm)**
- **Size 5 (6.0 mm)**
- **Size 6 (5.5 mm)**
- **Size 7 (4.8 mm)**
- **Size 8 (3.7 mm)**
- **Custom**

NOTE

If you select **Custom**, you can set a custom value in the **Space size** field, expressed in millimeters. You can change the value in the value field in any of the following ways:

- Enter a value into the value field.
- Click the arrows beside the value field.

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 in the selected layouts is changed project-wide.

TIP

You can also change the staff size from specific points in layouts, and change the size of individual staves.

RELATED LINKS
Edit Font Styles dialog on page 275
Brackets and braces on page 422
System objects on page 707
Changing the staff size from specific points on page 704
Changing the size of individual staves on page 705

Changing the staff size from specific points

You can change the staff size of all staves from specific points in layouts. For example, you can have smaller staves only on pages with more staves, and larger staves on other pages with fewer staves.

PREREQUISITE

You have inserted a system/frame break at the position from which you want to change the staff size.

Signposts are shown for system/frame breaks.

NOTE

If the size of system object font styles is set to **Staff-relative**, the staff size of the top staff in each instrument family group affects the size of system objects if they are shown above that bracketed group. Font styles that are set to **Absolute** are unaffected by staff size.

PROCEDURE

1.   In Engrave mode, select the signpost of the system/frame break from which you want to change the staff size.

2.   In the Properties panel, activate **Space size** in the **Format** group.

3.   Change the value in the value field in any of the following ways:

    ●   Enter a value into the value field.

    ●   Click the arrows beside the value field.

RESULT

Increasing **Space size** increases the staff size of all staves in the layout. Decreasing the value decreases the staff size.

The staff size is changed until the next change in staff size or the end of the flow, whichever comes first.

By default, the next flow in your project uses your project-wide staff size for the current layout.

RELATED LINKS
Staff size on page 702
Inserting system breaks on page 273
Inserting frame breaks on page 270
Hiding/Showing system break signposts on page 274
Hiding/Showing frame break signposts on page 272
Edit Font Styles dialog on page 275
Brackets and braces on page 422
System objects on page 707

Changing the size of individual staves

You can change the staff size of individual staves 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.

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.

PROCEDURE

1. Select an item on the staff whose size you want to change. You can do this in Write mode and Engrave mode.

   NOTE

   You can only change the size of a single staff at a time.

2. Change the staff size in any of the following ways:

   - Choose **Edit** > **Staff Size** > **60%**.

   - Choose **Edit** > **Staff Size** > **75%**.

   - Choose **Edit** > **Staff Size** > **100%**.

   - Choose **Edit** > **Staff Size** > **Custom Staff Size**.

   TIP

   You can also choose these options 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 staff size of the selected staff is changed. This can be used in combination with the other ways of changing staff size, such as changing the size of all staves in the layout or changing the size of staves from a specific point.

RELATED LINKS

Custom Staff Size dialog on page 706
Changing the staff size in layouts on page 702
Changing the staff size from specific points on page 704
Edit Font Styles dialog on page 275
Brackets and braces on page 422
System objects on page 707
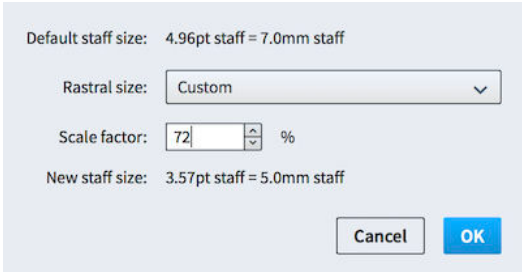
Custom Staff Size dialog

In the **Custom Staff Size** dialog, you can 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 millimeters.

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 millimeters.

RELATED LINKS

Changing the size of individual staves on page 705

Changing the thickness of staff lines

You can change the thickness of staff lines project-wide.

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Engraving Options**.
   The **Engraving Options** dialog opens.
2. Click **Staves** in the page list.
3. Change the value for **Staff line thickness** in any of the following ways:
   - Enter a value into the value field.
   - Click the arrows beside the value field.
4. Click **Apply**, then **Close**.

RESULT

The thickness of staff lines project-wide is changed. Increasing the value for **Staff line thickness** makes staff lines thicker, decreasing the value makes staff lines thinner.

System objects

System objects are items that apply to all staves in the system, but are not necessary to show on every staff. For example, tempo marks and rehearsal marks are important for all players to see, but would cause an orchestral full score to appear very cluttered and hard to read if they were shown on every staff.

In Dorico, the following items are considered system objects:

- Rehearsal marks
- Tempo marks
- Repeat endings
- System text
- Time signatures shown above the staff

You can show system objects at multiple positions in each system by showing them above multiple instrument families. For example, if you want to show system objects at different positions in the system, 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 the bracket grouping on the **Brackets and Braces** page in **Engrave** > **Engraving Options**.
- 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 the positions of system objects

You can change the positions of system objects in each layout independently by changing the instrument families above which system objects are shown. System objects include rehearsal marks, tempo marks, and repeat endings.

PROCEDURE

1. In Setup mode, choose **Setup** > **Layout Options**.

   The **Layout Options** dialog opens.

2. In the **Layouts** list, select the layouts in which you want to change the instrument families above which system objects appear in one of the following ways:

   - Click **Select All**.

   - Click **Select All Full Score Layouts**.

   - Click **Select All Part Layouts**.

   - Click **Select All Custom Score Layouts**.

   - **Ctrl/Cmd**-click individual layouts.

   - **Shift**-click adjacent layouts.

   By default, the layout currently open in the music area is selected when you open the dialog.

3. Select **Staves and Systems** from the **Category** menu.

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 appear below the bottom staff in the system in addition to appearing above the selected instrument families.

NOTE

System objects are only shown above instrument families that are bracketed or braced together. You can change the bracket grouping on the **Brackets and Braces** page in **Engrave** > **Engraving Options**.

RELATED LINKS
System objects on page 707
Changing bracket grouping according to ensemble type on page 424

System indents

Systems 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, however, in modern use this is not always necessary.

In Dorico, 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 increases the indent on that system to ensure the staff label remains legible and is not cut off on the left edge or collide 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 695
Changing the first system indent on page 709
Changing the start/end position of systems on page 293

Changing the first system indent

By default in Dorico, the first system in part layouts is indented. You can change the indent for the first system in each layout independently.

PROCEDURE

1. In Setup mode, choose **Setup** > **Layout Options**.
   The **Layout Options** dialog opens.

2. In the **Layouts** list, select the layouts whose first system indent you want to change in one of the following ways:

   - Click **Select All**.
   - Click **Select All Full Score Layouts**.
   - Click **Select All Part Layouts**.
   - Click **Select All Custom Score Layouts**.
   - **Ctrl/Cmd**-click individual layouts.
   - **Shift**-click adjacent layouts.

   By default, the layout currently open in the music area is selected when you open the dialog.

3. Select **Staves and Systems** from the **Category** menu.

4. In the **Staff Labels** section, change the value for **Indent first system of flow by** in any of the following ways:

   - Enter a value into the value field.
   - Click the arrows beside the value field.

5. Click **Apply**, then **Close**.

RESULT

The indent of the first system is changed project-wide in the selected layouts. This applies to all flows.

RELATED LINKS
System indents on page 709
Changing the minimum indent for systems with staff labels on page 695

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, 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.

Stem direction

In Dorico, 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.

TIP

You can change the default stem direction for notes and beam groups on the middle lines of staves, and equally balanced chords, in the **Stems** section of the **Notes** page in **Engraving Options**. You can also choose whether they follow your default stem direction or change according to the musical context.

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 treats notes as the only voice on the staff until you input more voices.

Single notes in multiple voices

When there are multiple voices on a staff and all voices contain notes, the stem direction of notes is determined by the stem direction of their voice. Notes in up-stem voices have up stems, and notes in down-stem voices have down stems. This applies even when the stems of notes would normally point in the other direction, based on their position on the staff.

NOTE

The order in which notes appear between different up-stem voices and different down-stem voices depends on their pitch and your settings on the **Voices** page in **Write** > **Notation Options**. You can also change the voice column index of notes individually.

When there are only notes in one voice for at least a whole bar, Dorico 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.

  TIP

  You can change the default stem direction for notes and beam groups on the middle lines of staves, and equally balanced chords, in the **Stems** section of the **Notes** page in **Engraving Options**. You can also choose whether they follow your default stem direction or change according to the musical context.

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.

  TIP

  You can change the default stem direction for notes and beam groups on the middle lines of staves, and equally balanced chords, in the **Stems** section of the **Notes** page in **Engraving Options**. You can also choose whether they follow your default stem direction or change according to the musical context.

Changing the default stem direction behavior of notes on the middle line of staves

The stems of notes on the middle lines of staves can point upwards/downwards. You can change their default direction, and choose whether the stem direction is determined by the stem directions of any adjacent notes, beam groups, or chords, or always uses the default direction.

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Engraving Options**.

    The **Engraving Options** dialog opens.

2. Click **Notes** in the page list.

3. In the **Stems** section, choose one of the following options for **Stem direction for notes on the middle line of the staff** in the **Stem Directions** subsection:

    -   **Determine by context**

    -   **Use default direction**

4. Optional: Choose one of the following options for **Default stem direction for notes on the middle line of the staff**:

    -   **Up**

    -   **Down**

5. Click **Apply**, then **Close**.

RELATED LINKS
Stem direction on page 711

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. You can do this in Write mode and Engrave mode.

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 803
Removing stem direction changes on page 715

Changing the default stem direction of voices

You can change the default stem direction of voices after they have been input.

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 when only one voice contains notes.

PROCEDURE

1. Select a note or chord in the voice whose stem direction you want to change. You can do this in Write mode and Engrave mode.

2. Change the default stem direction of the selected voice in one of the following ways:

   - Choose **Edit** > **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 711

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. You can do this in Write mode and Engrave mode.

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 714

Project-wide engraving options for stems

You can find options for the project-wide appearance of stems on the **Notes** page in **Engraving Options**.

The options on the **Notes** page allow you to change the design, collision avoidance, length, and thickness of stems. You can also set when stems are stem up or stem down, when stems are shortened in various contexts, and change their default stem direction when on the middle line of the staff.

Default flag design

Straight flag design

There are musical examples for many options to demonstrate how they affect the appearance of your music.

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

- Press **Ctrl/Cmd-Shift-E** in any mode.

- Choose **Engrave** > **Engraving Options** in Engrave mode.

You can then click **Notes** in the page list on the left of the dialog.

NOTE

Stems with tremolo strokes have specific options, which you can find on the **Tremolos** page in **Engraving Options**. For example, you can change the default distance between tremolo strokes and the tips of stems/different stem flags.

RELATED LINKS
Project-wide engraving options for tremolos on page 768

Stem length

The length of stems is determined by default in Dorico, according to accepted standards for the appearance of stems of notes at different positions on staves.

You can change the default settings for the length of all stems project-wide and you can lengthen/shorten individual stems in Engrave mode.

RELATED LINKS
Project-wide engraving options for stems on page 716

Lengthening/Shortening stems

You can lengthen/shorten the stems of individual notes, independently of your project-wide settings.

PROCEDURE

1. In Engrave mode, select the stems you want to lengthen/shorten.

2. Lengthen/Shorten the stems in any of the following ways:

- Press **Alt-Up Arrow** to make stems longer.

- Press **Alt-Down Arrow** to make stems shorter.

  NOTE

  If you want to lengthen/shorten stems by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Up Arrow**.

- Click and drag the square handles at the end of the stems upwards/downwards.

RESULT

The selected stems are lengthened/shortened, regardless of their stem direction. For example, selecting a down-stem note and pressing **Alt-Up Arrow** lengthens it by moving the end of the stem downwards, away from the notehead.

TIP

- **Stem adj.** in the **Notes and Rests** group of the Properties panel is activated when you lengthen/shorten stems.

  You can also use this property to lengthen/shorten stems by changing the value in the value field. However, the **Notes and Rests** group is only available when the notehead is selected rather than the stem.

  Deactivating the property resets the selected stems to their default length.

- You can change the default length of all stems project-wide in the **Stems** section of the **Notes** page in **Engrave** > **Engraving Options**. There are different options for stems in different contexts.

Hiding stems

You can shorten stems to achieve the effect of stemless noteheads.

NOTE

Stemless noteheads are not currently available in Dorico. They are planned for future versions.

PROCEDURE

1. In Engrave mode, select one of the following, depending on how you want to hide stems:

- If using the keyboard or mouse, select the stems you want to hide.

- If using the Properties panel, select the noteheads whose stems you want to hide.

2. Hide the stems in one of the following ways:

- Press **Alt-Down Arrow** until the stems cannot be seen.

> **TIP**
>
> To shorten the stem by larger increments, press **Ctrl/Cmd** as well, for example, **Ctrl/Cmd-Alt-Down Arrow**.

- Click and drag the stem tips to the notehead.
- In the Properties panel, activate **Stem adj.** in the **Notes and Rests** group, and set the value to -3.

RESULT

Stems are shortened so that they do not extend beyond the notehead.

> **NOTE**
>
> If you later change the pitch of notes whose stems you have hidden using this method, their stems can become partially visible, because stem length is automatically adjusted depending on the position of notes on the staff.

RELATED LINKS
Lengthening/Shortening stems on page 717

Split stems for altered unisons

Split stems can be used in chords containing altered unisons. They show the main body of the chord as usual, but with a stem branch coming off the main stem that connects noteheads in altered unisons to the chord.

Split stem chord

Split stems are also known as "cherry stalks" or "trees".

You can choose to show altered unisons with split stems or with single stems project-wide on the **Accidentals** page in **Notation Options**.

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

- Press **Ctrl/Cmd-Shift-N** in any mode.
- Choose **Write** > **Notation Options** in Write mode.
- Choose **Setup** > **Notation Options** in Setup mode.
- Click **Notation Options** on the right of the **Flows** panel in Setup mode.

RELATED LINKS
Altered unisons on page 357
Changing how altered unisons appear project-wide on page 358
Changing how altered unisons appear individually on page 358

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.

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, 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**.

If you do not input any tempo marks into your project, the default playback tempo is 120 bpm.

RELATED LINKS
Types of tempo marks on page 719
Metronome marks on page 728
Gradual tempo changes on page 731
Tempo mark components on page 727
Input methods for tempo marks on page 208
Positions of tempo marks on page 722
System objects on page 707
Changing the positions of system objects on page 708

Types of tempo marks

Dorico groups tempo marks into four 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).

RELATED LINKS
Tempo panel on page 210
Gradual tempo changes on page 731
Input methods for tempo marks on page 208
Tempo popover on page 209

General placement conventions for tempo marks

Tempo marks usually apply to all players and therefore to all staves. They always appear above the top staff in the score, but because they are system objects, they can also be shown at multiple positions in the score.

Tempo marks 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 or 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.

RELATED LINKS
System objects on page 707

Text in tempo marks

All types of tempo marks use text, but gradual tempo changes use a different font style to absolute, relative, and reset tempo changes. Tempo marks can have both full and abbreviated text, allowing you to show the one most appropriate in each layout.

This allows you to customize the same tempo mark depending on the requirements of the different types of layouts in your project. For example, if a tempo mark extends off the page in a part layout, you can show the abbreviated text for that tempo mark instead without affecting the length of the tempo mark in the full score layout.

You can change the appearance of fonts used for items in Dorico that use text, but are not text objects or text frames, in the **Edit Font Styles** dialog.

The following fonts are used for tempo marks:

- **Gradual Tempo Text Font**: Used for gradual tempo changes, such as *rallentando*.
- **Immediate Tempo Text Font**: Used for absolute tempo changes, such as Adagio.

RELATED LINKS
Edit Font Styles dialog on page 275
Changing tempo text on page 721
Showing abbreviated tempo text on page 721

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. You can do this in Write mode and Engrave mode.
2. In the Properties panel, enter the tempo text you want into the **Text** value field in the **Tempo** group.
3. Save your changes in any of the following ways:
   - Press **Return**.
   - Click outside of the value field.

RESULT

The tempo text for the selected tempo marks is changed.

Showing abbreviated tempo text

You can show individual tempo marks with custom abbreviated text, which you can change at any time, 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. You can do this in Write mode and Engrave mode.
2. Select the tempo marks you want to show with abbreviated text.
3. In the Properties panel, activate **Abbreviation** in the **Tempo** group.
4. Enter the text you want into the value field.
5. Activate **Abbreviate** in the **Tempo** group.
6. Activate the corresponding checkbox.

RESULT

The selected tempo marks appear with abbreviated text. This does not affect the appearance of the same tempo mark in layouts that show full tempo text as properties in Dorico 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.

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. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **Poco a poco** in the **Tempo** group.

RESULT

Poco a poco text is shown immediately after the text in the selected gradual tempo changes.

Deactivating **Poco a poco (little by little)** removes *poco a poco* text from the selected gradual tempo changes.

EXAMPLE

Rallentando with poco a poco text

Positions of tempo marks

You can change the positions of tempo marks individually and by changing their default positions project-wide. For example, you can override the default position for individual tempo marks if notes at those positions require more vertical space.

You can move tempo marks to different rhythmic positions in Write mode. They are positioned by default according to your settings in **Engraving Options**.

You can move tempo marks graphically in Engrave mode, but this does not change the rhythmic positions to which they are attached.

You can change the default positions and appearance of tempo marks project-wide on the **Tempo** page in **Engrave** > **Engraving Options**.

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 value in any of the following ways:

- Press **Alt-Right Arrow** to move them to the right.
- Press **Alt-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 according to the current rhythmic grid value.

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 725

Moving tempo marks graphically

You can move tempo marks graphically without changing the rhythmic positions to which they apply. You can move the start/end of gradual tempo changes independently, meaning you can also lengthen/shorten individual gradual tempo changes graphically.

NOTE

You cannot change the angle of gradual tempo changes.

PROCEDURE

1.   In Engrave mode, select one of the following that you want to move:

- Tempo marks
- Individual start/end handles of gradual tempo changes

TIP

You can show handles on all items, not just selected items, by choosing **Engrave** > **Show Handles** > **Always**. This can make it easier to select individual handles on multiple items.

2.   Move the tempo marks or handles in any of the following ways:

- Press **Alt-Right Arrow** to move tempo marks or handles to the right.
- Press **Alt-Left Arrow** to move tempo marks or handles to the left.

- Press **Alt-Up Arrow** to move tempo marks or whole gradual tempo changes upwards.

- Press **Alt-Down Arrow** to move tempo marks or whole gradual tempo changes downwards.

TIP

If you want to move items by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

- Click and drag them in any direction.

RESULT

The selected tempo marks, gradual tempo changes, or handles are moved to new graphical positions.

TIP

The following properties in the **Tempo** group of the Properties panel are activated automatically when you move tempo marks in the corresponding directions:

- **Start offset** moves tempo marks and the start of gradual tempo changes. **X** moves them horizontally, **Y** moves them vertically.

- **End X** moves the end of gradual tempo changes horizontally.

For example, if you move a whole gradual tempo change, both handles are moved so both properties are activated. You can also use these properties to move tempo marks and lengthen/shorten gradual tempo changes graphically by changing the values in the value fields. However, you cannot move absolute tempo marks and gradual tempo changes graphically at the same time when using these properties.

Deactivating the properties resets the selected tempo marks and gradual tempo changes to their default positions.

RELATED LINKS
Lengthening/Shortening gradual tempo changes on page 725

Changing the end position of gradual tempo changes relative to barlines

You can change how the ends of individual gradual tempo change lines are positioned relative to barlines, independently of your project-wide setting.

NOTE

This does not affect the appearance of gradual tempo changes with the text-only style.

PROCEDURE

1. In Engrave mode, select the gradual tempo changes whose end position relative to barlines you want to change.

2. In the Properties panel, activate **Barline interaction** in the **Tempo** group.

3. Choose one of the following options:

- **Stop before**

- **Continue**

RESULT

The end position of the selected gradual tempo changes is changed.

NOTE

You can change the default position of all gradual tempo change ends project-wide in the **Horizontal Position** section of the **Tempo** page in **Engrave** > **Engraving Options**.

RELATED LINKS
Project-wide engraving options for tempo marks on page 726
Changing the style of gradual tempo changes on page 731

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:

    *   Press **Shift-Alt-Right Arrow** to lengthen them.
    *   Press **Shift-Alt-Left Arrow** to shorten them.

        NOTE

        When using the keyboard, you can only move the end of gradual tempo changes. You can move the start of gradual tempo changes by moving the whole gradual tempo change, or by clicking and dragging the start handle.

    *   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 value.

NOTE

You can adjust the graphical positions of gradual tempo changes in Engrave mode.

Hiding/Showing tempo marks

You can hide/show individual tempo marks in each layout independently without changing the speed of playback, for example, if you want to show tempo marks in the full score layout but want to hide them in part layouts.

PROCEDURE

1. Select one of the following:

    *   The tempo marks you want to hide
    *   The signposts of tempo mark you want to show

You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate/deactivate the following properties in the **Tempo** group:

- **Text shown**
- **Metronome mark shown**

RESULT

When at least one of the properties is activated, the selected tempo marks are shown. It displays components according to the properties that are activated.

When neither property is activated, the selected tempo marks are hidden. Signposts are shown at their positions as they still affect the speed of playback.

RELATED LINKS

Deleting tempo marks

PROCEDURE

1. In Write mode, select the tempo marks you want to delete.
2. Delete the tempo marks in any of the following ways:

- Press **Backspace** or **Delete**.
- Choose **Edit** > **Delete**. You can also choose this option from the context menu.

RESULT

The selected tempo marks are deleted. The tempo in playback follows the previous tempo, or the default tempo of 120 bpm if there is no previous tempo.

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.

Project-wide engraving options for tempo marks

You can find options for the project-wide appearance of tempo marks on the **Tempo** page in **Engraving Options**.

The options on the **Tempo** page allow you to change the appearance of tempo marks, and their position relative to the staff, time signature changes, and other items. You can also change the appearance, thickness, and position of continuation lines relative to barlines for gradual tempo changes.

There are musical examples for many options to demonstrate how they affect the appearance of your music.

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

- Press **Ctrl/Cmd-Shift-E** in any mode.
- Choose **Engrave** > **Engraving Options** in Engrave mode.

You can then click **Tempo** in the page list on the left of the dialog.

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 change which components are shown in different types of tempo marks project-wide, and you can change which components are shown in individual tempo marks.

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 both the property and its corresponding checkbox are 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.

RELATED LINKS
Project-wide engraving options for tempo marks on page 726
Changing the type and appearance of absolute tempo changes on page 728
Adding poco a poco text to gradual tempo changes on page 722

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. You can do this in Write mode and Engrave mode.
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.

RELATED LINKS
Tempo mark components on page 727

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.

$$\quad = 176\text{--}184$$

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.

In Dorico, 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 208
Changing the metronome mark value on page 729
Showing the metronome mark value as a range on page 729
Changing the type and appearance of absolute tempo changes on page 728

Changing the metronome mark value

You can change the metronome mark value of individual absolute tempo marks after they have been input.

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. You can do this in Write mode and Engrave mode.

2.   In the Properties panel, change the value for **Tempo (bpm)** in the **Tempo** group in any of the following ways:

- Enter a value into the value field.

- Click the arrows beside the value field.

3.   Save your changes in any of the following ways:

- Press **Return**.

- Click outside of the value field.

RESULT

The metronome mark value 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

If you enter decimals, Dorico automatically rounds them up/down to the nearest whole number for the metronome mark. However, your specified value still affects the tempo in playback.

RELATED LINKS
Changing the type and appearance of absolute tempo changes on page 728

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. You can do this in Write mode and Engrave mode.

2.   In the Properties panel, activate **Tempo range (bpm)** in the **Tempo** group.

3.   Change the value in the value field in any of the following ways:

- Enter a value into the value field.

- Click the arrows beside the value field.

RESULT

The tempo range, expressed as beats per minute, is changed for the selected tempo marks.

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 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.

RELATED LINKS

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. You can do this in Write mode and Engrave mode.

2. In the Properties panel, change the value for **Relative %** in the **Tempo** group in any of the following ways:

    ●   Enter a value into the value field.

    ●   Click the arrows beside the value field.

3. Save your changes in any of the following ways:

    ●   Press **Return**.

    ●   Click outside of the value field.

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. You can do this in Write mode and Engrave mode.

2. In the Properties panel, change the value for **Final tempo %** in the **Tempo** group in any of the following ways:

    ●   Enter a value into the value field.

    ●   Click the arrows beside the value field.

3. Save your changes in any of the following ways:

    ●   Press **Return**.

    ●   Click outside of the value field.

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 · · · · · · · · · · · · ·

Rallentando with dashed line

Gradual tempo changes are considered a type of tempo mark in Dorico, 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, you can show gradual tempo changes with different styles.

- **rit.**: Shows gradual tempo changes with text only.
- **rit...**: Shows gradual tempo changes with text and a continuation line.
- **rit-e-nu-to**: Shows gradual tempo changes with the text hyphenated and separated into syllables.

You can also show gradual tempo changes with different line styles.

You can change both the style and line style of all gradual tempo changes project-wide on the **Tempo** page in **Engrave** > **Engraving Options**, and change the style and line style of individual gradual tempo changes independently of your project-wide settings.

RELATED LINKS

Changing the style of gradual tempo changes

You can change the style of individual gradual tempo changes, independently of your project-wide setting. 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. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate **Gradual style** in the **Tempo** group.

3. Select one of the following options from the menu:

   - **rit.**
   - **rit...**

- **rit-e-nu-to**

RESULT

The style of the selected gradual tempo changes is changed.

TIP

You can change the style of all gradual tempo changes project-wide on the **Tempo** page in **Engrave** > **Engraving Options**.

RELATED LINKS
Project-wide engraving options for tempo marks on page 726

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, independently of your project-wide settings.

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. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate **Line style** in the **Tempo** group.

3. Select one of the following options from the menu:

   - **Solid**

   - **Dotted**

   - **Dashed**

RESULT

The line style of the selected gradual tempo changes is changed.

TIP

You can change the default line style of all gradual tempo changes project-wide on the **Tempo** page in **Engrave** > **Engraving Options**.

RELATED LINKS
Project-wide engraving options for tempo marks on page 726
Changing the style of gradual tempo changes on page 731

Lengthening/Shortening gaps and dashes in gradual tempo changes

You can change the length of dashes and the gaps between dashes in individual gradual tempo changes, independently of your project-wide settings.

NOTE

This only applies to gradual tempo changes with dashed lines.

PROCEDURE

1. In Engrave mode, select the gradual tempo changes with dashed lines whose dash length you want to change.

2. In the Properties panel, activate the following properties, individually or together, in the **Tempo** group:

   - **Line dash length**
   - **Line dash gap**

3. Change the values in the value fields in any of the following ways:

   - Enter a value into the value field.
   - Click the arrows beside the value field.

RESULT

Increasing **Line dash length** makes dashes in gradual tempo changes longer, decreasing the value makes dashes shorter.

Increasing **Line dash gap** makes gaps between dashes in gradual tempo change lines longer, decreasing the value makes gaps shorter.

TIP

You can find options that change the default dash length for all dashed gradual tempo changes project-wide by clicking **Advanced Options** in the **Gradual Changes** section of the **Tempo** page in **Engrave** > **Engraving Options**.

For example, you can change the default dash length for dashed lines following text and dashed lines between hyphenated text separately.

RELATED LINKS

Changing the line thickness of gradual tempo changes

You can change the thickness of dashed and solid lines in gradual tempo changes individually, independently of your project-wide settings.

PROCEDURE

1. In Engrave mode, select the gradual tempo changes whose thickness you want to change.

2. In the Properties panel, activate **Line thickness** in the **Tempo** group.

3. Change the value in the value field in any of the following ways:

   - Enter a value into the value field.
   - Click the arrows beside the value field.

RESULT

Increasing the value makes dashed and solid lines thicker, decreasing the value makes dashed and solid lines thinner.

TIP

You can change the thickness of all dashed and solid gradual tempo change lines project-wide on the **Tempo** page in **Engrave** > **Engraving Options**.

RELATED LINKS

Ties

A tie is a curved line that joins two notes of the same pitch. When multiple, adjacent notes are joined with a sequence of ties, that is known as a tie chain.

Each sequence of tie chains, whether they join two notes together 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.

In Dorico, 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 separate tied notes.

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 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 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 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. You can change the minimum length of ties when they are within a single system on the **Ties** page in **Engrave** > **Engraving Options**.

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

Tie chains

When notes are longer than the maximum duration of a bar in the prevailing time signature, ties can extend over multiple bars. In Dorico, such ties are known as tie chains.

For example, if you input a note that is longer than a whole note in a 4/4 time signature, it becomes two or more notes tied together in a chain across multiple bars.

In Write mode, you can only select whole tie chains. In Engrave mode, you can select individual ties within tie chains. Any changes you make to tie chains in Write mode only affect the first tie in the chain.

NOTE

Dorico automatically adjusts tied notes in the following circumstances:

- If you change the pitch of a tied note, which includes adding or removing an accidental, the change is applied to all the notes that are tied together.
- If you add or remove an articulation, the articulation is added only to the start or the end of the tie chain as appropriate, for example, to the last note for an articulation of duration or to the first note for an articulation of force.

Articulations relative to tie chains

The positions of articulations relative to tie chains depend on the type of articulation. You can change the positions of articulations relative to tie chains project-wide and for individual tie chains.

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.
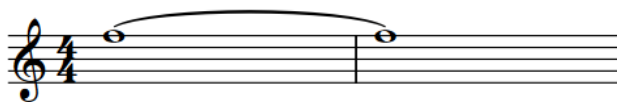
Two long notes tied together

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.

Ties can also join non-adjacent notes, notes in different voices, or notes in different staves together. In Dorico, 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.

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. In such cases, you can use **Note Spacing** in Engrave mode to adjust the spacing of individual notes at the start of systems/frames to give ties more space.

The start of a tie chain before a system break

The end of the same tie chain after a system break

Tied notes with accidentals across system 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 are treated as one note notated to fit in time signatures, cautionary accidentals at the start of new systems/frames are not shown by default. If you choose to show accidentals beside notes in tie chains at the start of new systems/frames, the position of the notes is changed to accommodate accidentals. However, this automatic position might not leave sufficient room for the part of the tie to the left of the notes to be shown with an ideal curve.

The start of a tie chain before a system break

The end of the same tie chain, with a cautionary accidental in parentheses
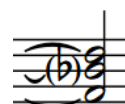
The end of the same tie chain after adjusting note spacing to give the tie beside the accidental more space

Ties across time signature changes

Ties are automatically positioned between notes that span a time signature change. If ties crossing a time signature change are joining notes in the middle of a staff, the top or bottom of

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. You can edit *laissez vibrer* ties in Engrave mode like any other tie.

RELATED LINKS
Inputting ties between non-adjacent notes on page 739
Hiding/Showing laissez vibrer ties on existing notes on page 740
Showing accidentals in parentheses on page 356
Note spacing on page 284
Adjusting note spacing at individual rhythmic positions on page 291

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. Input a tie in any of the following ways:

- Press **T**.

- Click **Tie** in the Notes toolbox.

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 127

Hiding/Showing laissez vibrer ties on existing notes

You can add *laissez vibrer* ties to any note.

PROCEDURE

1. Select the notes on which you want to add a *laissez vibrer* tie. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate/deactivate **Laissez vibrer tie** in the **Notes and Rests** group.

RESULT

Laissez vibrer ties are added to the selected notes when the property is activated, and are removed when the property is deactivated. *Laissez vibrer* ties are positioned automatically.

TIP

You can edit the length and shape of *laissez vibrer* ties individually like any other tie in Engrave mode.

RELATED LINKS
Changing the position/shape of ties on page 742

Deleting ties

You can delete ties without deleting the notes to which they are attached.

NOTE

Deleting ties from tie chains removes all ties in the tie chain. If you want to remove single ties from longer tie chains, you can split the tie chain.

PROCEDURE

1. In Write mode, select the tie chains from which you want to delete all ties.

2. Delete all ties in the tie chain in any of the following ways:

    ● Press **U**.

    ● Click **Scissors** in the Notes toolbox.

RESULT

All ties in the selected tie chains are deleted. Notes previously in the tie chain remain at their rhythmic positions.

RELATED LINKS
Splitting tie chains on page 741
Changing the duration of notes on page 125

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. Start note input in any of the following ways:

    ● Press **Shift-N** or **Return**.

    ● Choose **Write** > **Note Input**.

    ● Double-click the tie chain.

3. Position the caret at the rhythmic position 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 value.

    ● Press **Space** to advance the caret to the next rhythmic position, according to the note value currently selected.

4. Split the tie chain in any of the following ways:

    ● Press **U**.

    ● Click **Scissors** in the Notes toolbox.

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 115

Project-wide engraving options for ties

You can find options for the project-wide appearance, position, and placement of ties on the **Ties** page in **Engraving Options**.

The options on the **Ties** page allow you to change the default curvature direction, shape, and appearance of ties, and the position of ties relative to noteheads and other ties in tie chains.

There are musical examples for many options to demonstrate how they affect the appearance of your music.

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

- Press **Ctrl/Cmd-Shift-E** in any mode.
- Choose **Engrave** > **Engraving Options** in Engrave mode.

You can then click **Ties** in the page list on the left of the dialog.

Changing the position/shape of ties

Each tie has five square handles that you can move separately to change the appearance and shape of individual ties.

A tie in Engrave mode

NOTE

Moving one handle can also affect the positions of other handles.

For example, moving the left endpoint moves the start of a tie, but the rest of the handles stay in their existing positions. However, moving the left control point also causes the tie height handle to move. This gives you fine control over the shape of ties while ensuring that the end result remains curved and smooth.

PROCEDURE

1. In Engrave mode, select the tie handles you want to move in any of the following ways:

- Select a whole tie and press **Tab** to cycle through its handles until the one you want to move is selected.
- Click the handle you want to move.
- **Ctrl/Cmd**-click individual handles on multiple ties.

> **TIP**
>
> You can show handles on all items, not just selected items, by choosing **Engrave** > **Show Handles** > **Always**. This can make it easier to select individual handles on multiple items.

2. Move the handles in any of the following ways:

    ●   Press **Alt-Right Arrow** to move them to the right.

    ●   Press **Alt-Left Arrow** to move them to the left.

    ●   Press **Alt-Up Arrow** to move them upwards.

    ●   Press **Alt-Down Arrow** to move them downwards.

    > **TIP**
    >
    > If you want to move handles by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

    ●   Click and drag them in any direction.

RESULT

The positions of the selected tie handles are changed, which changes the shape of the corresponding ties.

> **TIP**
>
> The following properties in the **Ties** group of the Properties panel are activated automatically when you move the corresponding tie handles:
>
> ●   **Start offset** moves the left endpoints of ties. **X** moves them horizontally, **Y** moves them vertically.
>
> ●   **End offset** moves the right endpoints of ties. **X** moves them horizontally, **Y** moves them vertically.
>
> ●   **Start handle offset** moves the left control points of ties. **X** moves them horizontally, **Y** moves them vertically.
>
> ●   **End handle offset** moves the right control points of ties. **X** moves them horizontally, **Y** moves them vertically.
>
> You can also use these properties to change the shape of individual ties by changing the values in the value fields.
>
> Deactivating the properties resets the corresponding handles on the selected ties to their default positions.

Tie shoulder offset

Tie shoulders affect the angles of the curves of ties as they taper towards an endpoint, as the tapered ends often approach noteheads at a steeper angle than that of a tie's arch.

Increasing the shoulder offset makes the onset of the curve shallower, whereas decreasing the shoulder offset makes the onset steeper.

You can change the project-wide settings for the offset of tie shoulders by changing the values for the following options, which you can find by clicking **Advanced Options** in the **Design** section of the **Ties** page in **Engrave** > **Engraving Options**:

●   **Offset shoulders by fraction of half length of short tie**

●   **Offset shoulders by fraction of half length of long tie**
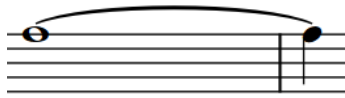
A long tie with default shoulder offset (**1/10**)

A long tie with increased shoulder offset (**7/8**)

You can also change the shoulder offset of ties individually by moving their control point handles in Engrave mode.

RELATED LINKS
Project-wide engraving options for ties on page 742
Changing the shoulder offset of ties on page 744

Changing the shoulder offset of ties

You can change the shoulder offset of individual ties, independently of your project-wide settings. For example, you might want to change the shoulder offset of a few very short or very long ties in your project to improve their shape.

PROCEDURE

1. In Engrave mode, select one of the control point handles on each of the ties whose shoulders you want to adjust in any of the following ways:

    - Select a whole tie and press **Tab** to cycle through the handles until the one you want to move is selected.

    - Click the handle you want to move.

    - **Ctrl/Cmd**-click individual handles on multiple ties.

    TIP

    You can show handles on all items, not just selected items, by choosing **Engrave** > **Show Handles** > **Always**. This can make it easier to select individual handles on multiple items.

2. Move the handles in any of the following ways:

    - Press **Alt-Right Arrow** to move them to the right.

    - Press **Alt-Left Arrow** to move them to the left.

    - Press **Alt-Up Arrow** to move them upwards.

    - Press **Alt-Down Arrow** to move them downwards.

        TIP

        If you want to move handles by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

    - Click and drag them in any direction.

3. Optional: Repeat steps 1 and 2 for the other control point handle on the ties whose shoulders you want to adjust.

RESULT

Moving tie offset handles further apart reduces the shoulder offset, while moving them closer together increases the shoulder offset.

TIP

The following properties in the **Ties** group of the Properties panel are activated automatically when you move the corresponding tie handles:

- **Start handle offset** moves the left control points of ties. **X** moves them horizontally, **Y** moves them vertically.

- **End handle offset** moves the right control points of ties. **X** moves them horizontally, **Y** moves them vertically.

You can also use these properties to change the shoulder offset of individual ties by changing the values in the value fields.

Deactivating the properties resets the corresponding handles on the selected ties to their default positions.

TIP

You can find options controlling the default shoulder offset of all ties project-wide by clicking **Advanced Options** in the **Design** section of the **Ties** page in **Engrave** > **Engraving Options**. There are separate settings for short ties and long ties.

RELATED LINKS
Project-wide engraving options for ties on page 742
Tie shoulder offset on page 743

Tie height

You can change values for the heights of all short ties and long ties project-wide. You can also change the height of individual ties in Engrave mode.

You can find options that change the project-wide heights of ties by clicking **Advanced Options** in the **Design** section of the **Ties** page in **Engrave** > **Engraving Options**. There are separate settings for short ties and long ties.

Increasing the height of ties makes them extend further from the staff, which gives them a rounder shape and means they take up more vertical space. Ties generally do not need to be as curved as slurs, as they join notes of the same pitch instead of arching over or above a range of pitches.

Where vertical space is tight, a balance must be found between how curved ties are and ensuring staves do not overlap.

A long tie with default height

A long tie with increased height

Changing the height of ties

You can change the height of individual ties, independently of your project-wide settings, for example, to save vertical space.

PROCEDURE

1. In Engrave mode, select the tie height (middle) handle of the ties whose height you want to change.

   TIP

   You can show handles on all items, not just selected items, by choosing **Engrave** > **Show Handles** > **Always**. This can make it easier to select individual handles on multiple items.

2. Move the tie height handles in any of the following ways:

- Press **Alt-Up Arrow** to move them upwards.

- Press **Alt-Down Arrow** to move them downwards.

  TIP

  If you want to move handles by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Up Arrow**.

- Click and drag them upwards/downwards.

RESULT

The height of the selected ties is changed.

NOTE

- To maintain a visually pleasing and symmetrical curve when changing the height of ties manually, you may need to move tie height handles to the right/left by a small amount, as well as upwards/downwards.

- Moving tie height handles to the right/left affects the shape of the whole tie.

- You can find options controlling the default height of all ties project-wide by clicking **Advanced Options** in the **Design** section of the **Ties** page in **Engrave** > **Engraving Options**. There are separate settings for short ties and long ties.

RELATED LINKS

Tie styles

There are different styles of ties available in Dorico, 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.

RELATED LINKS
Changing the style of ties on page 747

Changing the style of ties

You can change the style of individual ties. By default, all ties are solid.

PROCEDURE

1. Select the ties whose style you want to change. You can do this in Write mode and in Engrave mode.

> NOTE
>
> - In Write mode, you can only select whole tie chains. In Engrave mode, you can select individual ties within tie chains.
> - Any changes to tie chains in Write mode 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.

> TIP
>
> You can set the precise parameters of each of these options project-wide on the **Ties** page in **Engrave** > **Engraving Options**. For example, you can change the length and width of the stroke in **Editorial** ties, the diameter of dots and length of dashes, and the sizes of the gaps between dots and dashes.

RELATED LINKS
Tie styles on page 746

Changing the size of dashes/dots in ties

You can change the size of the dashes/dots in dashed/dotted ties individually, independently of your project-wide settings.

NOTE

This only applies to dashed/dotted ties.

PROCEDURE

1. Select the dashed/dotted ties whose dash/dot size you want to change. You can do this in Write mode and Engrave mode.

   NOTE

   Any changes to tie chains in Write mode 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 in any of the following ways:
   - Enter a value into the value field.
   - Click the arrows beside the value field.

RESULT

Increasing the value makes dashes/dots bigger, decreasing the value makes dashes/dots smaller.

TIP

You can find options to set the default size of dashes/dots in all dashed/dotted ties project-wide by clicking **Advanced Options** in the **Design** section of the **Ties** page in **Engrave** > **Engraving Options**.

You can also change the thickness of all tie styles on this page. However, you cannot change the thickness of ties individually.

RELATED LINKS

Changing the size of gaps in dashed/dotted ties

You can change the size of the gaps in dashed/dotted ties individually, independently of your project-wide settings.

PROCEDURE

1. Select the dashed/dotted tie chains whose gap size you want to change. You can do this in Write mode and Engrave mode.

   NOTE

   Any changes to tie chains in Write mode only affect the first tie in the chain.

2. In the Properties panel, activate **Gap** in the **Ties** group.

3. Change the value in the value field in any of the following ways:
   - Enter a value into the value field.
   - Click the arrows beside the value field.

RESULT

Increasing the value makes the gaps between dashes/dots larger. Decreasing the value makes the gaps between dashes/dots smaller.

TIP

You can find options to set the default size of the gaps between dashes/dots in all dashed/dotted ties project-wide by clicking **Advanced Options** in the **Design** section of the **Ties** page in **Engrave** > **Engraving Options**.

RELATED LINKS
Project-wide engraving options for ties on page 742

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.

TIP

You can change the default tie curvature direction of ties between notes with different stem directions on the **Ties** page in **Engrave** > **Engraving Options**.

You can also change the curvature direction of ties individually.

RELATED LINKS
Changing the curvature direction of ties on page 750

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. You can do this in Write mode and Engrave mode.

   NOTE

   - In Write mode, you can only select whole tie chains. In Engrave mode, you can select individual ties within tie chains.

   - Any changes to tie chains in Write mode 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.

TIP

You can adjust the precise shapes of tie chains, and of each tie within tie chains, in Engrave mode using the square handles on each tie.

RELATED LINKS
Changing the position/shape of ties on page 742

Time signatures

Time signatures indicate the meter, 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, and can be described using the same mathematical terms used for fractions: numerator on top, and denominator underneath.

The numerator specifies the number of multiples of the duration specified by the denominator. 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. Depending on your settings for time signature style, numerators and denominators can have different appearances.

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. Notes are beamed differently in different time signatures, again to make the meter clear and easily readable.

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.

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.

RELATED LINKS
Time signature styles on page 755
Input methods for time signatures on page 150
Conventions for beam grouping according to meter on page 420
Create Time Signature section of the Time Signatures (Meter) panel on page 152
Creating custom beat groupings for meters on page 421

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 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. Dorico does not yet support large time signatures, but this is planned for future versions. However, you can change the scale size of time signatures individually.

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. Dorico automatically inserts a barline before a time signature change if it occurs in the middle of an existing bar. However, Dorico does not override your existing music by inserting extra beats, unless **Insert** mode is activated.

A 4/4 time signature interrupting a 5/8 time signature, input without **Insert** mode activated, leaving only three eighth note beats in the second 5/8 bar.

A time signature applies until the next time signature change, the end of the movement, or the end of a piece, whichever comes first.

RELATED LINKS

Project-wide engraving options for time signatures

You can find options for the project-wide appearance of time signatures on the **Time Signatures** page in **Engraving Options**.

The options on this page allow you to change the appearance of all numerators and denominators project-wide, the appearance of meterless time signatures, and how interchangeable time signatures are separated. You can also change the default gaps in time signatures, for example, the gap between interchangeable time signatures and their separator.

There are musical examples for many options to demonstrate how they affect the appearance of your music.

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

- Press **Ctrl/Cmd-Shift-E** in any mode.

- Choose **Engrave** > **Engraving Options** in Engrave mode.

You can then click **Time Signatures** in the page list on the left of the dialog.

RELATED LINKS

Types of time signatures

There are different types of time signatures, which can indicate various and complex meters.

NOTE

Dorico 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.
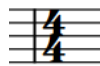
Compound

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.
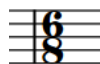
Irregular

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.
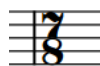
Additive

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.
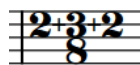
Alternating

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. They can have different separator styles in Dorico, which you can set project-wide and also change individually.
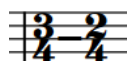
Aggregate

An aggregate time signature shows two or more meters within the same bar, such as 2/4+3/8+5/4. Dorico automatically inputs dashed barlines to show the divisions between each meter.

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, an open time signature can be shown with an X or N, or without any signature.
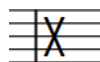
Non-power of two

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.
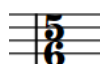
Some composers, such as Boulez, have written fractional time signatures. Dorico does not currently support these.

RELATED LINKS

Pick-up bars

Pick-up bars, also known as "upbeats" or "anacrusis", allow you to include music before the first full bar. 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 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 150
Hiding/Showing time signatures on page 761

Time signature styles

Dorico 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.

You can change the style of all time signatures project-wide according to their type on the **Time Signatures** page in **Engrave** > **Engraving Options**, and you can change the style of individual time signatures independently of your project-wide settings.

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
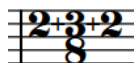
Numerator in a 7/8 time signature showing subdivisions

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

755

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
Project-wide engraving options for time signatures on page 752
Changing the numerator style of time signatures on page 756
Changing the denominator style of time signatures on page 756
Changing the separator style of interchangeable time signatures on page 758
Changing the open meter style of time signatures on page 757

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, independently of your project-wide setting.

PROCEDURE

1. Select the time signatures whose numerator style you want to change. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate **Numerator style** in the **Time Signatures** group.

3. Choose one of the following options:

    - **Number**

    - **Beat group**

RESULT

The numerator style of the selected time signatures is changed.

TIP

You can change the numerator style of all time signatures project-wide on the **Time Signatures** page in **Engrave** > **Engraving Options**.

RELATED LINKS
Time signature styles on page 755
Project-wide engraving options for time signatures on page 752

Changing the denominator style of time signatures

You can change the denominator style of individual time signatures independently of your project-wide settings, 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. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate **Denominator style** in the **Time Signatures** group.

3. Choose one of the following options:

- **Number**
- **Note**
- **None**

RESULT

The denominator style of the selected time signatures is changed.

TIP

You can change the denominator style of all time signatures project-wide on the **Time Signatures** page in **Engrave** > **Engraving Options**.

RELATED LINKS

Changing the open meter style of time signatures

You can change the open meter style of individual time signatures, independently of your project-wide setting.

PROCEDURE

1. Select the open meter time signatures whose style you want to change. You can do this in Write mode and Engrave mode.

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:

- **Empty** (none)

  NONE

- **X**

  X

- **N** (Penderecki's symbol)

  ∿

RESULT

The open meter style of the selected time signatures is changed.

TIP

You can change the style of all open meter time signatures project-wide on the **Time Signatures** page in **Engrave** > **Engraving Options**.

Changing the separator style of interchangeable time signatures

You can change the separator shown in interchangeable time signatures individually, independently of your project-wide setting.

PROCEDURE

1. Select the interchangeable time signatures whose separator you want to change. You can do this in Write mode and Engrave mode.

   NOTE

   In the Properties panel, **Separator** in the **Time Signatures** group is automatically activated for interchangeable time signatures.

2. Select one of the following options from the **Separator** menu:

   - **Parentheses**

     (..)

   - **Brackets**

     [..]

   - **Equals sign**

     =

   - **Slash**

     /

   - **Space**

     ' '

   - **Hyphen**

     –

RESULT

The separator style of the selected interchangeable time signatures is changed.

TIP

You can change the default separator of all interchangeable time signatures project-wide on the **Time Signatures** page in **Engrave** > **Engraving Options**.

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.

Project-wide spacing gaps for time signatures

You can change the minimum gaps between objects, including time signatures, on the **Spacing Gaps** page in **Engraving Options**.

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

- Press **Ctrl/Cmd-Shift-E** in any mode.
- Choose **Engrave** > **Engraving Options** in Engrave mode.

The following minimum values relate to time signatures:

- **Gap after barline before clef, key or time signature**
- **Gap after key signature**
- **Gap after mid-system time signature**

Other values may have an effect on the position of time signatures, however, they also affect other objects.

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.

If you want to adjust the default position of time signatures relative to notes or barlines, you must change the project-wide values for spacing gaps on the **Spacing Gaps** page in **Engrave** > **Engraving Options**.

PROCEDURE

1. In Write mode, select the time signatures you want to move.
2. Move the time signatures according to the current rhythmic grid value in any of the following ways:
   - Press **Alt-Right Arrow** to move them to the right.
   - Press **Alt-Left Arrow** to move them to the left.

RESULT

The time signature takes effect from its new position until the next existing time signature, or the 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 the time signature passes over another time signature as part of its move, the selected time signature that you are moving is replaced by the existing time signature.

You can undo this action, but any time signatures deleted in the process are only restored if you moved the time signature using the keyboard.

Moving time signatures graphically

You can move individual time signatures to new graphical positions without affecting the positions of any other items.

NOTE

You cannot move time signatures shown at the start of systems. You can only move time signature changes that occur partway through systems or at the end of systems.

PROCEDURE

1. In Engrave mode, activate **Note Spacing** in the Formatting panel.

2. Select the square note spacing handle at the top left of the time signature you want to move.
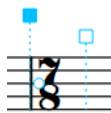
    A circular handle appears beside the time signature.

3. Select the circular handle.

4. Move the handle in any of the following ways:

    - Press **Alt-Right Arrow** to move it to the right.

    - Press **Alt-Left Arrow** to move it to the left.

      TIP

      If you want to move items by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

    NOTE

    You cannot move **Note Spacing** handles using the mouse, you can only move them using the keyboard.

RESULT

The time signature is moved graphically to the right/left.

TIP

You can also change the value for **Spacing Offset** in the **Time Signatures** group of the Properties panel to move time signatures horizontally. However, this also affects global note spacing around the rhythmic position of the time signature.

The **Spacing Offset** value is independent of note spacing changes.

RELATED LINKS
Note spacing on page 284

Hiding/Showing time signatures

You can hide/show time signatures without deleting them from your project.

PROCEDURE

1. Select the time signatures you want to hide/show. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate/deactivate **Hide time signature** in the **Time Signatures** group.

RESULT

The selected time signatures are hidden when **Hide time signature** is activated, and shown when it is deactivated.

NOTE

Hidden time signatures do not take up any rhythmic space, so hiding/showing time signatures affects note spacing.

Signposts are shown at the positions of each time signature so you can always find them again. However, signposts are not printed by default.

TIP

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 this menu.

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.

RELATED LINKS
Note spacing on page 284

Changing the size of time signatures

You can change the size of individual time signatures in each layout independently.

PREREQUISITE

PROCEDURE

1. In the music area, open the layout in which you want to change the size of time signatures. You can do this in Write mode and Engrave mode.

2. Select the time signatures you want to resize.

3. In the Properties panel, activate one of the following properties in the **Common** group:

   - If you want to resize time signatures by a set scale, activate **Scale**.

   - If you want to resize time signatures by a custom scale, activate **Custom Scale**.

4. Change the size of the selected time signatures in one of the following ways, according to the property you activated:

- If you activated **Scale**, select a set scale option from the menu.
- If you activated **Custom Scale**, enter the percentage by which you want to resize the selected time signatures.

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. Delete the time signatures in any of the following ways:

    - Press **Backspace** or **Delete**.
    - Choose **Edit** > **Delete**. You can also choose this option from the context menu.

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

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 played in 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
Inputting single-note tremolos on page 206
Inputting multi-note tremolos on page 206

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, 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.

However, there might be circumstances in which you want all notes to have the same number of tremolo strokes, whatever their duration. You can also start tremolos partway through tie chains, or stop tremolos partway through tie chains.

You can change the number of tremolo strokes shown on individual notes independently in Engrave mode.

RELATED LINKS
Changing the number of tremolo strokes on individual notes in tie chains on page 764

Changing the number of tremolo strokes on individual notes in tie chains

Dorico automatically changes the number of tremolo strokes on subsequent notes in tie chains according to their duration, but you can manually change the number of single-note tremolo strokes shown on each note in tie chains individually to represent your intended rhythm.

PROCEDURE

1. In Engrave mode, select the noteheads of the notes whose number of tremolo strokes you want to change.

2. In the Properties panel, activate **Single stem tremolo** in the **Notes and Rests** group.

3. Select one of the following options from the menu:

   - **None**
   - **One stroke**
   - **Two strokes**
   - **Three strokes**
   - **Four strokes**

- **Buzz roll**

RESULT

The number of tremolo strokes shown on the selected notes is changed.

EXAMPLE

The default number of tremolo strokes in a tie chain where the second note is longer than the first.

The number of tremolo strokes on the second note has been changed to match the first.

RELATED LINKS

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 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, the angle of single-note tremolo strokes is always the same, no matter the direction of the phrase.

The angles of multi-note tremolo strokes are determined by the height of the stems to which the multi-note tremolos apply. You can change the angles of multi-note tremolo strokes individually by lengthening/shortening the stems at the start/end of the tremolo.

You can change the default positions of all tremolo strokes project-wide on the **Tremolos** page in **Engrave** > **Engraving Options**.

RELATED LINKS

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. This affects all notes in tie chains.

RELATED LINKS

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.

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. You can change the number of tremolo strokes shown on each note in tie chains individually.

RELATED LINKS
Moving notes rhythmically on page 578
Changing the number of tremolo strokes on individual notes in tie chains on page 764

Moving tremolo strokes

You can move tremolo strokes upwards/downwards graphically.

NOTE

- You cannot move tremolo strokes to the right/left.
- You cannot move tremolo strokes rhythmically, as they apply to specific notes, but you can move notes with tremolos to different rhythmic positions. Notes with single-note tremolos can cross barlines, however, multi-note tremolo strokes are deleted automatically when their notes cross barlines.

PROCEDURE

1. In Engrave mode, select the tremolo strokes you want to move.
2. Move the tremolo strokes in any of the following ways:

   - Press **Alt-Up Arrow** to move them upwards.
   - Press **Alt-Down Arrow** to move them downwards.

TIP

If you want to move items by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Up Arrow**.

- Click and drag them upwards/downwards.

RESULT

The selected tremolo strokes are moved upwards/downwards.

NOTE

- Moving multi-note tremolo strokes also changes the length of the stems to which they are attached.

- When you first move tremolo strokes graphically, they may appear to move in the wrong direction or by a larger increment than you expected. This is because their positions are reset when you override those positions by moving them.

TIP

The following properties in the **Beaming** group of the Properties panel are activated automatically when you move the start/end of multi-note tremolo strokes:

- **Start Y offset** moves the start of multi-note tremolo strokes vertically by moving the end of the corresponding stem.

- **End Y offset** moves the end of multi-note tremolo strokes vertically by moving the end of the corresponding stem.

Tremolo Y in the **Notes and Rests** group of the Properties panel is activated automatically when you move single-note tremolo strokes. It moves single-note tremolo strokes vertically.

For example, if you move a whole multi-note tremolo stroke upwards, both stem handles are moved so both properties are activated. You can also use these properties to move tremolo strokes by changing the values in the value fields. However, you must select the noteheads rather than the tremolo strokes in order to see the relevant groups in the Properties panel.

Deactivating the properties resets the selected stem handles, and therefore tremolo strokes, to their default positions.

RELATED LINKS
Project-wide engraving options for tremolos on page 768

Project-wide engraving options for tremolos

You can find options for the project-wide appearance and position of tremolos on the **Tremolos** page in **Engraving Options**.

The options on the **Tremolos** page allow you to change the appearance of tremolo strokes, and their positions relative to the ends of stems, stem flags, noteheads, and beams.

There are musical examples for many options to demonstrate how they affect the appearance of your music.

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

- Press **Ctrl/Cmd-Shift-E** in any mode.
- Choose **Engrave** > **Engraving Options** in Engrave mode.

You can then click **Tremolos** in the page list on the left of the dialog.

Changing the appearance of multi-note half note tremolos project-wide

There are multiple accepted ways of notating multi-note half note tremolos. You can change how multi-note half note tremolos are notated project-wide.

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Engraving Options**.

    The **Engraving Options** dialog opens.

2. Click **Tremolos** in the page list.

3. In the **Multi-note Tremolos** section, choose one of the following options for **Appearance of half note (minim) tremolos**:

    - **All lines join stems**

    - **Outermost line joins stems**

    - **No lines join stems** (default)

4. Click **Apply**, then **Close**.

RESULT

The appearance of all multi-note half note tremolos project-wide is changed, according to your preference.

Tremolos in playback

You can control the playback of unmeasured tremolos by specifying the minimum number of tremolo strokes that are interpreted as unmeasured tremolos. This considers both the number of tremolo strokes and the number of beam lines that would be used for the note.

You can do this on the **Timing** page in **Playback Options**.

For example, if the option is set to require three tremolo strokes, an eighth note with two tremolo strokes is played as unmeasured, because the single beam of the eighth note is included in the calculation.

You can also specify the default length of notes in unmeasured tremolos. You express the duration of notes as a fraction of the length of a quarter note played at 120 quarters per minute in the **Tremolos** section on the **Timing** page in **Playback Options**.

The number of tremolo strokes determines the note value of the repeated notes. For example, one stroke indicates an eighth note, two strokes indicate a 16th note, and so on.

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

- Press **Ctrl/Cmd-Shift-P** in any mode.

- Choose **Play** > **Playback Options** in Play mode.

You can then click **Timing** in the page list on the left of the dialog.

Changing the duration of tremolos in playback

You can change both the default length of each note in unmeasured tremolos in playback, and the minimum number of tremolo strokes required to indicate tremolos should be unmeasured in playback.

For example, to change the value in the value field to set the default length to 0.5 seconds, enter 1 into the value field, or click the arrows beside the value field to change the value, for **Default unmeasured tremolo length** in the **Tremolos** section on the **Timing** page in **Playback Options**.

TIP

If you hover over either of the arrows beside the **Default unmeasured tremolo length** value field, a small box appears that displays the current fraction as a decimal.

PROCEDURE

1. In Play mode, choose **Play** > **Playback Options**.

   The **Playback Options** dialog opens.

2. Click **Timing** in the page list.

3. Optional: In the **Tremolos** section, change the value for **Minimum number of strokes for playback of unmeasured tremolos** in any of the following ways:

   - Enter a value into the value field.

   - Click the arrows beside the value field.

4. Change the value for **Default unmeasured tremolo length** in any of the following ways:

   - Enter a value into the value field.

   - Click the arrows beside the value field.

   For example, to set the default length of unmeasured tremolo notes to 0.5 seconds, change the value to 1.

   TIP

   If you hover over either of the arrows beside the value field, a small box appears that displays the current fraction as a decimal.

5. Click **Apply**, then **Close**.

RESULT

The sounding duration of each note in unmeasured tremolos in playback is changed project-wide.

Changing the value for **Minimum number of strokes for playback of unmeasured tremolos** changes the minimum number of tremolo strokes required for tremolos to be unmeasured in playback.

RELATED LINKS
Tremolos in playback on page 769

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 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

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.

Nested tuplets can be used to create complex rhythms.

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. Open the tuplets popover in any of the following ways:

   ● Press ;.

   ● Choose **Write** > **Create Tuplet**.

3. Optional: If inputting nested tuplets in an empty staff, enter the ratio for the outer tuplet into the popover. For example, 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. Open the tuplets popover again.

6. Enter the ratio for the inner tuplet into the popover. For example, 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 tuplets in one of the following ways:

   ● Press **Shift-;** to 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.

Notations on tuplet notes

You can add notations such as accidentals, articulations, and slurs to tuplets in the same ways as they can be added to normal notes.

Articulations are positioned between noteheads or stems and tuplet brackets, so they are closer to the notes than tuplet brackets or tuplet numbers/ratios.

RELATED LINKS

Moving tuplets rhythmically

You can move tuplets to different rhythmic positions after they have been input.

PROCEDURE

1. In Write mode, select the tuplets you want to move.

    NOTE

    A tuplet number/ratio or bracket must be included in the selection if you want the notes to stay a tuplet. 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 position of the tuplet.

2. Move the selected tuplets in any of the following ways:

    - Press **Alt-Right Arrow** to move them to the right.

    - Press **Alt-Left Arrow** to move them to the left.

    NOTE

    You cannot move tuplets rhythmically using the mouse.

RESULT

The selected tuplets move to the right/left along the staff according to the current rhythmic grid value.

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.

- If 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 afterward, 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.

   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. Delete the tuplets in any of the following ways:

   - Press **Backspace** or **Delete**.
   - Choose **Edit** > **Delete**. You can also choose this option from the context menu.

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.

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.

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.

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.

You can change the precise positions and shapes of tuplet brackets individually in Engrave mode.

Each tuplet bracket has four handles that can be moved graphically.

The two upper handles set the position of the start/end of the tuplet bracket. These handles can be moved independently of each other to create angled tuplet brackets, even if you have set tuplet brackets to be **Always horizontal** on the **Tuplets** page in **Engrave** > **Engraving Options**.

The two lower handles set the length of the tuplet bracket hooks. Moving either of these handles changes the length of both hooks.

Moving tuplet numbers/ratios and brackets graphically

You can move tuplet numbers/ratios and tuplet brackets graphically without changing the rhythmic positions to which they apply. You can also move the start/end handles of tuplet brackets independently of each other, meaning you can lengthen/shorten tuplet brackets graphically.

PROCEDURE

1. In Engrave mode, select any of the following that you want to move:

   - Tuplet numbers/ratios

   - Whole tuplet brackets

   - Individual handles on tuplet brackets

2. Move the tuplet brackets, tuplet numbers/ratios, or handles in any of the following ways:

   - Press **Alt-Right Arrow** to move handles to the right.

   - Press **Alt-Left Arrow** to move handles to the left.

   - Press **Alt-Up Arrow** to move handles, whole brackets, and tuplet numbers/ratios upwards.

- Press **Alt-Down Arrow** to move handles, whole brackets, and tuplet numbers/ratios downwards.

  TIP

  If you want to move tuplet brackets, tuplet numbers/ratios, or handles by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd**-**Alt**-**Left Arrow**.

- Click and drag whole tuplet brackets or tuplet numbers/ratios upwards/downwards.
- Click and drag handles on tuplet brackets in any direction.

RESULT

The selected tuplet brackets or tuplet numbers/ratios are moved to new graphical positions, without changing the rhythmic positions to which they apply.

TIP

The following properties in the **Tuplets** group of the Properties panel are activated automatically when you move the corresponding part of tuplet brackets:

- **Start offset** moves the start of tuplet brackets. **X** moves them horizontally, **Y** moves them vertically.
- **End offset** moves the end of tuplet brackets. **X** moves them horizontally, **Y** moves them vertically.
- **Hook length** changes the length of tuplet bracket hooks.

For example, if you move a whole tuplet bracket, both handles are moved, so **Start offset** and **End offset** are both activated. You can also use these properties to move tuplet brackets and tuplet numbers/ratios graphically by changing the values in the value fields.

As you can change values for the properties for the start/end of tuplet brackets independently, you can also use the properties to change the angles of tuplet brackets.

Deactivating the properties resets tuplet brackets to their default positions.

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/show. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **Bracket** in the **Tuplets** group.
3. Choose one of the following options:

   - **Hidden**

   - **Shown**

Changing the angles of tuplet brackets

You can change the angles of individual tuplet brackets by moving the square handles on each corner of tuplet brackets to new graphical positions independently.

PROCEDURE

1. In Engrave mode, select one of the following handles on the tuplet brackets whose angle you want to change:

    - The start corner handle
    - The end corner handle

2. Move the handles in any of the following ways:

    - Press **Alt-Right Arrow** to move them to the right.
    - Press **Alt-Left Arrow** to move them to the left.
    - Press **Alt-Up Arrow** to move them upwards.
    - Press **Alt-Down Arrow** to move them downwards.

      TIP

      If you want to move handles by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

    - Click and drag them in any direction.

3. Optional: Repeat steps 1 and 2 for the other corner handle on the tuplet brackets whose angle you want to change.

RELATED LINKS
Moving tuplet numbers/ratios and brackets graphically on page 775
Forcing tuplet brackets to be horizontal on page 779
Tuplet brackets on page 775

Changing the placement of tuplet brackets relative to the staff

You can change the placement of individual tuplet brackets and tuplet numbers/ratios relative to the staff.

PROCEDURE

1. Select the tuplet brackets and tuplet numbers/ratios whose placement relative to the staff you want to change. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate **Placement** in the **Tuplets** group.

3. Choose one of the following options:

    - **Above**

      ┌3┐

    - **Below**

      └3┘

    - **Cross-stave above**

      └3┐

    - **Cross-stave below**

RESULT

The placement of the selected tuplet brackets is changed.

TIP

- Deactivating **Placement** returns the selected tuplets to their default placement.
- You can change the placement of all tuplet brackets relative to vocal staves project-wide in the **Placement** section of the **Tuplets** page in **Engrave** > **Engraving Options**.

Changing the rhythmic end positions of tuplet brackets

You can change the rhythmic end positions of tuplet brackets relative to individual notes individually.

PROCEDURE

1. Select the tuplet brackets whose end positions you want to change. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **End position** in the **Tuplets** group.
3. Select one of the following options:

- **End at right-hand side of final note**
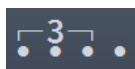
- **End immediately before following note**
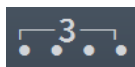
- **End at position of final tuplet division**
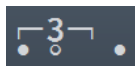
RESULT

The end position for the selected tuplet brackets is changed.

TIP

- Deactivating the property returns the selected tuplets to your default settings.
- You can change the horizontal position of tuplet numbers/ratios on all tuplets project-wide in the **Horizontal Position** section of the **Tuplets** page in **Engrave** > **Engraving Options**.

RELATED LINKS

Forcing tuplet brackets to be horizontal

You can change the angle of individual tuplet brackets so that they appear horizontal, independently of your project-wide setting.

PROCEDURE

1.   Select the tuplet brackets whose angle you want to change. You can do this in Write mode and Engrave mode.

2.   In the Properties panel, activate **Force horizontal** in the **Tuplets** group.

RESULT

The selected tuplet brackets appear horizontal when the property is activated. When the property is deactivated, the selected tuplet brackets follow your project-wide setting for angled tuplet brackets.

TIP

You can change whether all tuplet brackets can appear angled or always appear horizontal project-wide in the **Brackets** section of the **Tuplets** page in **Engrave** > **Engraving Options**.

RELATED LINKS
Project-wide engraving options for tuplets on page 781
Changing the angles of tuplet brackets on page 777

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.

In Dorico, you can change the appearance of all tuplet numbers/ratios project-wide on the **Tuplets** page in **Engrave** > **Engraving Options**, and for individual tuplets independently of this setting.

RELATED LINKS
Project-wide engraving options for tuplets on page 781

Changing the appearance of tuplet numbers/ratios

You can change which type of tuplet number/ratio is shown for individual tuplets, independently of your project-wide setting.

PROCEDURE

1.   Select the tuplet brackets of the tuplets whose type of tuplet number/ratio you want to change. You can do this in Write mode and Engrave mode.

The **Tuplets** group of the Properties panel is only shown if you select tuplet brackets. It is not shown if you select notes within the tuplet, or notes within the tuplet and the tuplet bracket.

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.

TIP

● Deactivating **Number** returns the selected tuplets to the default setting.

● You can change which tuplet number/ratio appears on all tuplets project-wide in the **Number and Ratio** section of the **Tuplets** page in **Engrave** > **Engraving Options**.

RELATED LINKS

Changing the position of tuplet numbers/ratios

You can change the horizontal positions of tuplet numbers and ratios in individual tuplet brackets, independently of your project-wide setting.

PROCEDURE

1. Select the tuplet brackets whose tuplet number/ratio positions you want to change. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate **Center** in the **Tuplets** group.

3. Select one of the following options:

    ● **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.

RESULT

The position of the tuplet numbers/ratios for the selected tuplets is changed.

TIP

- Deactivating the property returns tuplets to your project-wide setting.

- You can change the horizontal position of tuplet numbers/ratios on all tuplets project-wide in the **Number and Ratio** section of the **Tuplets** page in **Engrave** > **Engraving Options**.

RELATED LINKS

Project-wide engraving options for tuplets

You can find options for the project-wide appearance of tuplets, tuplet brackets, and tuplet numbers/ratios on the **Tuplets** page in **Engraving Options**.

The options on the **Tuplets** page allow you to change the appearance and angles of tuplet brackets, and the position of tuplet brackets, tuplet numbers/ratios relative to the staff and noteheads.

There are musical examples for many options to demonstrate how they affect the appearance of your music.

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

- Press **Ctrl/Cmd-Shift-E** in any mode.

- Choose **Engrave** > **Engraving Options** in Engrave mode.

You can then click **Tuplets** in the page list on the left of the dialog.

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 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 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 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, 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 labelling of instruments.

If instrument changes are enabled on the **Players** page in **Setup** > **Layout Options**, Dorico 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.

RELATED LINKS
Percussion kits on page 783

Percussion kits

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.

In Dorico, 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
Percussion kit presentation types on page 788
Edit Percussion Kit dialog on page 77
Combining individual percussion instruments into kits on page 75
Adding instruments to percussion kits on page 80
Importing percussion kits on page 784
Removing individual instruments from percussion kits on page 85
Moving instruments between players on page 76
Staff labels for percussion kits on page 698
Defining percussion kits as drum sets on page 81

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**.

The **Edit Percussion Kit** dialog opens.

3. Click **Export Kit** at the bottom of the dialog.

The File Explorer/macOS Finder dialog opens.

4. In the File Explorer/macOS Finder dialog, specify a name and location for the library file.

5. Click **Save**.

RESULT

The kit is exported and saved as a library file.

NOTE

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.

   The File Explorer/macOS Finder dialog opens.

3. In the File Explorer/macOS Finder dialog, 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.

RELATED LINKS

Project-wide engraving options for unpitched percussion

You can find options for the project-wide appearance and position of percussion legends and ghost notes on the **Percussion** page in **Engraving Options**.

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

● Press **Ctrl/Cmd-Shift-E** in any mode.

● Choose **Engrave** > **Engraving Options** in Engrave mode.

You can then click **Percussion** in the page list on the left of the dialog.

Per-flow notation options for unpitched percussion

You can find options for how notes in percussion kits are notated project-wide on the **Percussion** page in **Notation Options**.

For example, you can choose to notate all notes in a percussion kit in a single voice rather than in multiple voices.

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

- Press **Ctrl/Cmd-Shift-N** in any mode.
- Choose **Write** > **Notation Options** in Write mode.
- Choose **Setup** > **Notation Options** in Setup mode.
- Click **Notation Options** on the right of the **Flows** panel in Setup mode.

  ⚙

You can then select **Percussion** from the **Category** menu.

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.

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.

NOTE

This only applies to changing playing technique-specific noteheads.

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-Up Arrow** to cycle upwards.
- Press **Shift-Alt-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 790
Inputting notes in percussion kits on page 121
Defining how combinations of articulations and single-note tremolos sound in playback on page 334
Playing techniques on page 633

Showing notes in percussion instruments as ghost notes

You can show notes in percussion instruments as ghost notes. Ghost notes are shown in parentheses.

PROCEDURE

1. Select the unpitched percussion notes that you want to show as ghost notes. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate **Ghost note** in the **Notes and Rests** group.

RESULT

The noteheads of the selected notes are shown in parentheses.

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-Up Arrow** to move them to the instrument above.

   ● Press **Alt-Down Arrow** to move them to the instrument below.

   NOTE

   You can change the positions of instruments in the kit in the **Edit Percussion Kit** dialog for that percussion kit.

RESULT

The notes are moved to another instrument in the kit.

RELATED LINKS
Edit Percussion Kit dialog on page 77
Changing the positions of instruments within percussion kits on page 84
Percussion kit presentation types on page 788
Changing the presentation type of percussion kits on page 789
Creating cross-staff beams on page 411

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 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 step 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 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.

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.

Percussion kit presentation types

You can show percussion kits in three different presentation types, which can be different in each layout in your project.

NOTE

Dynamics are not shared between the grid/five-line staff presentation types and the single-line instruments presentation type. Any dynamics added to instruments in the single-line instruments presentation type do not appear when you switch to grid/five-line presentations.

You can edit the appearance/structure of each presentation type independently in the **Edit Percussion Kit** dialog. For example, changing the order of instruments in the five-line staff presentation does not affect the order of instruments in the grid presentation of the same percussion kit.

5-line staff

Kit instruments are shown on a five-line staff. You can determine which instruments are shown on each line and in each space of the staff. A single staff label containing the name of the kit is shown.

The numbers down the left-hand side of the editing area in the **Edit Percussion Kit** dialog correspond to staff positions. For example, position 0 is the middle line of the five-line staff, position 1 is the space immediately above the middle staff line, position -2 is the line below the middle staff line, and so on.

Bold black lines show the five staff lines, while gray lines above and below the staff show nominal staff line positions. Each instrument is shown on its staff position.

Grid

Kit instruments are shown on a grid, with each instrument on its own line. You can customize the size of the gaps between each line. Staff labels are shown for each instrument in a smaller font than normal staff labels.

The numbers down the right-hand side of the editing area in the **Edit Percussion Kit** dialog correspond to the number of staff spaces between each instrument line. By default, all instruments in a grid are two spaces apart.

The order in which the instruments are listed matches the order in which they appear in the score.

Each instrument in a grid shows its own staff label by default, aligned vertically with its own line, but you can group adjacent instruments together and show a single label for each group.

Single-line instruments

Kit instruments are shown as individual instruments with their own lines. Normal-sized staff labels are shown for each instrument.

The editing area in the **Edit Percussion Kit** dialog lists all of the instruments in the order in which they appear in the score.

5-line staff presentation

Grid presentation

Single-line instruments presentation
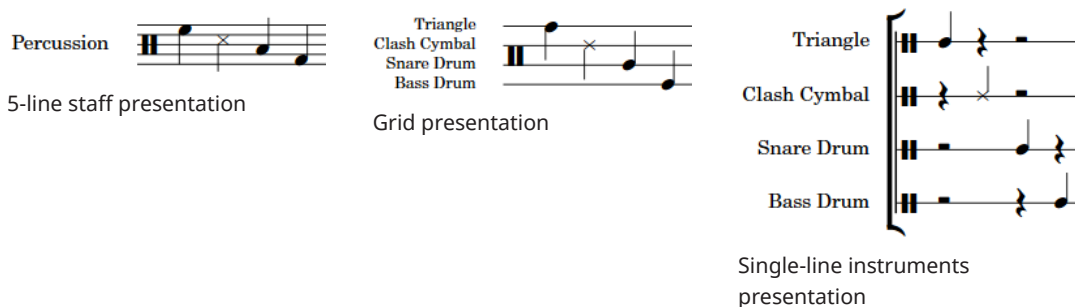
Multiple instruments held by the same player are vertically spaced according to the ideal gaps defined on the **Vertical Spacing** page in **Setup** > **Layout Options**.

RELATED LINKS
Edit Percussion Kit dialog on page 77
Changing the presentation type of percussion kits on page 789
Staff labels for percussion kits on page 698

Changing the presentation type of percussion kits

You can change the presentation type of percussion kits in each layout independently of other layouts 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. In Setup mode, choose **Setup** > **Layout Options**.

   The **Layout Options** dialog opens.

2. In the **Layouts** list, select the layouts in which you want to change the percussion kit presentation type in one of the following ways:

   - Click **Select All**.

   - Click **Select All Full Score Layouts**.

   - Click **Select All Part Layouts**.

   - Click **Select All Custom Score Layouts**.

   - **Ctrl/Cmd**-click individual layouts.

   - **Shift**-click adjacent layouts.

   By default, the layout currently open in the music area is selected when you open the dialog.

3. Select **Players** from the **Category** menu.

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 788

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
Percussion Instrument Playing Techniques dialog on page 790
Edit Percussion Kit dialog on page 77
Defining how combinations of articulations and single-note tremolos sound in playback on page 334
Exporting percussion kits on page 783
Importing percussion kits on page 784
Input methods for playing techniques on page 196

Percussion Instrument Playing Techniques dialog

You can edit the set of playing technique-specific noteheads defined for each percussion instrument in the **Percussion Instrument Playing Techniques** dialog.

You can open the **Percussion Instrument Playing Techniques** dialog in Setup mode in the following ways:

- For an individual percussion instrument: Expand the card of the player holding the instrument in the **Players** panel, click the arrow in the instrument label, and choose **Edit Percussion Playing Techniques**.
- For percussion instruments that are part of percussion kits: Open the **Edit Percussion Kit** dialog by clicking the arrow in the kit instrument label in the **Players** panel, select the

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instrument whose playing techniques you want to edit in the main editing area, and click **Edit Percussion Playing Techniques**.
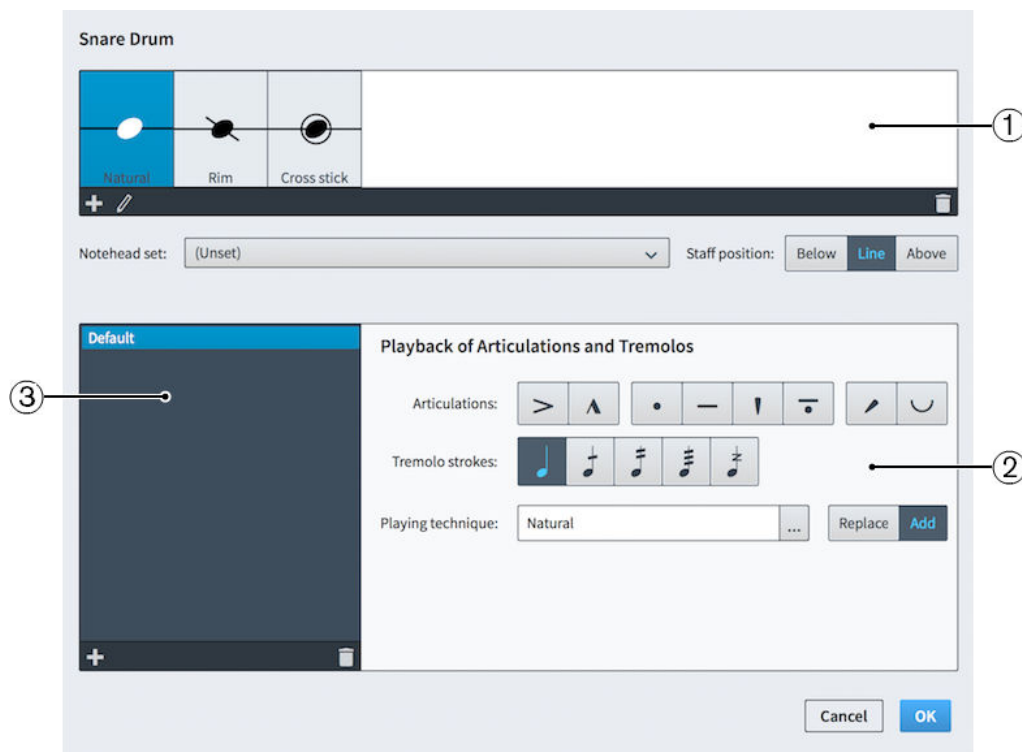
Percussion Instrument Playing Techniques dialog

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
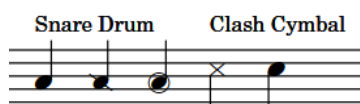
Three different snare drum playing technique-specific noteheads followed by two clash cymbal playing technique-specific noteheads

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.

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NOTE

Overrides for articulations and tremolos are not currently reflected in playback, but this is planned for future versions.

RELATED LINKS

Creating new playing technique-specific noteheads for unpitched percussion instruments on page 792
Overriding the appearance of playing technique-specific noteheads on page 793
Defining how combinations of articulations and single-note tremolos sound in playback on page 334
Exporting percussion kits on page 783
Importing percussion kits on page 784

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: Expand the card of the player holding the instrument in the **Players** panel, click the arrow in the instrument label, and choose **Edit Percussion Playing Techniques**.

    *   For percussion instruments that are part of percussion kits: Open the **Edit Percussion Kit** dialog by clicking the arrow in the kit instrument label in the **Players** panel, 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**.

    The selected playing technique is added 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 as defined on the **Notes** page in **Engrave** > **Engraving Options**.

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.

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**.

   The **Edit Percussion Kit** dialog opens.

3. Select the instrument whose noteheads you want to override in the main editing area of the dialog.

4. Click **Edit Noteheads**.

   The **Override Percussion Noteheads** dialog opens. It lists the playing technique-specific noteheads defined for the selected instrument in the **Percussion Instrument Playing Techniques** dialog, and shows which notehead type is mapped for each technique.

Playing Technique	Default Notehead	Notehead Override
Natural	(Unset)	(Unset)
Rim	Slashed Noteheads (Top Left to Bottom Right)	(Unset)
Cross stick	Large Circled Noteheads	(Unset)

   Cancel | OK
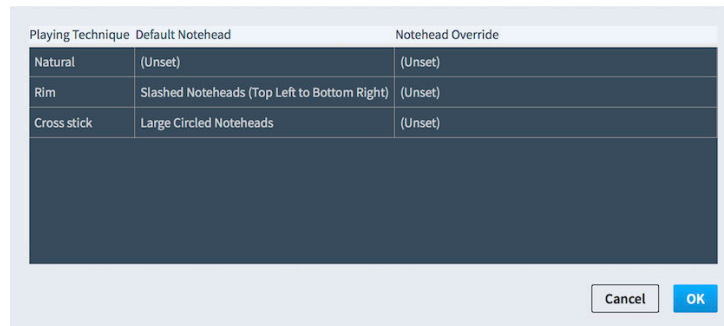
   Override Percussion Noteheads dialog for a snare drum

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.

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.

You can change the default position of percussion legends in the **Percussion Legends** section of the **Percussion** page in **Engrave** > **Engraving Options**.

You can change the placement and appearance of percussion legends individually using properties in the **Percussion Legend** group of the Properties panel.

You can change various aspects of the paragraph style for percussion legends, such as the font size and style, in the **Paragraph Styles** dialog.

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
Adding percussion legends to five-line staff kit presentations on page 794
Paragraph Styles dialog on page 276
Project-wide engraving options for unpitched percussion on page 784
Per-flow notation options for unpitched percussion on page 785
Staff labels for percussion kits on page 698

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.

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 above the staff. 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 value:

   ● Press **Alt-Right Arrow** to move the whole range to the right.

   ● Press **Alt-Left Arrow** to move the whole range to the left.

   ● Press **Shift-Alt-Right Arrow** to lengthen the range.

   ● Press **Shift-Alt-Left Arrow** to shorten the range.

   NOTE

   When using the keyboard, you can only lengthen/shorten percussion legend ranges by moving the end of the range. You can move the start of the range by moving the whole range or by clicking and dragging the start handle.

   ● Click and drag the circular handle at the start/end of the percussion legend to the right/left.

RESULT

The rhythmic range covered by the selected sounding instrument percussion legend is changed according to the current rhythmic grid value.

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. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate **Legend Type** in the **Percussion Legend** 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. You can do this in Write mode and Engrave mode.

2.   In the Properties panel, activate **Use short names** in the **Percussion Legend** 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 698

Changing the text shown in percussion legends

By default, percussion legends show the instrument names of percussion instruments in five-line staff presentations, stacked vertically. You can change the text shown in percussion legends to show custom text.

PROCEDURE

1.   In Engrave mode, select the percussion legends whose text you want to change.

2.   In the Properties panel, activate **Custom Text** in the **Percussion Legend** group.

3.   Enter the text you want into the value field.

4.   Save your changes in any of the following ways:

     ●   Press **Return**.

     ●   Click outside of the value field.

RESULT

The text shown in the selected percussion legends is changed.

Changing the placement of percussion legends relative to the staff

By default, percussion legends are shown above the staff but you can change their placement so they are shown below the staff.

PROCEDURE

1.   Select the percussion legends whose placement relative to the staff you want to change. You can do this in Write mode and Engrave mode.

2.   In the Properties panel, activate **Placement** in the **Percussion Legend** group.

3.   Choose one of the following options:

     ●   **Above**

- **Below**

RESULT

The selected percussion legends appear above/below the staff.

TIP

- Deactivating **Placement** returns the selected percussion legends to their default placement relative to the staff.
- You can change the default distance between all percussion legends and other items project-wide in the **Percussion Legends** section of the **Percussion** page in **Engrave** > **Engraving Options**.

RELATED LINKS

Voices in percussion kits

Dorico automatically combines music into a smaller number of voices when multiple percussion instruments are presented in a five-line staff or as a grid, even if they contain different rhythms. By default, music is combined into one up-stem voice and one down-stem voice.

Alternatively, you can choose to notate all notes in a percussion kit in a single voice when the kit is defined as a drum set on the **Percussion** page in **Write** > **Notation Options**. This convention is used less frequently for orchestral percussion.

You can also 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. You can eliminate the use of ties by choosing to truncate longer notes so that only their onsets appear on the **Percussion** page in **Notation Options**.

If one of the instruments in a percussion kit has a tuplet rhythm, other instruments can share the voice if their notation is compatible, such as if the tuplet structure is the same, or if they have a single note that coincides with the start of the tuplet. In this case, the single non-tuplet note is notated as the same duration of the first note of the tuplet.

If the music of the different instruments in the same voice is incompatible, Dorico dynamically creates another voice and notates the remaining music in that voice until the music is compatible again.

RELATED LINKS

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. You can do this in Write mode and Engrave mode.
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**.

   The **Edit Percussion Kit** dialog opens.

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** in any of the following ways:

   - Enter a value into the value field.

   - Click the arrows beside the value field.

   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.

TIP

You can change the stem direction and voice of all instruments in the kit before closing the dialog.

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 329
Drum editor on page 307
Inputting notes in the drum editor on page 307
Moving notes in the piano roll editor on page 305
Transposing notes in the piano roll editor on page 305

Unpitched percussion imported from MIDI files

When importing MIDI files, Dorico 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.

This is the only condition under which Dorico 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, and all scoring applications take different approaches to what data is exported, and how it is encoded. Therefore, the results of importing MusicXML into Dorico varies considerably.

Dorico 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 representation can be challenging, so Dorico 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.

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 not 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 chooses different instruments than you expected, but you can change instruments using the **Edit Percussion Kit** dialog.

RELATED LINKS

Universal Indian Drum Notation

Dorico 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.
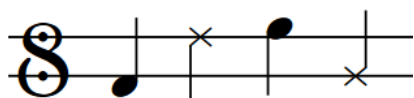
You can input Indian drum clefs by clicking **Indian drum clef** in the **Uncommon Clefs** section of the Clefs panel.

RELATED LINKS

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 have its own 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, 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 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 118
Showing voice colors on page 803
Stem direction on page 711
Per-flow notation options for voices on page 802
Per-flow notation options for rests on page 658
Adding notes above/below existing notes on page 133
Implicit rests in multiple-voice contexts on page 807
Moving individual rests vertically on page 661

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.

You can choose how interlocking notes in different voices are positioned project-wide on the **Voices** page in **Write** > **Notation Options**.

Dorico positions notes by default with the noteheads partially overlapping, in order to minimize the horizontal space they occupy and 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 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

Per-flow notation options for voices

There are a number of options for how notes in multiple voices are positioned project-wide on the **Voices** page in **Notation Options**.

The options on this page allow you to change the position and order of notes in multiple-voice contexts, and choose when noteheads in different voices can overlap.

Musical examples demonstrate how each option affects the appearance of your music.

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

● Press **Ctrl/Cmd-Shift-N** in any mode.

● Choose **Write** > **Notation Options** in Write mode.

● Choose **Setup** > **Notation Options** in Setup mode.

● Click **Notation Options** on the right of the **Flows** panel in Setup mode.

You can then select **Voices** from the **Category** menu.

Showing voice colors

You can show notes in different colors according to their voice, for example, to check which notes are in which voice.

PROCEDURE

- Choose **View** > **Note and Rest Colors** > **Voice Colors**.

    - A tick is shown beside **Voice Colors** in the menu when voice colors are shown.

    - No tick is shown beside **Voice Colors** in the menu when voice colors are not shown.

RESULT

Noteheads appear with colors according to their voice. Colors are randomly assigned, meaning colors do not refer to specific voices.

EXAMPLE
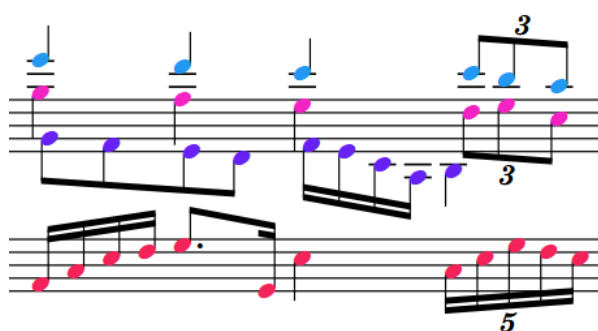
Voice colors shown

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 803

Changing the voice of existing notes

You can change the voice of notes after they have been input. 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. Choose **Edit** > **Voices** > **Change Voice** and select an existing voice, or a new voice if there is only one voice on the staff. You can also choose this option from the context menu.

RESULT

The voice of the selected notes is changed.

NOTE

As a result of changing the voice, Dorico might automatically 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.

You can later hide implicit rests and change the stem direction of notes manually.

RELATED LINKS
Showing voice colors on page 803
Large selections on page 109
Filters on page 109
Implicit rests in multiple-voice contexts on page 807
Hiding/Showing rests before the first note in voices on page 808
Hiding/Showing rests after the last note in voices on page 809
Changing the stem direction of notes on page 714

Pasting notes into different voices

You can copy and paste notes into voices that are different to their original voices. For example, you can copy notes from an up-stem voice on one staff into a down-stem voice on another staff.

PROCEDURE

1. In Write mode, select the notes you want to copy.

2. Copy the notes in any of the following ways:

   - Press **Ctrl/Cmd-C**.

   - Choose **Edit** > **Copy**. You can also choose this option from the context menu.

3. Select the staff to which you want to paste the notes, at the position where you want the selection to start.

4. Choose **Edit** > **Paste Into Voice** > **[Existing or new voice]**. You can also choose this option from the context menu.

RESULT

The selected notes are copied to the selected staff and into the selected voice.

Deleting unused voices

You can create as many voices as you want in each staff. To delete an entire voice from your project, you must delete all notes from the voice.

NOTE

Deleting all notes in a voice does not delete the voice immediately.

Any unused voices are automatically deleted when you close a project, but you cannot manually delete voices once they have been created.

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 118

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.

   NOTE

   You must select notes in two voices. You cannot select notes in just one voice, or in three or more voices.

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 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

Dorico 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. You can do this in Write mode and Engrave mode.

2. Choose **Edit** > **Voices** > **Swap Voice Order**. You can also choose this option from the context menu.

RESULT

The order of the selected notes is changed.

NOTE

Swapping the order of notes automatically activates **Voice column index** in the **Notes and Rests** group of the Properties panel, which you can see in Engrave mode. If you swap the contents of these notes again, their positions might not appear as expected.

Deactivating **Voice column index** reverts notes to your project-wide settings for note order.

EXAMPLE

Interlocking notes in opposing voices positioned notehead to notehead.

Interlocking notes in opposing voices positioned stem to stem.

RELATED LINKS
Voice column index on page 806

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 only.

You can activate this property to change the index number, and therefore the horizontal order, of individually selected notes. Deactivating the property returns the selected notes to their default position.

TIP

- You can change the order of notes in multiple voices project-wide on the **Voices** page in **Write** > **Notation Options**.
- You can also change the minimum gaps between notes in different voices in the **Voices** section of the **Notes** page in **Engrave** > **Engraving Options**.

You can move notes graphically in Engrave mode. You can move notes individually and independently of all other items at that rhythmic position, or move everything at the same rhythmic position.

RELATED LINKS
Swapping the order of voices on page 805
Per-flow notation options for voices on page 802
Notation Options dialog on page 110
Engraving Options dialog on page 228

Notes crossed to staves with existing notes in other voices

When you cross 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.

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 by copying them, then pasting them into the lower staff in a different voice to the notes already in the lower staff.

RELATED LINKS
Changing the voice of existing notes on page 803
Pasting notes into different voices on page 804
Creating cross-staff beams on page 411
Changing the stem direction of notes on page 714
Stem direction on page 711

Implicit rests in multiple-voice contexts

In Dorico, implicit rests are shown automatically to fill in rhythmic positions around notes.

The same applies 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

NOTE

By default, Dorico consolidates rests when multiple voices have rests of the same duration at the same rhythmic position.

You can show multiple rests at individual rhythmic positions by changing the vertical position of rests.

You can also change your project-wide settings for the consolidation of rests in multiple-voice contexts on the **Rests** page in **Notation Options**.

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 choose when rests are shown in a number of different multiple-voice contexts project-wide on the **Rests** page in **Notation Options**.

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

- Press **Ctrl/Cmd-Shift-N** in any mode.

- Choose **Write** > **Notation Options** in Write mode.

- Choose **Setup** > **Notation Options** in Setup mode.

- Click **Notation Options** on the right of the **Flows** panel in Setup mode.

You can also delete rests from selected passages.

RELATED LINKS

Hiding/Showing rests before the first note in voices

You can manually hide/show rests before the first note in voices from the previous barline.

NOTE

You cannot hide rests before notes that are not the first note in a voice in the selected staff, or if the previous note in the same voice does not have rests hidden after it.

PROCEDURE

1. Select the first note in the voices before which you want to hide rests. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate/deactivate **Starts voice** in the **Notes and Rests** group.

RESULT

Rests are hidden before the selected notes from the previous barline when **Starts voice** is activated, and shown when it is deactivated.

TIP

Alternatively, you can delete rests from passages of music. Deleting rests sets the **Starts voice** and **Ends voice** properties on notes at the start/end of rest passages so that no implicit rests are shown.

RELATED LINKS
Deleting rests on page 660
Hiding/Showing rests after the last note in voices on page 809

Hiding/Showing rests after the last note in voices

You can manually hide/show rests after the last note in voices until the next barline.

NOTE

You cannot hide rests after notes that are immediately followed by another note in the same voice on the selected staff.

PROCEDURE

1. Select the last note in the voices after which you want to hide rests. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate/deactivate **Ends voice** in the **Notes and Rests** group.

3. Optional: Select the rhythmic position at which point the selected voices end from the following options:

   - **Immediately**

   - **After barline**

RESULT

Rests are hidden after the selected notes when **Ends voice** is activated, and shown when it is deactivated.

RELATED LINKS
Deleting rests on page 660

Rhythm dot consolidation

You can change how rhythm dots in multiple voices are consolidated project-wide.

In the **Rhythm Dots** section of the **Notes** page in **Engrave** > **Engraving Options**, you can choose how rhythm dots in multiple voices are consolidated project-wide from the following options:

Preferred

Allowed

Allowed only for unisons

Disallowed

TIP

You can also change how rhythm dots in multiple voices are consolidated individually.

RELATED LINKS

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

Note or notes played before the first full bar of a piece, also known as an "upbeat". See also 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 sample libraries, a term that refers to playing techniques generally.

attachment

The rhythmic position at which an item occurs, or to which an item applies, in the music. In Engrave mode in Dorico, an attachment line is shown between a selected item and its rhythmic position.

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

caret

Shown during note input, it 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, the caret, cursor, and pointer are related but serve different purposes. See also rhythmic grid.

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, such as when a tied note with an accidental continues onto another page, to eliminate ambiguities. 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, 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.

collision avoidance

Automatic adjustments made by Dorico 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.

cursor

The vertical blinking line that appears when entering or editing text. See also caret.

D

disclosure arrow

A small arrow that is shown on all edges of the main window in Dorico. It allows you to hide/show the toolbar and panels individually.

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.

Engrave mode

A workspace that allows you to make fine graphical adjustments and to adjust the page layout and the format of the system. See also modes.

engraving options

Options that affect the graphical appearance of the notation, including choice of symbols, line thicknesses, and distances. These options apply to the whole project, including all flows and layouts, and can be set in the **Engraving Options** dialog.

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.

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. Most commonly shown as a curved line with a dot under the curve, it can also be shown with a pointed arch or square shape. Also known as a "pause" or a "birds' eye".

flow

A complete span of music of any scope, for example, a movement, song, piece, scene, number, act, cue, example, or exercise that contains music assigned to players.

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.

fragment

Part of a notation item. For example, fragments of a note include its notehead, rhythm dots, accidentals, the tip of its stem, and beam. In Write mode, selecting any part of an item also selects all of its fragments, so any changes you make affect the whole item. In Engrave mode, you can select each fragment individually to tweak its position or appearance. See also item.

frame

A rectangular container for music, text, or graphics on a page.

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; when performed, it steals from the duration of either the preceding or the following rhythmic notes. Also known as "arhythmic notes". 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, 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 circular or square selectable item that marks the ends of lines, the corners of frames, and other moveable positions, such as pedal line retakes and slur control points. In Write mode, handles are circular and mark rhythmic positions. In Engrave mode, handles are square and mark graphical positions.

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, 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 midway across the width of the frame. See also frame, justification.

I

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".

item

Generic term for any note, rest, chord, notation, or other selectable object that appears in the score in Dorico. See also fragment.

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 or an instrumental part.

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.

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, 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.

music area

The main part of the window in Setup, Write, and Engrave 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

notation options

Options that affect the way the music is notated, particularly concerning how notes and rests are grouped according to meter, rules for the extent of accidentals, and options for transposition. These options can be set independently for each flow in the **Notation Options** dialog.

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.

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, 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.

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), notated as change to the height of a pedal line. Also known as a "pedal lift".

pick-up bar

Note or notes played before the first full bar of a piece, also known as an "upbeat" or "anacrusis". Often pick-up bars only comprise one or two beats whose main purpose is to lead in to the start of the piece.

player

A musician who plays one or more instruments. Players are defined as either solo players or section players. See also solo player, section player.

playhead

A vertical line that moves alongside music during playback and when recording, showing the current rhythmic position. Also known as a "playback line".

Play mode

A workspace that allows you to assign VST instruments, to adjust the mix, to apply automation, and to tweak note data. 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 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.

Print mode

A workspace that allows you to print to your printer, export to PDF, and export to other graphics files. 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 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. Properties are layout-specific, meaning changing the properties of an item in one layout does not affect the same item in other layouts.

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 continues this tradition by offering users a selection of rastral staff sizes.

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.

Setup mode

A workspace that allows you to add players, to assign instruments to those players, to create flows, and to assign players and flows to layouts. See also modes.

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 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 spacing handle

The square handle on the bottom left corner of each staff when **Staff Spacing** is activated in Engrave mode. Staff spacing handles only change the vertical position of a single staff. See also system spacing handle.

string shift indicator

An angled line that indicates the direction of movement when string players have to shift position on the fingerboard to play a higher/lower note with the same finger as the previous note.

stroke

The short line that bisects editorial slurs and ties. Also known as a "notch".

SVG

SVG stands for Scalable Vector Graphics, which is an XML-based way of displaying and modifying graphics. Due to the way it is coded, it allows you to modify graphics very flexibly compared to other formats.

system break

The forced termination of a system of music at a particular rhythmic position, typically at a barline. Indicated in Dorico with signposts.

system fullness indicator

The highlighted region in the right page margin that is shown when **Note Spacing** is activated. It combines a color (green, purple, or red) and a percentage to indicate how full the system is.

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, you can show system objects at multiple positions in each system by showing them above multiple instrument families.

system spacing handle

The square handle on the top left corner of each system when **Staff Spacing** is activated in Engrave mode. System spacing handles change the vertical position of the top staff in systems, which also moves all staves in the system accordingly. See also staff spacing handle.

T

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

The pitches notated are the pitches that are played by each instrument, which are different to the pitches heard as a result when played by transposing instruments. See also concert pitch.

tuplet

A rhythm 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".

U

upbeat

Note or notes played before the first full bar of a piece. See also pick-up bar.

V

vertical justification

The alignment of musical content to the top and bottom edges of the frame. Typically, a music frame is laid out such that the top line of the top staff of the top system is positioned at or near the top of the page. If the ideal height of the music in the frame is less than the available height, the remainder is distributed evenly between the systems, and between the staves of the systems. See also frame, justification.

voice

In Dorico, 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 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 workspace that allows you to input music and other notations. See also modes.

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