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 highlighted in `Courier` typeface.

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.

For example, the default key command for **Undo** is **Ctrl**-**Z** on Windows and **Cmd**-**Z** on macOS. When key commands with modifier keys are described in this manual, they are shown with the Windows modifier key first, in the following way:

● Windows modifier key/macOS modifier key-key

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:

● Open the **Dorico Key Commands** window that provides an overview of all available key commands.

● Search for key commands of specific functions or menu items in the **Preferences** dialog. In this dialog, you can also assign new key commands or change default key commands.

RELATED LINKS

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.

To access the **Dorico Key Commands** map, do one of the following:

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

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. Select **Edit** > **Preferences**.
2. In the **Key Commands** section, in the **Search** field, enter the name of a function.
   The entries that are listed below are filtered according to the words that you enter.
3. 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

Changing the keyboard layout

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

PROCEDURE

1. Open **Preferences** by choosing **Edit** > **Preferences**.
2. Select a different keyboard layout from the **Keyboard language** menu in the **Key Commands** section.
3. Click **Apply**.

RESULT

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

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. Select **Edit** > **Preferences**.
2. In the **Key Commands** section, search for the name of a function and select it.
3. Optional: Press **Remove Key Command** if the function is already assigned a key command.

   NOTE

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

4. Click in the **New key command** input field.
5. On your computer keyboard, press the key command that you want to assign.
6. Click **Add Key Command**.

   The key command is shown in the **Assigned key commands** display.
7. Click **Apply**.

RESULT

You can immediately use the assigned key command.

RELATED LINKS
Searching for the key commands of functions on page 11
Resetting key commands on page 13

Removing key commands

You can remove assigned key commands from a function.

PROCEDURE

1. Select **Edit** > **Preferences**.
2. In the **Key Commands** section, search for the name of a function and select it.
3. Click **Remove Key Command**.
4. Click **Apply**.

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. Select **Edit** > **Preferences**.
2. In the **Key Commands** section, click **Reset Key Commands**.
3. Click **OK**.

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, etc.

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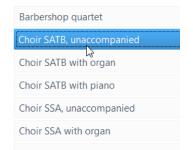
You have started Dorico. The **Hub** is open.

PROCEDURE

1. In the **Hub**, select one of the listed template groups, for example 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.
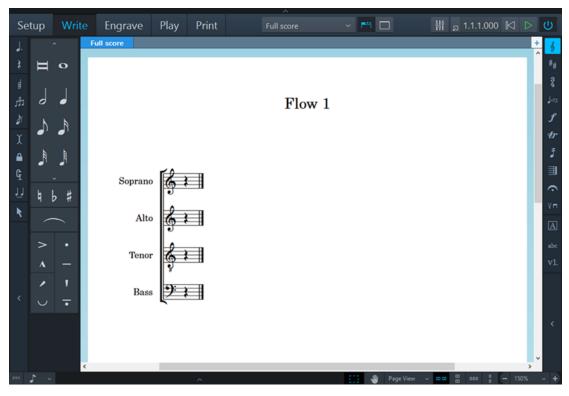
RELATED LINKS
Hub on page 33

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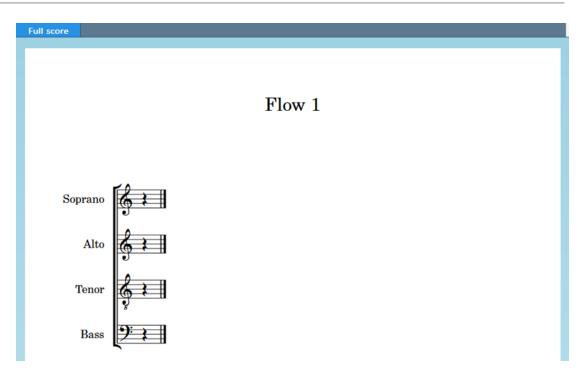
On the left side of the toolbar, the modes are displayed. By activating a mode, you change the workspace and the available panels. The active mode is highlighted in a different color. In the middle of the toolbar, layout options allow you to switch between the different layouts in your project and to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

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. On top of 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 the 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, etc.

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.

RELATED LINKS

Functions of the modes

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

By activating a mode, you change the workspace and the available panels.

Setup Mode

In Setup mode, you can create players, 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.

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.

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.

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.

Print Mode

In Print mode, you can print your layouts or export them as graphic files.

Hiding/restoring panels

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

PROCEDURE

- Do one of the following:
  - To show/hide the left panel, click its disclosure arrow or select **Window** > **Show Left Panel**.
  - To show/hide the right panel, click its disclosure arrow or select **Window** > **Show Right Panel**.
  - To show/hide the bottom panel, click its disclosure arrow or select **Window** > **Show Bottom Panel**.
  - To show/hide all panels, click **Hide/Restore Panels** ▣ or select **Window** > **Hide/Restore Panels**.

RESULT

If you hide all active panels, the button changes its look and displays which panels are hidden.

For example, the following button 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

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** on 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 may 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

- Do one of the following:

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

RESULT

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

Starting a new project

After getting a first impression of the Dorico user interface you may want to 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

- Do one of the following:
  - Select **New Empty Project**.
  - Press **Ctrl/Cmd-N**.

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.

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
Windows on page 36
Flows on page 32

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**.

   This adds an empty-handed player on the **Players** panel.

2. In the popover, select an instrument.

   NOTE

   For this example, select the piano player.

   TIP

   - You can use the search field of the popover and start entering the name of the instrument. The list automatically filters the names while you type.

   - You can also open the popover by clicking the plus symbol to the right of the added empty-handed player. Alternatively, you can right-click the player and select **Add Instrument to Player**.

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 24

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.

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:

PROCEDURE

- On the **Flows** panel, click **Add Flow** .

RESULT

All existing players are assigned to the new flow. The new flow is 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, etc. 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

- On 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.

TIP

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.
- Write mode is active.
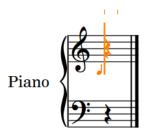
PROCEDURE

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

2. Do one of the following:

   - Press **Shift-N** or **Return** to activate note input.
   - Double-click the rest.

   The caret is displayed.

3. Select one of the durations on the notes panel.

> NOTE
>
> By default, Dorico selects a quarter note 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 the octave above by pressing the respective key command.

RESULT

The following is an example of input notes:

RELATED LINKS
Key commands in Dorico on page 10

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**.

This opens a small popover on top of the staff.

3. Enter a typical time signature, such as 3/4.

4. Press **Enter**.

RESULT

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

Adding a key signature

In this section, you learn how to add a key signature. You can add a key signature at any rhythmic position on the staff.
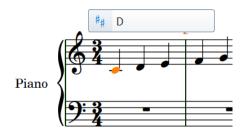
When you start a new project from scratch, by default, there is no key signature shown. Dependent on the kind of music you are writing, the key signature might be taken to mean C major or an open key with no specific tonal center. In any case, you can change key anywhere on the staff. To add a different 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 a small popover on top of the staff.

3. Enter a key signature. If you want to enter D major, enter an uppercase D.

For D minor, enter a lowercase d.

4. Press **Enter**.

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 for you.

PREREQUISITE

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

PROCEDURE

1. Do one of the following:

    *   Press **Q**.

    *   In the notes toolbox, activate **Chords** .

    The caret now shows a plus sign at the top:

2. Optional: Select one of the durations on the notes panel.

3. Input the notes that should form a 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 change the octave by pressing the respective key command.

    The following 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

RELATED LINKS
[Key commands in Dorico](#) on page 10

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, etc. 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 may or may not have any music to play in a given flow. For example, all the brass players may be omitted from the slow movement of a classical symphony, or certain players may 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, you can create a conductor's score with as many instruments as possible condensed onto a smaller number of staves, a full score with each player's music on separate staves, and an instrumental part containing only the music belonging to a specific player.

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.

Projects

A project is an individual document that you create within Dorico.

A project may contain many separate pieces of music, from very short to very long, written for any combination of instruments and in different layouts.

Modes

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

In the project window, the following modes are available:

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, apply automation, and optimize note data.

Print

In this mode, you can define different print jobs, such as printing full conductors scores, study scores, individual parts, etc. 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, 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, etc. You can edit and extend these properties according to your needs.

NOTE

Similar instruments, such as guitars with different tunings, horns in different transpositions, or the instruments in the strings family can share common properties. This enables you to edit the data for many instruments at the same time.

RELATED LINKS

Players

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

In detail, a player may represent the following:

- A solo player, which is an individual musician who can play one or more instruments, for example, a clarinettist who doubles on alto saxophone or a percussionist who plays bass drum, clash cymbals, and triangle.
- A section player, which represents multiple musicians who all play the same instrument, for example, eight desks of violins or the soprano section in a mixed voice choir.

NOTE

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

Groups

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

In a typical project, there may be only one group that contains all of the defined players, but in order to allow easy separation of forces in larger-scale works, you can define as many groups as needed. It may also be necessary to assign players to these groups for the purposes of, among other things, properly bracketing and labeling 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

Flows are separate spans of music that are completely independent in musical content.

A flow can be, 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.

A flow may 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 would 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, and so each flow would contain only those players who have anything to play.

NOTE

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

Layouts

Layouts define how music for one or more players in one or more flows is presented, including page size, margins, staff size, etc.

Layouts combine musical content that is represented by flows with rules for page layout and music engraving. You can have layouts for one or more players drawn from one or more 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 may 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 may also 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. To each flow frame, one or more flows is assigned 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, block lyrics, and so on.

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 Steinberg news.

Read More

> Links you to a page on the Steinberg website with more detailed information about the news and tutorials topic that you selected.

User Forum

> Links you to the user forum on the Steinberg website.

Downloads

> Links you to the download page on the Steinberg website.

Knowledge Base

> Links you to the Knowledge Base 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 **Enter**.

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

- Do one of the following:

    - In the Hub, select **New Empty Project**.

    - Press **Ctrl/Cmd-N**.

        NOTE

        This option is also available in the project window.

    - Select **File** > **New**.

        NOTE

        This option is also available in the project window.

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.

PROCEDURE

1. In the Hub, select one of the project template categories:

    - **Orchestral**

    - **Band**

    - **Chamber**

    - **Choral and Vocal**

    - **Solo**

2. From the listed project templates of the selected category, select a project template.

3. Click **New from Template**.

RESULT

The project template opens in a new project window.

NOTE

Alternatively, you can also select **File** > **New from Template**. Then select a project template from the listed project template categories.

Selecting recent projects

You can open a project on which you recently worked.

PROCEDURE

- Do one the following:

  - In the **Recent Projects** list, select a file name and press the **Up Arrow** and **Down Arrow** keys to scroll through the list of file names. To open a file, press **Enter**.

  - 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**.

  - Click **File** > **Open Recent** and select one of the project file names.

    NOTE

    This option is also available in the project window.

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. Click **Open Other**.

NOTE

Alternatively, you can also select **File** > **Open** > **Button** > **anotherbutton**.

2. In the dialog that opens, browse for the file that you want to open.

TIP

To open several files at the same time, press **Ctrl/Cmd** and select the files, or press **Shift** and select a range of files.

3. Click **Open**.

RESULT
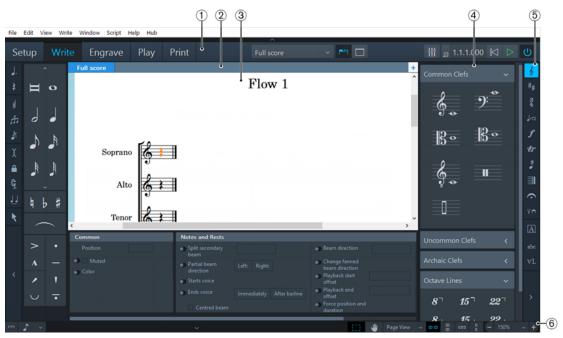
If you import a MusicXML or a MIDI file, Dorico creates a new project file from the MusicXML or MIDI content. You can save this file as a default Dorico project.

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 independent 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.

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 and to change the working environment.

3 **Show Mixer** button

Opens/Closes the **Mixer** window.

4 Basic transport options

Allow to you quickly access the main transport functions.

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

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. 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.

Tab bar

The tab bar in Dorico allows you to display different layouts within the same project window.
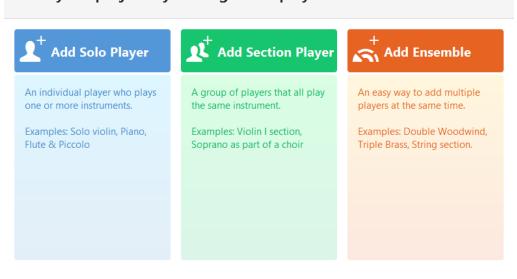
Each tab may contain a separate layout, or an additional view of a layout that is already open in another tab or window. Each tab is labeled with the name of the selected layout.

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 mode, 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 mode, the music area shows the editable score.

Music area showing a sample of a score

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

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.

Every mode in Dorico has its own particular panels.

Modes and their panels

Mode	Left Panel	Right Panel	Bottom Panel
Setup	Players	Layouts	Flows
Write	Notes	Notations	Properties
Engrave	Formatting	Pages	Properties
Play	Tracks	VST Instruments	n/a
Print	Layouts	Print options	n/a

Some panels are displayed by default. You can hide and 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 individual modes.

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
Notes toolbox on page 88
Notations toolbox on page 91

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 Resolution** selector

Allows you to change the resolution of the rhythmic grid, which is used for inserting notes and notations in Write mode.

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.

RELATED LINKS
Rhythmic grid on page 99
View types on page 44
Selection tools on page 44
Page arrangements for page view on page 45
Zoom options on page 45

Selection tools

Dorico allows you to choose a selection tool 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
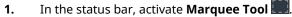
Allows you to click and move the view within the music area.

RELATED LINKS
Selecting multiple notes and notations on page 44
Moving the view on page 44

Selecting multiple notes and notations

You can select notes and notations using the **Marquee Tool**.

PROCEDURE

1. In the status bar, activate **Marquee Tool** .
2. In the music area, click at the position where you want the selection to start and keep the mouse button pressed.
3. Drag to the position where you want the selection to end.
     A gray rectangle is shown to indicate which notes and notations will be selected.
4. Release the mouse button.

RESULT

All notes and notations that you marked are selected.

Moving the view

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

PROCEDURE

1. On the status bar, activate **Hand Tool** .
2. Click anywhere within the view and keep the mouse button pressed.
     Once you move the mouse pointer, it changes into a hand symbol.
3. Move the view.
4. Release the mouse button.

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 that are 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 may be helpful if you want to print the layout as a series of single pages. This may 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

Page arrangements for page view

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

Spreads Horizontally

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

Spreads Vertically

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

Single Pages Horizontally

Displays individual pages laid out from left to right.

Single Pages Vertically

Displays individual pages laid out from top to bottom.

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.

Set Zoom

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

Zoom In

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

RELATED LINKS

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.

Opening different views or layouts by using tabs

You can use tabs in order to display different views or layouts within the same project window.
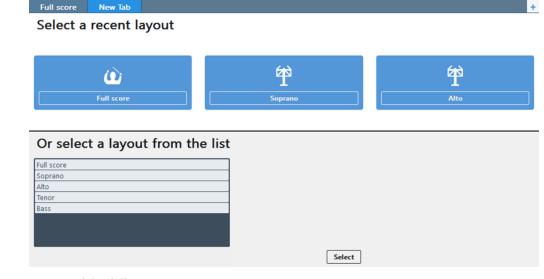
Each tab can contain a separate layout or an additional view of a layout that is already open in another tab or window. Whenever you open a new tab, you are prompted to select a layout that you want to display in the tab.

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

1. Do one of the following:

   - Press **Ctrl/Cmd-T**.

   - To the right of the tabs, click **New Tab** + .

   - Select **Window** > **New Tab**.

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

2. Do one of the following:

   - 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.

Creating tab groups

You can create tab groups that are vertically or horizontally split. This allows you to display different layouts side by side or above one another.

You can also use this function to see an individual layout with a different view.

PROCEDURE

- Select the tab of the layout that you want to move to a new tab group.
  - To create a new tab group that is vertically split from the original tab group and that shows the layouts side by side, select **Window** > **Vertical Split**.
  - To create a new tab group that is horizontally split from the original tab group and that shows the layouts above one another, select **Window** > **Horizontal Split**.

RESULT

The selected tab is moved to the new tab group.

RELATED LINKS
Moving tabs to another tab group on page 48

Closing individual tabs

You can close individual tabs of layouts that you no longer need.

PROCEDURE

- To close individual tabs, do one of the following:
  - Select the tab of the layout that you want to close and press **Ctrl/Cmd-W**.
  - Hover the mouse over the tab and click the **x** icon.
  - Right-click the tab and from the context menu, select **Close Tab**.

  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.

Closing multiple tabs

You can close all tabs but the selected tab.

PROCEDURE

1. Right-click a tab.
2. From the context menu, select **Close Other Tabs**.

RESULT

The tabs and the corresponding layouts are closed.

Switching tabs

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

PROCEDURE

- To switch tabs, do one of the following:
    - Click the tab to which you want to switch.
    - 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.
    - Select **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. Choose the tab that you want to move.
2. Click and drag the tab to a blank space next to the target tab group and 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 left or right, 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 from the context menu, select **Move Tab to New Window**.

- 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 may 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 playback line and move the view to follow the playback.

PROCEDURE

- Do one of the following:

  - Press **Ctrl/Cmd-Shift-T**.

  - Select **Window** > **New Window**.

RESULT

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

Changing to full screen mode

To maximize the amount of screen estate available for your music, you can make any project window cover the whole screen, hiding the desktop elements provided by your operating system, for example, the task bar in Windows or the system menu bar and Dock in Mac OS.

PROCEDURE

- Select **View** > **Full Screen**.

AFTER COMPLETING THIS TASK

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

Hiding panels

To be able to see more of your layouts, you can hide all of the surrounding panels from the main window completely.

PROCEDURE

- Do one of the following:

  - On the toolbar, click **Hide/Restore Panels** .

  - Select **Window** > **Hide/Restore Panels**.

RESULT

If you hide all active panels, the button changes its look and displays which panels are hidden. For example, the following button indicates that all panels were active and are now hidden: ▤.

Hiding individual panels

To be able to see more of your layouts, you can hide individual panels from the main window.

NOTE

This applies equally to all modes.

PROCEDURE

● Do one of the following:
  ● To hide the left panel, click its disclosure arrow or select **Window** > **Show Left Panel**.
  ● To hide the right panel, click its disclosure arrow or select **Window** > **Show Right Panel**.
  ● To hide the bottom panel, click its disclosure arrow or select **Window** > **Show Bottom Panel**.

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. If you selected **Page View**, you can change the page arrangement using the page arrangement controls:
   ● **Spreads Horizontally** ▦
   ● **Spreads Vertically** ▤
   ● **Single Pages Horizontally** ▦
   ● **Single Pages Vertically** ▯

RELATED LINKS
View types on page 44
Page arrangements for page view on page 45

Preferences

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

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

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

RELATED LINKS
View types on page 44
Zoom options on page 45
Selection tools on page 44
Layout Options on page 85
Key Commands on page 10

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

Enable note input using the mouse

If you activate this option, the **Select** tool ▶ in the notes toolbox is activated when you open a saved or new project. This allows you to use the mouse to input notes. You can override this option temporarily by deactivating the **Select** tool.

Default click-drag behavior

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

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 open Setup mode in the following ways:

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

Panels in Setup mode

The following panels are available:

1 **Players**

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

2 **Flows**

Shows the flows that are created for your project.

3   **Layouts**

Lists the layouts that are created for players.

If you select or edit items on a panel, the panel and the selected item are highlighted in a different color. On each of the panels, you can activate/deactivate each player, layout, or flow to flexibly determine the following:

- The players that take part in a 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 or print in an instrumental part or a full score layout
- The flows that you want to show or print in instrumental parts or 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.
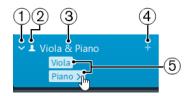
If the **Players** panel is not visible, do one of the following:

- Click the disclosure button on the left edge of the main window.
- Select **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 if the player is a solo player ![solo] or a section player ![section].

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.

55

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 is the default order in which they appear in a layout. You can change the player order for each individual layout in the layout options. In the **Layout Options** dialog, select the **Players** category, and in the **Players** subcategory, activate **Uses custom player order** and change the order of the listed players.

RELATED LINKS

Layouts panel
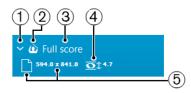
The **Layouts** panel lists all the layouts for full score and instrumental parts.

If the **Layouts** panel is not visible, do one of the following:

- Click the disclosure button on the right edge of the main window.
- Select **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 if the layout is a full score layout , an instrumental part layout , or a 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.

NOTE

You can change the space size in the 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 on 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
Layouts on page 83
Layout Options on page 85

Flows panel

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

If the **Flows** panel is not visible, do one of the following:

● Click the disclosure button at the bottom of the main window.

● Select **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

Players

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

A player may be a solo player, which represents a single human being who can play one or more instruments. For example, a clarinettist may double alto saxophone or bass clarinet. A player may also be a sectional player, which represents multiple human beings, 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

Adding solo players

PREREQUISITE
The **Players** panel must be open.

PROCEDURE

1. Do one of the following:

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

- On the **Players** panel at the bottom, click **Add Solo Player** .

This adds an empty-handed player on the **Players** panel.

2. In the popover that opens, select an instrument:

- In the search field, enter the first letters of the instrument to be played by the player, then select it from the filtered list, and click **Add**.

- Scroll through the popover list, select an instrument, and click **Add**.

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

TIP

If the popover is unavailable, click the plus symbol to the right of the added empty-handed player. Alternatively, you can right-click the player and select **Add Instrument to Player**.

RESULT

The solo player is automatically named after the selected instrument.

RELATED LINKS

Adding section players

PREREQUISITE

The **Players** panel must be open.

PROCEDURE

1. Do one of the following:

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

- On the **Players** panel at the bottom, click **Add Section Player** .

This adds an empty-handed player on the **Players** panel.

2. In the popover that opens, select an instrument:

- In the search field, enter the first letters of the instrument to be played by the player, then select it from the filtered list, and click **Add**.

- Scroll through the popover list, select an instrument, and click **Add**.

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

> **TIP**
>
> If the popover is unavailable, click the plus symbol ➕ to the right of the added empty-handed player. Alternatively, you can right-click the player and select **Add Instrument to Player**.

RESULT

The section player is automatically named after the selected instrument.

RELATED LINKS

Duplicating players

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

PROCEDURE

1. Right-click the player in the **Players** panel.
2. Choose **Duplicate Player** from the context menu.

RESULT

A new player is added, with the same instrument as the original player. The original and new players are automatically numbered to ensure their names are unique.

RELATED LINKS

Numbering instruments

According to convention, when there are multiple instruments of the same type in the same score, they are each given a number so they can be identified.

For example, if there is only one flute in a score it is simply 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.

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: 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.

RELATED LINKS

Player 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 name

The player name is the 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 layout name is 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.

Layout names are linked to the player name until you change the layout name.

Instrument names

Instrument names are the 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 they are playing clarinet automatically shows **Clarinet**, and the staff label automatically shows **Bass Clarinet** where they are playing bass clarinet.

All instruments in Dorico come with a set of instrument names that you can change if you want.

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

You can choose to 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.

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.

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

Singular full name

The name shown in staff labels whenever full instrument names are shown, and the staff contains a single player.

Singular short name

The name shown in staff labels whenever short instrument names are shown, and the staff contains a single player.

Plural full name

The name shown in staff labels whenever full instrument names are shown, and the staff contains multiple players.

Plural short name

The name shown in staff labels whenever short instrument names are shown, and the staff contains multiple players.

Show transposition

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 for the selected instrument from the following options:

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

Save as default for instrument

Check the box to save your changes in the dialog as the default for any new instruments of that type you add to the project.

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. Select the name of the player whose player name you want to change in the **Players** panel.
2. Open the player name 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 **Enter**
   - Click anywhere outside of the layout name 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 63

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. Select the name of the player whose layout name you want to change in the **Layouts** panel.
2. Open the layout name 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 **Enter**

    •   Click anywhere 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

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. Click the disclosure arrow in the player card containing the instrument whose names you want to change in the **Players** panel.

    This expands the card to show the instruments held by the player.

2. Hover the mouse pointer over the instrument whose names you want to change.

    An arrow is shown at the right end of the instrument name.

3. Click the arrow at the right end of the instrument name, and choose **Edit Names** from the context menu.

    The **Edit Instrument Names** dialog opens.

4. Enter new names in any of the following instrument name fields in the **Edit Instrument Names** dialog:

    •   **Singular full name**

    •   **Singular short name**

    •   **Plural full name**

    •   **Plural short name**

5. Optional: If you are changing the instrument names of a transposing instrument, choose when the transposition is shown from the following options:

    •   **Always**

    •   **Follow Layout Options**

    •   **Never**

6. Optional: Check the box beside **Save as default for instrument** to save your changes as the new default for the selected instrument type.

7. Click **OK**.

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 63
Changing layout names on page 64

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 to a different position in the panel.

3. Release the mouse button to insert the player at the selected position.

Deleting players

You can delete players.

PROCEDURE

1. Select the player that you want to delete.

2. Click **Delete Player** 🗍.

You can also right-click the player and choose **Delete Player** from the context menu.

3. Click 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.

Excluding players from full score layouts

By default, every player that you add is added to existing full score layouts. You can exclude players that you do not want to show in a full score layout.

PROCEDURE

1. On the **Layouts** panel, select the full score layout.

2. On the **Players** panel, deactivate the checkbox of the player card for the player that you want to exclude.

RESULT

The player is excluded from the layout.

Including players in instrumental part layouts

You can include one or multiple players in existing instrumental part layouts.

PROCEDURE

1. On the **Layouts** panel, select the instrumental part layout.

2. On the **Players** panel, activate the checkbox of the player card for the player that you want to include.

RESULT

The name of the included player is added to the layout name.

Excluding players from flows

If you create a new flow, all players are automatically added to the flow. You can exclude players from the 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. On the **Flows** panel, select the flow.

2. On the **Players** panel, deactivate the checkbox of the player card for the player that you want to exclude.

RESULT

The player is excluded from the flow.

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

PREREQUISITE

The **Players** panel must be open.

PROCEDURE

1. Do one of the following:

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

- On the **Players** panel at the bottom, click **Add Ensemble** .

2. In the popover that opens, select an ensemble:

   - 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 **Enter**.

RESULT

The ensemble players are added to the **Players** panel, either as solo or as section players.

RELATED LINKS

Instruments

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

In the real world, instruments are played by humans, and this is also reflected in Dorico. 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.

You can always change the initial specification and add or delete instruments.

Adding instruments to players

You can add instruments to solo players or section players.

PREREQUISITE

You have added a solo player or section player.

PROCEDURE

1. In the **Players** panel, open the instrument picker in any of the following:

   - 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. In the popover that opens, select an instrument:

   - In the search field, enter the first letters of the instrument to be played by the player, then select it from the filtered list, and click **Add**.

   - Scroll through the popover list, select an instrument, and click **Add**.

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

RESULT

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

Adding multiple instruments to solo players

You can add multiple instruments to solo players.

PREREQUISITE

You have added a solo player that has already been assigned an instrument, or you have added an ensemble with several solo players.

PROCEDURE

1. In the **Players** panel, open the instrument picker in any of the following:

   - Select the player and press **Shift-I**.

   - Click the plus symbol to the right of the added empty-handed player.

   - Right-click the player and select **Add Instrument to Player**.

2. In the popover that opens, select an instrument:

   - In the search field, enter the first letters of the instrument to be played by the player, then select it from the filtered list, and click **Add**.

   - Scroll through the popover list, select an instrument, and click **Add**.

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

RESULT

The selected instrument is added to the player.

Adding empty percussion kits to players

PROCEDURE

1. In the **Players** panel, open the **Edit Percussion Kit** dialog in any of the following ways:

   - Select a solo or section player and press **Shift-I** and click **Create Empty Kit** in the instrument picker.

   - Click the plus symbol to the right of an 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.

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.

2. Choose **Combine Instruments into Kit** from the context menu.

3. Edit the kit as required in the **Edit Percussion Kit** dialog that opens immediately. 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. You can change the instruments of pitched instruments and individual unpitched percussion instruments, but you cannot change the instrument of percussion kits.

NOTE

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

PROCEDURE

1. Expand the card of the player whose instrument you want to change in the **Players** panel.

   The card lists the instruments of the player.

2. Hover your mouse pointer over the instrument you want to change and click the arrow:

3. Choose **Change Instrument** from the context menu.

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

   - Enter the first few letters of the instrument name you want, then select it from the filtered list.

   - Click an instrument family and then an instrument.

   - Use the **Up Arrow** and **Down Arrow** keys to select an instrument family, then press **Tab** to switch to the instrument column.

     Press **Up Arrow** and **Down Arrow** to select an instrument.

NOTE

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

RESULT

The selected instrument is changed, without affecting any music on its staff.

NOTE

Where appropriate new clefs are input, meaning notes may appear differently so they are notated correctly according to the new clef.

Moving instruments between players

You can move individual instruments between players, as each player can hold multiple instruments, in the following ways:

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

2   Click the arrow in the instrument name when you hover the mouse over it, choose **Move Instrument to Player** from the context menu, then select the player you want from the players available.

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.   Open the player card by clicking the disclosure arrow to the left of the player name.

2.   Move the mouse over the instrument name and click the disclosure arrow to the right of the instrument name.

3.   Choose **Delete Instrument** from the context menu.

4.   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** from the context menu.

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

The **Edit Percussion Kit** dialog

At the top of the dialog, you can set the full name and abbreviated name for the kit instrument. These names are used as staff labels for percussion kits that use the five-line staff presentation type.

The main editing area of the dialog has three tabs, allowing you to edit how the kit will appear in each of the presentation types:

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. However, 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.

You can change the names of individual instruments within percussion kits. Click **Edit Names** below the action bar to open the **Edit Instrument Names** dialog.

This changes the appearance of percussion instrument names in all presentations.

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

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

The Edit Percussion Kit dialog action bar, left to right: **Add new instrument**, **Add existing instrument from player**, **Remove instrument from kit**, **Change instrument**, and **Delete instrument**

Add new instrument

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

Add existing instrument from player

Shows a menu listing the other players in your project that are holding individual percussion instruments not in kits. You can select a percussion instrument from another player to move to this kit, bringing its music with it.

Remove instrument from kit

Removes the selected instrument from the kit, so it appears as an individual instrument. Individual instruments can be moved to other players or into other kit instruments.

Change instrument

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

Delete instrument

Deletes the instrument from the kit, including its music.

RELATED LINKS

Adding instruments to percussion kits

You can add new instruments to percussion kits within the **Edit Percussion Kit** dialog.

PROCEDURE

1. Expand the card of the player holding the kit to which you want to add instruments in the **Players** panel.

2. Click the arrow in the kit instrument label and choose **Edit Percussion Kit** from the context menu to open the **Edit Percussion Kit** dialog.

3. Click **Add New Instrument**:

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

   - Enter the first few letters of the instrument name you want, then select it from the filtered list.

   - Click an instrument family and then an instrument.

   - Use the **Up Arrow** and **Down Arrow** keys to select an instrument family, then press **Tab** to switch to the instrument column. Use the **Up Arrow** and **Down Arrow** keys to select an instrument.

     NOTE

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

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

- Press **Return**.

- Click **Add**.

6. Click **Close** to close the kit editor.

RESULT

The selected instrument is added to the percussion kit.

Changing instruments in percussion kits

You can change existing instruments in percussion kits while retaining any existing music for that instrument.

PROCEDURE

1. Expand the card of the player holding the kit to which you want to add instruments in the **Players** panel.

2. Click the arrow in the kit instrument label and choose **Edit Percussion Kit** from the context menu to open the **Edit Percussion Kit** dialog.

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:

- Enter the first few letters of the instrument name you want, then select it from the filtered list.

- Click an instrument family and then an instrument.

- Use the **Up Arrow** and **Down Arrow** keys to select an instrument family, then press **Tab** to switch to the instrument column. Use the **Up Arrow** and **Down Arrow** keys to select an instrument.

  NOTE

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

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.

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 grid presentation percussion kit, the name of each individual instrument is shown in the staff label. You may want to 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. Open the **Edit Percussion Kit** dialog by clicking the arrow in the instrument name when you hover the mouse over it, and choosing **Edit Percussion Kit** from the context menu.

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

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

4. Hold down **Shift**.

5. 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.

Changing the names of 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. Open the **Edit Percussion Kit** dialog by clicking the arrow in the instrument name when you hover the mouse over it, and choosing **Edit Percussion Kit** from the context menu.

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

3. 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.

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

    - **Full Name**

    - **Short Name**

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

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			Ride Cymbal	
Hi-hat			Hi-hat	
Snare Drum			Snare Drum	
Crash Cymbal			Crash Cymbal	
Wood Block 1				
Wood Block 3			Wood Blocks	
Wood Block 2				
Tom 1			Tom 1	
Tom 2			Tom 2	
Floor tom			Floor tom	
Kick Drum			Kick Drum	

Ungrouped grid presentation percussion kit

Grid presentation percussion kit with wood blocks grouped

RELATED LINKS
Staff labels for percussion kits on page 595

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. Open the **Edit Percussion Kit** dialog by clicking the arrow in the instrument name when you hover the mouse over it, and choosing **Edit Percussion Kit** from the context menu.

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

3. 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.

4. Click **Delete**:

   🗑

RESULT

The group is deleted. The individual staff labels for each instrument in the group are restored.

Changing the positions of instruments within percussion kits

You can change the positions of instruments within percussion kits of all presentation types to change the order in which the instruments appear in the score and parts.

PROCEDURE

1. Open the **Edit Percussion Kit** dialog.

   You can do this by clicking the arrow in the instrument name of the percussion kit whose instrument positions you want to change and choosing **Edit Percussion Kit** from the context menu.

2. 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.

3. Click a percussion instrument in the kit whose position you want to change.

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

   - Click the up arrow **Move** button to move it upwards.

   - Click the down arrow **Move** button to move it downwards.

   - Click and drag the instrument to the position you want (5-line staff presentation only).

5. Optional: Repeat these steps for other instruments in the percussion kit, and for other kit presentation types for the same percussion kit.

RESULT

The position of the selected instrument within the kit is changed. Multiple instruments can share the same staff position, but it is advisable to ensure that they use different noteheads so that the player can tell them apart.

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. Open the **Edit Percussion Kit** dialog.

   You can do this by clicking the arrow in the instrument name of the percussion kit whose instrument positions you want to change and choosing **Edit Percussion Kit** from the context menu.

2. Click the **Grid** presentation type.

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

4. 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.

RESULT

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

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. Open the **Edit Percussion Kit** dialog by clicking the arrow in the instrument name when you hover the mouse over it, and choosing **Edit Percussion Kit** from the context menu.

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

3. Click **Remove Instrument From Kit** in the action bar:

4. Click **Close** to close the kit editor.

RESULT

The selected instrument appears as an individual instrument belonging to the player, separately from the percussion kit.

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

RELATED LINKS
Moving instruments between players on page 71

Groups

A group is a collection of players.

In most scores, there is a single group, for example a choir, an orchestra, or a band. In some works for large forces, there may be multiple groups, for example, in Britten's "War Requiem", which has three distinct groups, or Walton's "Belshazzar's Feast" which requires two separate off-stage brass groups. These make it necessary to be able to assign players to these groups for the purposes of, among other things, properly bracketing and labeling their staves in the conductor's score.

Adding groups

You can organize players in groups.

PREREQUISITE

The **Players** panel must be open.

PROCEDURE

1. Optional: Select the players that you want to include in the group.

2. On the **Players** panel at the bottom, 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 79

Renaming groups

You can change the name of a group.

PROCEDURE

1. On the **Players** panel, double-click the name of the group.

2. Enter the new name.

3. Press **Enter**.

Deleting 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. On the **Players** panel, select the group that you want to delete.

2. Do one of the following:

   - Click **Delete** ☐

   - Press **Delete**.

3. Do one of the following:

   - To keep the players, click **Keep Players**.

   - To delete the group including the players, click **Delete Players**.

Adding players to groups

You can add existing or new players to groups.

PREREQUISITE

You have added at least one player, one ensemble, or one group.

PROCEDURE

- On 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 on page 78
Adding solo players on page 59
Adding section players on page 60

Moving players between groups

You can move players from one group to another.

PROCEDURE

1. Select the players that you want to move to another group in the **Players** panel.

2. Click and drag the selected players into the other group.

3. Release the mouse at the position where you want to add the players.

RESULT

The players are moved to the other group.

Removing players from groups

You can remove players from groups.

PROCEDURE

1. On the **Players** panel, select the players that you want to remove from a group.

2. Click and drag the selected players out of the group and release the mouse button.

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, the notes that you may have already input for that player in that flow are deleted.

RELATED LINKS
Flows on page 32
Flows panel on page 58

Creating flows

If you need more than one flow in your project, you can create a new flow.

PROCEDURE

- On the **Flows** panel, click **Add Flow** .

RESULT

All existing players are assigned to the new flow. The new flow is automatically added to all existing full score and part layouts.

Flow names and flow titles

Whenever you add a flow to 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 **File** > **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.

Renaming flows in Setup mode

PROCEDURE

1. Do one of the following:
    - 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.
3. Press **Enter**.

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

PROCEDURE

1. Choose **File** > **Project Info**.
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.

    NOTE

    You can repeat steps 2-3 for other flows in your project before closing the dialog.

4. Save your changes and close the dialog in any of the following ways:
    - Press **Return**
    - Click **OK**

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.

IMPORTANT

If you delete flows, all music for all instruments belonging to all players for the flows is also deleted.

PROCEDURE

1. Select the flows you want to delete in the **Flows** panel.

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.

Excluding flows from layouts

By default, every flow that you create is added to existing full score layouts or instrumental part layouts. You can exclude flows that you do not want to show in a layout.

PROCEDURE

1. On the **Layouts** panel, select a layout.

2. On the **Flows** panel, deactivate the checkbox of the flow card for the flow that you want to exclude.

RESULT

The flow is excluded from the layout.

Changing the Notation Options for flows

You can change the **Notation Options** for one or several flows.

PROCEDURE

1. Optional: On the **Flows** panel, select a flow or all flows.

2. Click **Notation Options** ⚙.

3. Optional: In the **Notation Options** dialog, you can change your flow selection if necessary. Do one of the following:

    - Select one or several flows from the **Flows** list.

    - Click **Select All**.

4. From the **Select a Category** pop-up menu, select a category.

5. In the area on the right, make your changes.

6. Click **Apply**.

Layouts

Layouts define how the music in a flow is presented.

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.

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, an instrumental part layout contains all flows. You can exclude flows that you do not need.

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, a layout that contains only one flow instead of all flows.

RELATED LINKS

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 on the **Layouts** panel.

AFTER COMPLETING THIS TASK

You can assign players and flows to your layout.

Renaming layouts

You can change the name of a layout.

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. Do one of the following:

- Double-click the name of the layout.
- Right-click the name of the layout and from the context menu, select **Rename**.

2. Enter the new name

3. Press **Enter**.

Switching layouts
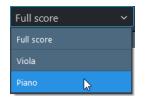
If you have created several layouts, you can switch to another layout in every mode.

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

PROCEDURE

- In the middle of the toolbar, from the workspace controls, click **Select Layout** and select one of the available layouts.

Full score	∨
Full score	
Viola	
Piano	

RESULT

The selected layout opens in the music area.

Sorting layouts

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

PROCEDURE

1. Click a layout card and keep the mouse button pressed.

2. Drag the layout card to a different position on the panel.

3. Release the mouse button.

RESULT

The layout is inserted at the selected position.

Deleting layouts

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

PROCEDURE

1. Select the layout that you want to delete.

2. Do one of the following:

- Click **Delete Layout** ▢.
- Press **Delete**.

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

Layout Options

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 labeling.

NOTE

- For project-wide changes that affect all layouts in your project, you can also make changes in **Engrave** > **Engraving Options**.

- You can save all options that you set in the layout options as default values for new projects by activating **Save as defaults for** and selecting a layout type.

You can open **Layout Options** in 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:

  ⚙

- 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 features a pop-up menu that allows you to select a category. Every category provides subcategories with options that are displayed in the area to the right. A **Layouts** section below the selectable categories lists all the layouts that are available in your project.

If you have not specified for which layout you want to make changes, the **Layouts** list and further options at the bottom of the **Layouts** list allow you to select one or multiple layouts, groups of layouts, or all layouts.

You can also select individual layouts in the following ways:

- **Ctrl/Cmd**-click individual layouts in the list.
- **Shift**-click multiple adjacent layouts in the list.

RELATED LINKS
[Engraving Options](#) on page 163

Page setup

The **Page Setup** category in the layout options allows you to determine basic page properties which affect the way the notation is arranged on a page.

Bar numbers

The **Bar Numbers** category in the layout options allows you to determine how bar numbers are displayed and positioned in each layout.

Note spacing

The **Note Spacing** category in the layout options allows you to determine options that affect the way notes are aligned on staves.

TIP

Justifications of a final system in a flow that are determined by a percentage value are activated by default. To deactivate this, deactivate **Only justify final system in flow when more than**.

Players

The **Players** category in the layout options allows you to determine options that affect the way music is displayed for individual players.

Vertical spacing

The **Vertical Spacing** category in the layout options allows you to determine distances between staves and systems.

Write mode

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

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.

To open Write mode, you have the following options:

- Select **Write** on the toolbar.
- Select **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

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

3 Properties panel

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

4 Notations panel

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

5 Notations toolbox

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

Notes toolbox

The tools in the notes toolbox allow you to modify the note input.

Dotted Notes

Adds/Removes rhythm dots to notes or chords.

Rests

Allows you to input rests of the duration that you select on the notes panel.

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.

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. To use a different tuplet, press the respective key command on your computer keyboard.

Grace Notes

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

Insert

Inserts music instead of overwriting.

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.

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, by default, splits the note with a tie.

IMPORTANT

Any time signature changes or other edits to your music may lead to unexpected results.

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**.

Tie

Ties the note to be input to the previous note of the same pitch. When editing notes, you can use this tool to tie together notes in different voices or to tie grace notes to rhythmic notes.

To activate/deactivate **Tie**, press T.

Select

Activates/Deactivates mouse input.

RELATED LINKS
Activating rhythm dots on page 103
Rests on page 100
Inputting chords on page 96
Adding tuplets on page 104
Inputting grace notes on page 107
Activating/deactivating mouse input on page 97

Notes panel

The notes panel contains note durations, accidentals, slur, and articulations for inputting notes.

To show/hide the notes panel, click the disclosure arrow ▶ / ◀ below the notes toolbox.

The upper part of the notes panel provides the note durations that you can input. 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 during note input.

NOTE

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

To show/hide the properties panel, click the disclosure arrow / below the notes toolbox.

Notes and Rests group of the Properties panel in Write mode

RELATED LINKS
Changing the properties of individual items in Write mode on page 121

Notations panel

The Notations panel contains the notation items for your music.

Depending on the tool that you select in the notations toolbox, the choice of usable notations in the Notations panel changes.

To show/hide the Notations panel, click the disclosure arrow below the notations toolbox.

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, Tonality Systems, and Accidentals

Opens sections in the Notations panel that allow you to specify and select key signatures, and to select tonality systems and several types of 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.

Tremolos

Opens a section of the Notations panel that allows you to 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.

Rehearsal Marks

Inserts a rehearsal mark at the selected note.

Text

Opens a popover that allows you to insert text at the selected rhythmic position.

Lyrics

Opens a popover above the selected note on the staff. This popover allows you to input lyrics.

RELATED LINKS
Lyrics on page 113

Note input

There are several different ways to input notes.

To input notes, you can use any of the following methods, and switch between them at any time:

- MIDI keyboard
- Computer keyboard
- Mouse or trackpad

TIP

A MIDI keyboard is the fastest way to input notes.

The procedures that you come across in this chapter are for active note input. Information relating to note editing or the options that influence note input are handled in the notation reference. In some cases, though, hints to editing processes may be given in this chapter.

RELATED LINKS
Notes on page 453

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.

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 affect the note or chord that you are about to input: you 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 98

Positioning of new items

The input position 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 caret's rhythmic position.

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

If you want to add a 3/4 time signature in front of a specific note, you have the following options: you can select the note, press **Shift**-**M**, enter 3/4, and press **Enter**. If no note is selected, select **Time Signature (Meter)** in the notations toolbox. Then select 3/4 from the **Common** section, move the mouse pointer to the position where you want to insert the time signature, and click.

Selecting/deselecting notes or notations

You can edit your music with or without selecting notes or notations in the toolboxes or panels.

If you select notes or notations in the toolboxes, they are inserted at the selected rhythmic position in the music area. You can also click notations on the Notations panel and position them on a staff.

To select notes or notations in the music area, you can do one of the following:

- Click a note or notation.
- Drag a marquee around multiple notes or notations.

To deselect any items, click anywhere outside the staves within the music area or press **Ctrl/ Cmd**-**D**.

Starting note input

Dorico provides several methods to start inputting notes.

> **NOTE**
>
> You must specify the duration, accidentals, and articulations before specifying the pitch. This applies to all input methods.

You can use any of the following methods to start note input:

- Double-click the rhythmic position on the staff at which you want to begin inputting notes.
- Select a note, chord, rest, or other item at the rhythmic position on the staff at which you want to begin inputting notes, and press **Return** or press **Shift-N**.
- Click a note duration in the Notes panel when no note is selected in the music area.

Inputting notes

Notes can be input 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 in from a MIDI keyboard.

PROCEDURE

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

   - Press **Shift-N**.
   - Select the staff where you want to input notes and press **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 the note value you want for your notes in one of the following ways:

   - Select the rhythmic value from the Notes panel on the left of the window.
   - Press the number that corresponds to the rhythmic value you want, such as **6** for quarter notes, **5** for eighth notes, **7** for half notes, and so on.

3. If required, activate a rhythm dot.

4. If required, add an accidental.

5. If required, add an articulation.

6. Input the pitches you want in one 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**.

   - 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.

> **TIP**
>
> A gray notehead appears when inputting with a mouse pointer to show you where the note will be input.

- Play in the notes you want with a MIDI keyboard.

7. Finish inputting notes by pressing **Esc** or **Return**.

RELATED LINKS
Adding notes above and below existing notes on page 105

Inputting notes in Insert mode

When Insert mode is activated, you can input notes before existing notes without overriding them. Insert mode allows you to move existing notes forward at the same time as inputting new notes where they were before.

PROCEDURE

1. In Write mode, start note input.

2. Select the note value you want for your notes.

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

- Press **I**
- Click **Insert** in the Notes panel on the left of the window:

When **Insert** mode is activated, the caret shows V and inverted V shapes at the top and bottom, as shown in this example:

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

- Press the letters on your keyboard that correspond to the notes you want.
- Click on the staff with a mouse pointer on the lines or in the spaces where you want to input notes at the rhythmic position.

  > **TIP**
  >
  > A gray notehead appears when inputting with a mouse pointer to show you where the note will be input.

- Play in the notes you want with a MIDI keyboard.

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

- Press **I** again.
- Select the **Insert** button again in the Notes panel on the left of the window.

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.

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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 for players with multiple instruments

Note input for players who play multiple instruments follows the rules that apply for the default note input. To see the notes that you input for the different instruments, you can start note input in galley view.

PREREQUISITE

You have added a solo player who plays at least two instruments.

PROCEDURE

1. In the status bar, from the view selector, select **Galley View**.

2. Input your notes for all instruments, one after the other.

Inputting chords

Chords can be input 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 in from a MIDI keyboard.

PROCEDURE

1. In Write mode, start note input.

2. Select the note value you want for your notes.

3. Activate **Chords** in one of the following ways:

- Press **Q**

- Click **Chords** in the Notes panel on the left of the window:

4. 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.

5. Input the pitches you want in one of the following ways:

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

NOTE

When **Chords** is activated, notes are input at the same rhythmic position and above the previous note until you advance the caret manually. For example, if you press **A** then **E** then **A**, a chord of A-E-A is input at the caret position.

- Click on the staff with a mouse pointer on the lines or in the spaces where you want to input notes at the rhythmic position.

TIP

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

- Play in the notes you want with 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.

6. To deactivate **Chords**, do one of the following:

- Press **Q** again.
- Select the **Chords** button again in the Notes panel on the left of the window.

RESULT

Multiple notes are input at the caret position.

NOTE

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.

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

RELATED LINKS

Activating/deactivating mouse input

You can activate/deactivate mouse input.

PROCEDURE

- In the Notes toolbox, do one of the following:

  - To activate mouse input, deactivate **Select** .
  - To deactivate mouse input, activate **Select** .

Activating/deactivating mouse input for all projects

You can activate/deactivate mouse input for all projects. This changes the default setting. You can still activate/deactivate mouse input for an individual session.

PROCEDURE

1. Click **Edit** > **Preferences**.
2. In the **Preferences** dialog, select the **General** section.
3. Activate/Deactivate **Enable note input using the mouse**.
4. Click **Apply**.

Caret

The caret shows the rhythmic position at which notes, chords or notation items can be 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: you may also know the caret by the names insertion point or cursor.

In Dorico, the caret is displayed as 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 changes its look 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.

Chords

The caret shows a plus symbol on the left at the top.

Lock to Duration

The caret line is dashed.

Grace Notes

The caret is smaller than the default caret.

Voices

If you input multiple voices, the caret shows:

- 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 to indicate the stem direction of the voice

Activating/deactivating the caret

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

To activate the caret, you have the following options:

- Select a note or rest and press **Shift**-**N** or **Return**.
- Double-click the rhythmic position on the staff at which you want to begin inputting notes.

To deactivate the caret, you have the following options:

- Press **Esc**.

- Double-click anywhere outside the staves within the music area.

Moving the caret manually

When inputting chords, the caret does not move automatically. Therefore, you must move it manually.

You can move the caret in the following ways:

- Press **Right Arrow** and **Left Arrow** to move the caret to the next or previous rhythmic position.
- Press **Ctrl/Cmd**-**Right Arrow** and **Ctrl/Cmd**-**Right Arrow** to move the caret to the next or previous bar.
- Press **Space** to advance the caret to the next rhythmic position, according to the note value currently selected.
- Press **Up Arrow** and **Down Arrow** to move the caret to the staff above and the staff below.
- Press **Ctrl/Cmd**-**Up Arrow** and **Ctrl/Cmd**-**Down Arrow** to move the caret to the top or bottom staff in the system.

RELATED LINKS
Inputting chords on page 96

Rhythmic grid

The rhythmic grid shows the rhythmic divisions and subdivisions of the bar in which the caret is located.

Rhythmic grid for eighth notes

The rhythmic grid is shown above the top staff, on which the caret is visible. Longer lines indicate beat divisions, while shorter lines indicate subdivisions of the beat.

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
- The amount by which the duration of a note or of a selection of notes is modified

RELATED LINKS
Caret on page 98
Moving the caret manually on page 99

Changing the rhythmic grid resolution

You can change the resolution of the rhythmic grid.

The default grid resolution is set to eighth notes.

PROCEDURE

- Do one of the following:
  - For a coarser grid resolution, select **Write** > **Rhythmic Grid** > **Decrease Grid Resolution** or press the respective key command.

- For a finer grid resolution, select **Write** > **Rhythmic Grid** > **Increase Grid Resolution** or press the respective key command.

Alternatively, you can do one of the following:

- Select a grid resolution from the **Rhythmic Grid Resolution** selector on the status bar.
- Select **Write** > **Rhythmic Grid** and then select one of the available beat divisions.

RELATED LINKS

Rests

Dorico provides several ways to input rests.

You have the following options:

- While inputting notes, you can press **Space** or **Right Arrow**. These key commands move the caret, and any gaps between notes are automatically filled with rests. You can select a different duration on the notes panel.
- If you activate **Rests** in the notes toolbox or press **,** (comma), only rests instead of notes are input into the score. Dorico automatically discerns which rests are appropriate according to the time signature that you selected.
- If you activate **Rests** and **Force Duration** in the notes toolbox, or press **,** (comma) and **O**, only rests of the duration that you selected on the notes panel are input into the score.

Inputting rests with the rests tool

You can input only rests if you activate the **Rests** tool.

PROCEDURE

1. In the notes toolbox, activate **Rests** .
2. Optional: On the notes panel, select a duration.
3. Input a rest by doing one of the following:
   - Play a note on the MIDI keyboard.
   - Press a key from **A** to **G** on your computer keyboard.

RESULT

A rest of the selected duration is added to the score. If you add more than one rest, Dorico automatically combines the rests to a rest of a different duration that makes sense in combination with the input notes.

Inputting rests of a specified duration

You can force Dorico to input rests of a specified duration.

PROCEDURE

1. Do one of the following:
   - In the notes toolbox, activate **Rests** and **Force Duration** .
   - Press **,** (comma) and **O**.
2. On the notes panel, select the duration.

3. Press any key on your MIDI or computer keyboard.

RESULT

The rest of the selected duration is input into your score.

Voices

You can input multiple voices in Dorico.

By default, each staff of an instrument only uses a single voice, but you can create more voices if necessary.

Each voice has a nominal stem direction which determines the stem direction of notes where multiple voices are present on the same staff. The voice that is created by default for each staff of each instrument is an up-stem voice. When you start a new voice, you can choose whether it should be nominally up-stem or down-stem.

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

RELATED LINKS
Adding notes above and below existing notes on page 105

Inputting new voices

You can input multiple voices into your score.

PREREQUISITE

You have started note input. The caret is activated.

PROCEDURE

1. Move the caret to the rhythmic position where you want to start inputting a voice.

2. Press **Shift**-**V**.

The caret shows a plus symbol and a note with a specific stem direction. If you have already input two voices, the caret additionally shows a number to indicate which voice you are going to input next.

3. Optional: Press **Shift**-**V** again to change the stem direction of the voice.

4. Input notes for the voice.

Re-using existing voices

You can re-use existing voices to change or input notes.

PREREQUISITE

You have started note input. The caret is activated.

PROCEDURE

1. Move the caret to the rhythmic position where you want to start inputting into an existing voice.

2. Press **V** to cycle through the existing voices.

The caret shows an up-stem or a down-stem note and additionally a number if you have created several voices.

3. Input notes for the voice.

IMPORTANT

Existing notes in the voice are overwritten.

Selecting durations

You can select durations 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:

   ● Activate one of the durations on the notes panel.

   ● Press one of the respective key commands.

RELATED LINKS
Notes panel on page 89
Key commands in Dorico on page 10

Changing the duration of selected notes

You can shorten or lengthen the duration of selected notes.

PROCEDURE

1. Select one or more notes.
2. Activate a different duration on the notes panel or press its key command.

   NOTE

   Alternatively, you can press **Shift**-**Alt**-**Left Arrow**/**Right Arrow** to shorten or lengthen the notes by the amount determined by the resolution of the rhythmic grid. If you want to change the grid resolution, you can do one of the following:

   ● Select a grid resolution from the **Rhythmic Grid Resolution** selector on the status bar.

   ● Select **Write** > **Rhythmic Grid** and select a grid resolution.

Forcing the duration of notes

Dorico automatically notates and beams appropriately, according to the current time signature and their position in the bar.

For example, if you input a half note at the start of a 6/8 bar, it is notated as a dotted quarter note tied to an eighth note. 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.

If you want to specify how the durations of notes are notated, you can force their duration.

PROCEDURE

1. In Write mode, start note input.

2. Activate **Force Duration** in one of the following ways:

- Press **O**

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

3. Input the notes you want.

You can deactivate **Force Duration** at any time by pressing **O** or clicking **Force Duration** in the Notes toolbox.

RESULT

The notes you input are notated as their whole value, whatever their position in the bar.

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**.

RELATED LINKS
Inputting notes on page 94
Setting beaming within time signatures on page 247
Creating custom beam groupings for meters on page 262

Activating rhythm dots

The **Dotted Notes** tool allows you to add rhythm dots to notes.

PROCEDURE

1. Do one of the following:

- Press **.** (dot).

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

  NOTE

  The tool remains activated until you either select a different note duration or deactivate it.

2. Optional: Press **Alt-.** (dot) to increase the number of input dots.

Adding accidentals

You can add basic accidentals to individual notes during note input.

PROCEDURE

1. To add an accidental, do one of the following:

- On the notes panel, click **Natural** , **Flat** , or **Sharp** .

- In Write mode, on the computer keyboard, press the respective key command.

2. Input a note.

RELATED LINKS

Adding articulations

You can add articulations to notes or chords during note input.

PROCEDURE

1. To add an articulation, do one of the following:

- On the keyboard, press the respective key command for a duration.
- On the notes panel, activate one of the articulations buttons.

IMPORTANT

You can add an articulation of duration and an articulation of force to the same note or chord. If you add a second articulation of the same type to a note or chord, the new articulation replaces the existing one.

2. Input a note.

Adding tuplets

NOTE

To add a triplet, you can also click **Tuplets** .

PROCEDURE

1. Start note input.

2. Activate the tuplets function by pressing the respective key command on your computer keyboard.

3. Add the ratio for the tuplet you want. For example, enter `4:6` to input four notes in the duration normally occupied by six.

NOTE

To add a triplet, you can enter either 3:2 or 3.

4. Press **Enter** to close the tuplets popover.

5. Input the notes you want.

6. Optional: Deactivate tuplet input by pressing the respective key command on your computer keyboard.

RELATED LINKS

Adding notes above and below existing notes

You can add notes above and below existing notes. You can 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

The add intervals popover

The add intervals popover allows you to add notes above and below existing notes, and also transpose existing notes.

Add intervals popover. A new command Write ‣ Add Intervals Popover has been added, with the default key command Shift+I.

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 example of how to structure your entry to transpose notes or add notes to existing notes.

Enter:	To add or transpose notes:
`t3` or `t6`	Transpose notes upwards
`t-5` or `t-3`	Transpose notes downwards
`3` or `3rd`	Add notes a third above
	NOTE
	The ordinal suffix is not necessary but you can include it if you wish.
`-4` or `-4th`	Add notes a fourth below

Enter:	To add or transpose notes:
	NOTE
	The ordinal suffix is not necessary but you can include it if you wish.
`3,6` or `-3,3,4`	Add multiple notes separated by commas but no spaces.
`3 all` or `-M2,m3 to all`	Add notes above or below all notes in selected chords.
`-3 top` or `dim5 top`	Add notes only to the top notes in chords.
`aug4 bottom` or `-2 bottom`	Add notes only the to bottom notes in chords.
`p`, `per`, or `perf`	Perfect interval
`M`, `maj`, or `major`	Major interval
`m`, `min`, or `minor`	Minor interval
`d`, `dim`, or `diminished`	Diminished interval
`a`, `aug`, or `augmented`	Augmented interval
`diat` or `diatonic`	Diatonic interval
`t 3 8 qt`	Transpose notes by mictrotonal intervals.
	NOTE
	The first number is the interval degree.
	The second number is the number of quartertones.

If you do not otherwise specify it, the interval will be calculated by adding or transposing notes by the number of staff positions specified, e.g. in C major, if the selected note is a D natural and you specify 3 to add a third above, the added note will be an F natural. You can specify the quality of the interval by entering the interval you want 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.

RELATED LINKS
Adding notes above and below existing notes on page 105
Transposing existing notes using the add intervals popover on page 107

Transposing existing notes 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
The add intervals popover on page 105

Inputting grace notes

The **Grace Notes** tool allows you to input grace notes instead of notes. You can input slashed and unslashed grace notes.

PROCEDURE

1. Do one of the following:

    - In the notes toolbox, activate **Grace Notes** .
    - Press the respective key command.

2. On the notes panel, select a duration.

3. Optional: Press the respective key command in your language to change between slashed and unslashed grace notes.

    NOTE

    The type of grace note that you input is displayed within the tool icon in the notes toolbox. You can change the grace note type after note input.

4. Input the grace note.

5. Deactivate the **Grace Notes** tool to continue note input.

RELATED LINKS
Changing the grace note type on page 107
Key commands in Dorico on page 10

Changing the grace note type

When inputting grace notes, slashed grace notes are input by default. If you did not switch between the different grace note types during note input, you can change the grace note type after note input.

PROCEDURE

1. Select the grace note.

2. Open the properties panel.

3. In the **Grace Notes** group of the Properties panel, do one of the following:

- Activate **Unslashed** ♪ to change the grace note to an unslashed grace note.

- Activate **Slashed** ♪ to change the grace note to a slashed grace note.

Adding time signatures

When you add time signatures to your project, Dorico adds the barlines automatically at the correct places.

PROCEDURE

1. Select the first note or rest on the staff.

2. Do one of the following:

- Press **Shift-M**.

    This opens a small popover on top of the staff.

    Enter a typical time signature, such as 3/4 and press **Enter**.

- In the notations toolbox, select **Time Signatures (Meter)** ⅜.

    On the Notations panel, select one of the time signatures in the **Common** section or create a custom time signature in the **Create Time Signature** section.

RELATED LINKS
Creating custom time signatures on page 108

Adding time signatures with a pickup

You can define a pickup, also known as anacrusis or upbeat, in combination with time signatures.

PROCEDURE

1. Select the first note or rest on the staff.

2. Press **Shift-M**.

3. In the popover, enter a time signature, press `,` and enter the number of notes that you want to input as pickup, for example `3/4,1`.

RESULT

When you start inputting notes, a barline is inserted automatically after the pickup. All the notes that follow, follow the set time signature.

RELATED LINKS
Creating custom time signatures on page 108

Creating custom time signatures

You can create custom time signatures.

PROCEDURE

1. In the notations toolbox, select **Time Signatures (Meter)**.

2. On the Notations panel, open the **Create Time Signature** section.

3. From the upper pop-up menu, select the type of time signature that you want to create.

4.   In the top and bottom rows of input fields below the selected time signature, which show a sample entry for a 4/4 time signature, you have the following options:

- To create a regular time signature, input the numerator into the first top input field and the denominator into the first bottom input field.

- To create interchangeable, aggregate, or alternating time signatures, start inputting the numerators and denominators into the leftmost top and bottom input fields and continue input further to the right.

> **NOTE**
>
> You can use **Tab**/**Shift**-**Tab** to move back and forth between the input fields.

The resulting time signature is shown at the bottom of the section.

5.   Optional: Activate **Pickup bar of** and from the pop-up menu, select the pickup, also known as anacrusis or upbeat, that you want to use.

6.   Click the displayed time signature.

7.   Optional: If you did not select a note or chord, you can move the mouse pointer to the position where you want to insert the time signature and click.

RESULT

The time signature is inserted. All the notes that follow, follow the set time signature.

RELATED LINKS

Adding custom time signatures using the popover

In the popover on top of the staff, you can enter different custom time signatures by using different key combinations on your computer keyboard.

Each of the custom time signatures that you can create on the notes panel in the **Create Time Signature** section, can also be created by using the popover (**Shift**-**M**) and the keys on your computer keyboard, as described in the following examples:

> **NOTE**
>
> Default time signatures are entered as follows: numerator, slash, denominator, for example: 3/8.

Time signatures with beat groupings

Enter the required numerators and plus symbols, then a slash and the denominator without empty spaces. If you surround the numerators with brackets, these are added together and are shown as one number.

EXAMPLE

Time Signatures with Beat Groupings

2+2+2+3/8 creates the following time signature:

Time Signatures with Beat Groupings That Are Added Together

[2+2+2+3]/8 creates the following time signature:

Alternating time signatures

Enter a time signature, add an empty space, a plus symbol, an empty space, and then an alternate time signature.

EXAMPLE

3/8 + 2/8 creates the following time signature:

Interchangeable time signatures

Enter a time signature, an empty space, and then another time signature in parentheses.

EXAMPLE

3/8 (2/8) creates the following time signature:

Aggregate time signatures

Enter a time signature, an empty space, a vertical bar, an empty space, and then another time signature. The resulting displayed time signature is visually identical with the alternating time signature, but it creates bars that have a length of both time signatures added together. The bars are subdivided by a dashed barline where the first bar normally ends.

EXAMPLE

3/8 | 2/8 creates the following time signature:

The bars are subdivided as follows:

Text

Dorico allows you to add text that is attached to a particular position on a staff.

NOTE

To insert text that is independent of rhythmic positions and that is attached to a particular page, you can add text frames on master pages in Engrave mode.

Any text that you add to the score is automatically added above the staff to which it is attached, in the default paragraph style and two and a half spaces from the outside of the staves.

RELATED LINKS

Text Editor

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.

The text editor provides the following options:

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.

Character Style

Determines the appearance of marked 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.

Font

Allows you to change the font family of marked text.

Font Style

Allows you to change the font style of marked text.

Font Size

Allows you to change the size of marked text.

Font Stretch

Allows you to make marked text wider or narrower.

Baseline Shift

Allows you to gradually shift the baseline of marked text up or down.

Letter Spacing

Allows you to increase/decrease the space between the characters of marked text.

Word Spacing

Allows you to increase/decrease the space between the words of marked text.

Foreground Color

Allows you to change the foreground color of marked text.

Background Color

Allows you to change the background color of marked text.

Align Left

Allows you to align text to the left 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.

Align Center

Allows you to centers the text relative to the rhythmic position of the text in the score. For text in a text frame, the text is centered between the left and right margins of a text frame.

Align Right

Allows you to align text to the right relative to the rhythmic position of the text in the score. For text in a text frame, the text is aligned along the right margin of a text frame.

Justify

For text in a text frame, the space between words is adjusted so that each line spans the full width of a text frame.

Underline

Allows you underline selected text.

Overline

Allows you to overline selected text.

Strikethrough

Allows you to strike through selected text.

Superscript

Allows you to position selected text higher than the text on the baseline.

Subscript

Allows you to position selected text lower than the text on the baseline.

RELATED LINKS

Adding text

You can add text at a specified rhythmic position in the score.

PROCEDURE

1. Do one of the following:

- 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. Do one of the following:

- Click **Text abc**.
- Press **Shift-X**.
- Select **Write** > **Create Text**.

The text editor opens.

3. Enter text.

4. Optional: Format the text using the text editor options.

5. Close the text editor by doing one of the following:

- Click anywhere outside the text editor.

- Press **Esc**.

- Press **Ctrl/Cmd-Enter**.

Inserting line breaks

You can insert line breaks while entering text into the score.

NOTE

Inserting line breaks only adds new lines, but no new paragraphs.

PROCEDURE

1. Enter text.

2. Press **Enter**.

RESULT

A new line is inserted. The cursor jumps to the beginning of the new line.

Changing the position of added text

You can position added text above or below the staves.

PREREQUISITE

The text editor is closed.

PROCEDURE

1. Select the text.

2. Choose between **Above** or **Below** for the **Position** property in the **Text** group of the Properties panel.

RESULT

The text changes its position relative to the staff position where it was created.

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.

Lyrics

Dorico allows you to input multiple lines of lyrics, chorus lyrics, and translations.

You can input lyrics above or below the staves. Using a popover and a set of key commands you can input lyrics line by line and syllable by syllable.

All lyrics are automatically horizontally aligned with the notes to which they belong. Multiple lines of lyrics are automatically vertically aligned.

You can designate whole lines or a selection of lyrics as a chorus line. You can also enter the chorus directly using the popover. In the popover, the chorus is marked with the letter "c". In the score, the chorus is written in italics without a verse number. If the chorus follows several lines of lyrics on the same staff, the chorus is centered vertically relative to the lines of lyrics.

You can designate any existing lines, a selection of lyrics, or a chorus line as a translation. You can also enter translations directly using the popover. In the popover, the translation is marked with a verse number or a "c" and an asterisk (*). In the score, the translation is written in italics. If you have multiple lines of lyrics, every translation line can be positioned below a line of lyrics.

If you need to make changes to the position of lyrics or if you want to activate/deactivate verse numbers, Dorico provides several options in the Properties panel or on the **Lyrics** page in **Engrave** > **Engraving Options** (key command Ctrl/Cmd-Shift-E) which allow you to: change selected syllables, whole lines of lyrics, or make project-wide changes to how lines of lyrics are aligned.

RELATED LINKS

Key commands for inputting lyrics

Dorico provides several key commands that help you to input lyrics.

The following key commands are available by default:

Lyrics Key Commands

Task	Key Command
Add lyrics.	**Shift**-**L**
NOTE Only available if you selected a note, a rest, or a syllable.	
Finish the current word and move to the next note or chord.	**Space**
Finish the current syllable and move to the next note or chord.	- (hyphen)
Add an extender line to indicate that a word is sung over multiple notes.	Repeat **Space** as often as required.
Add several hyphens to indicate that a syllable is sung over multiple notes.	Repeat - (hyphen) as often as required.
Increase/Decrease the line number.	**Down Arrow**/**Up Arrow**
Switch between lyric/chorus line and translation line. NOTE The translation line shows an asterisk (*) in the popover.	**Alt**-**Down Arrow**/**Alt**-**Up Arrow**
Move forwards/backwards from syllable to syllable within lines of lyrics.	**Alt**-**Right Arrow**/**Alt**-**Left Arrow**

Task	Key Command
Add spaces within a word or syllable.	**Shift**-**Alt**-**Space**
Add an elision	_ (underscore)
Forcing a hyphen within a single word or syllable	**Alt**-- (hyphen)

Adding lyrics

You can add multiple lines of lyrics to a staff.

PROCEDURE

1. Select the note or chord where you want to start adding lyrics.
2. Do one of the following:

   - Press **Shift**-**L**.

   - Click **Lyrics** V1.

   A popover opens that shows you the line number for which you input the lyrics.
3. Optional: Press **Down Arrow**/**Up Arrow** to specify the line number.
4. Input the lyrics.

AFTER COMPLETING THIS TASK

Repeat the steps to add further lines of lyrics.

Adding chorus lines

You can add a chorus line.

NOTE

The default key commands for adding lyrics apply.

PROCEDURE

1. Select the syllable of a line of lyrics, or a note or chord where you want to start adding the chorus.
2. Press **Shift**-**L**.
3. In the popover that opens, press **Up Arrow**.
   The popover now shows a "c" instead of a line number.
4. Input the chorus.

   NOTE

   Alternatively, you can do one of the following:

   - Input a lyrics line and select a word or syllable. Then right-click the lyrics line, and from the context menu, select **Lyrics** > **Line** > **Chorus**.
   - Left-click and drag a rectangle around the whole chorus line to select it, and activate the **Chorus** property in the **Lyrics** group of the Properties panel.

RESULT

A chorus line is added in italics. If you activated verse numbers on the **Lyrics** page in **Engrave** > **Engraving Options**, the verse number is removed.

RELATED LINKS
Showing and hiding verse numbers on page 450
Lyrics section on page 125

Adding translations

You can add translations to lyrics and chorus lines.

NOTE

The default key commands for adding lyrics apply.

PROCEDURE

1. Select the syllable of a line of lyrics or the note or chord where you want to start adding translations.
2. Press **Shift-L** to open the popover.
3. Press **Alt-Down Arrow**/**Up Arrow** to switch from lyrics line to translation line.

   NOTE

   The translation line shows an asterisk (*).

4. Input the translation.

   NOTE

   Alternatively, you can do one of the following:

   - Add a line of lyrics or a chorus line and select a syllable. Then right-click the line, and from the context menu, select **Lyrics** > **Translations** > **Line <line number> Translation/Chorus Translation**.
   - Add a line of lyrics or a chorus line and select a syllable or a whole line. Then activate the **Is translation** property in the **Lyrics** group of the Properties panel.

RESULT

A translation line is added italics. If you added verse numbers on the **Lyrics** page in **Engrave** > **Engraving Options** (key command **Ctrl/Cmd-Shift-E**), the verse number is removed.

RELATED LINKS
Showing and hiding verse numbers on page 450
Lyrics section on page 125

Changing lines of lyrics

You can change the line numbers of whole lines of lyrics. This also changes the position of the lines of lyrics.

NOTE

To identify which line you are working on, select a syllable in the line of lyrics and check the **Line number** property in the Properties panel. Alternatively, you can activate verse numbers on the **Lyrics** page in **Engrave** > **Engraving Options** (key command **Ctrl/Cmd-Shift-E**).

PROCEDURE

1. Select a syllable within a line of lyrics.

2. Right-click and from the context menu, select **Lyrics** > **Line** > **Line <number of line>**.

NOTE

Alternatively, left-click and drag a rectangle around the whole line, and select a number for the **Line number** property in the **Lyrics** group of the Properties panel.

RESULT

The line of lyrics is moved to the selected position within a set of multiple lines. If you activated verse number, the line of lyrics shows a different verse number.

RELATED LINKS
Showing and hiding verse numbers on page 450
Lyrics section on page 125

Moving syllables to different lines of lyrics

You can move selected syllables to different lines of lyrics.

NOTE

To identify which line you are working on, select a syllable in the line of lyrics and check the **Line number** property in the Properties panel. Alternatively, you can activate verse numbers on the **Lyrics** page in **Engrave** > **Engraving Options** (key command **Ctrl/Cmd-Shift-E**).

PROCEDURE

1. Select a syllable within a line of lyrics.

2. Select a number for the **Line number** property in the **Lyrics** group of the Properties panel.

RESULT

The syllable is moved to the selected line of lyrics. If the line of lyrics already contains a syllable, that syllable is overwritten.

RELATED LINKS
Showing and hiding verse numbers on page 450
Lyrics section on page 125

Moving lines of lyrics to different lines

You can move whole lines of lyrics to different lines.

NOTE

To identify which line you are working on, select a syllable in the line of lyrics and check the **Line number** property in the Properties panel. Alternatively, you can activate verse numbers on the **Lyrics** page in **Engrave** > **Engraving Options** (key command **Ctrl/Cmd-Shift-E**).

PROCEDURE

1. Select a syllable within a line of lyrics.

2. Right-click the line, and from the context menu, select **Lyrics** > **Line** > **Line <number of line>**.

NOTE

Alternatively, left-click and drag a rectangle around the whole line, and select a number for the **Line number** property in the **Lyrics** group of the Properties panel.

RESULT

The line of lyrics is moved to the selected line. If that line already contains a line of lyrics, the lines are exchanged.

RELATED LINKS
Showing and hiding verse numbers on page 450
Lyrics section on page 125

Moving syllables to different lines

You can move selected syllables to different lines of lyrics.

NOTE

To identify which line you are working on, select a syllable in the line of lyrics and check the **Line number** property in the Properties panel. Alternatively, you can activate verse numbers on the **Lyrics** page in **Engrave** > **Engraving Options** (key command **Ctrl/Cmd-Shift-E**).

PROCEDURE

1.   Select a syllable within a line of lyrics.

2.   Select a number for the **Line number** property in the **Lyrics** group of the Properties panel.

RESULT

The syllable is moved to the selected line of lyrics. If the line of lyrics already contains a syllable, that syllable is overwritten.

RELATED LINKS
Showing and hiding verse numbers on page 450
Lyrics section on page 125

Placing lyrics above or below staves

You can place one or several lines of lyrics, chorus lines, and translations above or below staves.

PROCEDURE

1.   Select a syllable within a line of lyrics.

2.   Right-click and from the context menu, select **Lyrics** > **Placement** > **Above/Below**.

NOTE

Alternatively, you can mark one or several whole lines, and choose between **Above** or **Below** for the **Line placement** property in the **Lyrics** group of the Properties panel.

RELATED LINKS
Lyrics section on page 125

Placing syllables above or below staves

You can place selected syllables from lyrics above or below staves.

PROCEDURE

1. Select one or multiple syllables within a line of lyrics.

2. Choose between **Above** or **Below** for the **Line placement** property in the **Lyrics** group of the Properties panel.

RELATED LINKS
Lyrics section on page 125

Aligning syllables within lyrics

If syllables collide within a line of lyrics, you can change their alignment.

PROCEDURE

1. In a line of lyrics, select one or more syllables that you want to align with the rest of the text.

2. Activate **Lyric text alignment** in the **Lyrics** group of the Properties panel.

3. From the menu, select one of the alignment options.

RELATED LINKS
Lyrics section on page 125

Properties in Write mode

In Write mode, you can edit notes and notations and change the way your music is notated for each flow.

If you want to edit individual items, you can use the properties panel that allows you to make direct changes to selected items in the score. To make changes to the way Dorico notates your music in general, you can use the **Notation Options**. You can set the **Notation Options** for all flows or for each flow independently.

RELATED LINKS
Options in the Properties panel on page 121
Notation Options on page 119
Flows on page 80

Notation Options

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 or courtesy 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 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.

The Notation Options dialog

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

1   **Category**

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

2   **Flows**

Lists all the flows that are available in your project. You can select one, multiple, or all flows. You can select multiple flows in the following ways:

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

3   **Select All**

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

4   **Save As Default**

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

5   **Section**

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

RELATED LINKS
Options in the Properties panel on page 121
Flows on page 80

Changing the Notation Options

You can change the **Notation Options** for one or several flows.

PROCEDURE

1. In Write mode, select **Write** > **Notation Options**.
2. In the **Notation Options** dialog, from the **Flows** list, select one, multiple, or all flows.
3. From the **Select a Category** pop-up menu, select a category.
4. In the area on the right, make your changes.
5. Click **Apply**.

Options in the Properties panel

The Properties panel in Write mode provides options that allow you to edit notes and notations.

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, at the very least the **Common** group and the **Notes and Rests** group 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 may want to change for that note.

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 its disclosure arrow at the bottom of the window
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.

Common section

The **Common** section of the properties panel is available for all items in the music area.

> NOTE
>
> If you select different types of items in the music area at the same time, only the **Common** section is available for editing purposes.

Position

Shows the rhythmic position of a selected item, expressed as a number of quarter note beats from the start of a flow.

Muted

If you activate this option, you can mute selected notes or chords during playback. You can also mute any other notation that affects playback, such as dynamics.

Color

If you activate this option, you can change the color of a selected item. Click the box to the right. In the **Select Color** dialog that opens, select one of the available basic colors, pick a color from the screen, or specify a custom color.

Articulations section

In the **Articulations** section of the properties panel, you can edit the position and the visibility of articulations.

> NOTE
>
> To edit an articulation, you must select the note to which the articulation belongs.

Placement

Allows you to change the placement of an articulation of a selected note. You can decide whether you want the articulation placed on the notehead side or on the stem side.

Hidden

Allows you to hide an articulation of a selected note. If an articulation is hidden, it is still played back, but it is not visible in the score. You can instead show a signpost that you can activate by selecting **View** > **Signposts**.

Pos. in tie chain

Allows you to specify whether an articulation of a tied note is positioned at the start or end note in the tie chain.

Dynamics section

In the **Dynamics** section of the Properties panel, you can edit the position and change the style of selected dynamics.

Common Options for All Dynamics

Placement

If you activate this option, you can place a selected dynamic above or below the staff.

Parenthesized

Adds parentheses to a selected dynamic.

Prefix

Allows you to add or edit a custom prefix to a selected dynamic. For example, you can add `sempre` before fortissimo (ff).

Suffix

Allows you to add or edit a custom suffix to a selected dynamic. For example, you can add `strongly` after fortissimo (ff).

Show intensity marking

Only available for immediate or combined dynamics and for markings of force/intensity of attack.

Dorico allows you to input a custom dynamic into your score, such as `sempre` or `strongly`, if you combine it with another dynamic that is used as an intensifier. If you activate/deactivate this option, the intensifier is shown/hidden.

Beat-relative position

Only available for immediate or combined dynamics and for markings of force/intensity of attack.

Normally, the optical center of a dynamic is aligned with the rhythmic position of the note or chord. If you activate this option, you can specify if you want to position the dynamic at the end of the beat before that rhythmic position. In the case that a dynamic is preceded by a crescendo or diminuendo, and there is no note or chord at the rhythmic position at which the gradual dynamic ends, the dynamic is automatically positioned at the end of the last beat that is affected by the gradual dynamic. In this case, you can move the dynamic to the next rhythmic position.

The following options are available:

- **Before**

  Positions the dynamic at the end of the last beat.

- **After**

  Positions the dynamic to the next rhythmic position after the last beat.

Text alignment

Only available for immediate dynamics or combined dynamics and for markings of force/intensity of attack.

If you activate this option, you can align a dynamic with the note to which it is assigned. You have the following options:

- **Align optical center with notehead**

  The centers of the dynamic and the notehead are aligned.

- **Left-align with notehead**

  The dynamic starts at the start of the notehead.

Gradual Dynamics Options

Type

Allows you to select between **Cresc. or dim.** and **Messa di voce** as types of gradual dynamics. **Cresc. or dim.** enables the **Gradual style** pop-up menu that allows you to choose between different crescendo/diminuendo hairpins or text.

Gradual style

Only available if you activate **Cresc. or dim.** as type of gradual dynamic.

Allows you to select between hairpins, short text instructions, or hyphenated text instructions.

Hairpin line style

Only available if you select **Hairpin** from the **Gradual style** menu, or if you select **Messa di voce** as type of gradual dynamic.

Allows you to select how you want the lines of a hairpin to be shown. You have the following options:

- **Solid**

  Shows the hairpin with solid lines.

- **Dashed**

  Shows the hairpin with dashed lines.

- **Dotted**

  Shows the hairpin with dotted lines.

Niente

Adds niente to a crescendo, diminuendo, or messa di voce.

Niente style

Only available if you select **Hairpin** from the **Gradual style** menu or if you activate **Messa di voce** as type of gradual dynamic.

If you activate this option, you can select one of the following styles for the selected niente:

- **Circle on hairpin**

  Adds a small circle to the end of the diminuendo or to the start of the crescendo.

- **Text**

  Adds an "n" to the end of the diminuendo or to the start of the crescendo.

Poco a poco (little by little)

Adds poco a poco to a crescendo, diminuendo, or messa di voce.

Abbreviate

Only available if you select a crescendo/diminuendo text style from the **Gradual style** menu.

If you activate this option, the text for the selected crescendo/diminuendo is abbreviated.

Messa di voce inflection

Only available if you activate **Messa di voce** as type of gradual dynamic.

The inflection point of a messa di voce is the point at which the first hairpin ends and the second begins. The inflection point is determined automatically when the messa di voce is created based on the rhythm of the notes in the span of the dynamic.

If you activate this option, you can adjust the rhythmic position of the inflection point. The value in the left field specifies the primary rhythmic position, expressed in fractions of quarter notes. The value in the right field allows you to specify a secondary rhythmic position within a run of grace notes at the primary rhythmic position.

Diminuendo style

Only available if you select **cresc./dim.** for a diminuendo from the **Gradual style** menu.

If you activate this option, you can select the text that you want to display for a diminuendo and thus use the terms "diminuendo" and "decrescendo" interchangeably.

NOTE

You can specify the default text appearance for a diminuendo in the engraving options by selecting **Engrave** > **Engraving Options** > **Dynamics** > **Appearance of gradual reduction in dynamic**.

Barline Interaction

If you activate this option, you can set a hairpin to stop before a barline or to continue after a barline.

Continuation line style

Only available if you select **cresc....** from the **Gradual style** menu.

If you activate this option, you can specify whether the line that indicates the duration of the dynamic change is dashed or dotted.

Force/Intensity of Attack Options

rfz/sfz style

If you activate this option, you can decide whether you want to show markings of force/intensity of attack with an ending "z" or not.

Combined Dynamics Options

Separator shown

If you activate this option, you can insert a separator between the combined dynamics.

Separator

If you activate this option, you can specify the type of separator by selecting the one you want from the menu.

Lyrics section

In the **Lyrics** section of the properties panel, you can make changes to selected syllables or whole lines of lyrics.

Syllable type

Allows you to change the type of selected syllables.

Line placement

Allows you to move selected syllables above or below a staff.

Line number

Allows you to change the line number for selected syllables.

Chorus

If you activate this option, you can select syllables and designate them as chorus lyrics that are centered vertically in relation to other preceding lines of lyrics. Chorus lyrics are displayed in italics.

Is translation

If you activate this option, you can specify lines of lyrics as translations of song lyrics. Translations are displayed in italics.

Lyric text alignment

If you activate this option, you can align selected syllables horizontally in relation to the noteheads. By default, syllables are centered below the notes.

RELATED LINKS
Placing lyrics above or below staves on page 118
Changing lines of lyrics on page 116
Moving lines of lyrics to different lines on page 117
Adding chorus lines on page 115
Adding translations on page 116
Aligning syllables within lyrics on page 119

Rehearsal marks section

In the **Rehearsal Marks** section of the properties panel, you can change the type of selected rehearsal marks and the number or letter with which they should start.

Sequence type

If you activate this option, you can choose whether the selected rehearsal mark is displayed as a letter, a number, or whether it shows the current bar number.

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If you selected **Numbers** or **Letters** as **Sequence type** and activate this option, you can increase or decrease the number or the letter with which the selected rehearsal mark should start.

Trills section

In the **Trills** section on the properties panel, you can change the placement and appearance of selected trills and trill lines.

Placement

If you activate this option, you can move a trill above or below a staff.

Start speed

If you activate this option, you can specify how fast a trill starts. The trill line automatically changes its form according to your setting.

End speed

If you activate this option, you can specify how fast a trill ends. The trill line automatically changes its form according to your setting.

Has trill line

If you activate this option, you can specify if a trill has a trill line.

Start position

If you activate this option, you can specify if you want a trill to be positioned starting at the notehead or at the accidental of the note.

Extra gap position

If you activate this option, you can specify if you want a gap position at the start or at the end of the trill line.

Interval

If you activate this option, you can choose the number of half-steps between the two notes of a trill.

Accidental position

If you activate this option and you are using an accidental as trill interval, you can specify if you want the accidental to be placed above, below, or in line with the trill.

Inside slurs, tuplets, and octave lines

If you activate this option, the selected trill is positioned inside slurs, tuplets, and octave lines.

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 later print or export.

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.

To open Engrave mode, you have the following options:

- Select **Engrave** on the toolbar.
- Select **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 Properties

Contains quick access properties that allow you to make specific modifications to individual parts of notes and notations.

3 Pages
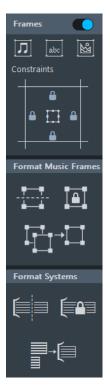
Allows you to specify how the notation is formatted on pages. The way this is done is based on the typical techniques as they are used in desktop publishing programs.

RELATED LINKS

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 a system is formatted on a page.

To show/hide the formatting panel, 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. To make changes, activate this section.

Insert Music Frame

Allows you to insert a frame for which you can specify the layouts that you want to show.

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> **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.

RELATED LINKS

Properties panel

The properties panel in Engrave mode contains quick access properties that allow you to make specific modifications to individual parts of notes and notations.

To show/hide the properties panel, click the disclosure arrow ⌃ / ⌄ below the music area.

The properties panel contains several sections. Whenever 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 the respective options that you may require to edit the selected item.

EXAMPLE

If you select a note or rest, the **Notes and Rests** section becomes available in the properties panel.

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.

To show/hide the pages panel, 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 upper 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.

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. To close the master page editor, click **Close 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.

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 score 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

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**: master page set used for full score layouts

- **Default Part**: 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 any of the following:

- 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 134

Creating master page sets

You can create custom master page sets that are based on the sets provided by Dorico.

PROCEDURE

1. Select one of the default master page sets by clicking it in the **Master Page Sets** section of the Pages panel.

2. Click **New Master Page Set**:

RESULT

A new master page set is created, based on the selected default master page set. It is added at the bottom of the list of master page sets.

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. Double-click the master page set that you want to rename in the **Master Page Sets** section of the Pages panel.

    NOTE

    Alternatively, you can select the master page set and click **Rename Master Page Set**:

2. Enter the new name you want.

3. Press **Enter**.

Deleting master page sets

You can delete master page sets that you no longer need, including the default master page sets.

PROCEDURE

1. Select the master page set that you want to delete by clicking it in the **Master Page Sets** section of the Pages panel.

2. Click **Delete Master Page Set**:

Selecting master page sets

You can select a master page set to be applied to your score.

PROCEDURE

● Select a master page set from the **Current set** menu in the **Master Pages** section of the Pages panel.

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

Creates a page pair that is used for the first page of music in a layout.

NOTE

If you create no **First** page pair, the first page in your layout uses the **Default** page pair.

Default

Creates a default page pair that is used for each successive left and right pages after the first page of a layout. Every master page set must always contain a **Default** master page.

Custom

Creates a custom page pair that is appended after the **Default** master page in the master page set. This allows you to create a different page format for final pages, for example.

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 136
Master page overrides on page 138

Adding master pages

You can add master pages to a master page set.

PROCEDURE

1. Select a master page set to which you want to add master pages from the **Current set** menu in the **Master Pages** section in the Pages panel.

2. Click **New Master Page**:

3. Enter a name for the new master page into the **Name** field in the **New Master Page** dialog.

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**

RELATED LINKS
Selecting master page sets on page 135

Renaming master pages

You can change the names of master pages.

PROCEDURE

1. Select the master page set containing the master page you want to rename from the **Current set** menu in the **Master Pages** section of the Pages panel.

2. Click the master page pair that you want to rename in the **Master Pages** section.

3. Click **Rename Master Page**:

4. Enter the name you want in the **Name** field in the **Rename Master Page** dialog.

5. Close the dialog and save the new name in any of the following ways:

   - Click **OK**
   - Press **Return**

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. Select the master page set from which you want to delete master pages from the **Current set** menu in the **Master Pages** section of the Pages panel.

2. Click the master page pair that you want to delete in the **Master Pages** section.

3. Click **Delete Master Page**:

RESULT

The selected master page pair is deleted.

NOTE

You can undo this action immediately by in 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.

Customizing master pages

You can customize master pages according to your needs.

NOTE

If you want to edit the page size and margins, page orientation, and staff size for full score and part layouts, you must specify these in the layout options.

PROCEDURE

1. Double-click a master page pair in the **Master Pages** section of the Pages panel.

2. In the master page editor, change the layout of the selected master page pair. For example, you can change the size and shape of frames.

3. Click **Close Master Page Editor** to save your changes.

The selected master page pair is changed.

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 may 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 may 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.
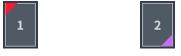
Pages whose master page has been changed are shown with a marking on them in the **Pages** section of the Pages panel:

- Master page changes to the current page only: marking along top edge

- Master page changes from the page onwards: marking shown along left edge and top edge

Here are some 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 current 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

- Do one of the following:
    - To edit the frames, on the formatting panel, activate the **Frames** section.

        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** display shows a marking in the upper left or bottom right corner.

Removing individual master page overrides

You can remove all overrides that you have made to individual pages in each layout, 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.

PROCEDURE

1. Open the layout whose master page overrides you want to remove in the music area.
2. Select the pages whose overrides you want to remove in the **Pages** section of the Pages panel in one of the following ways:
    - Click a single page
    - **Ctrl/Cmd**-click multiple pages
3. Remove master page overrides in any of the following ways:
    - Right-click in the **Pages** section of the Pages panel and choose **Remove Page Overrides** from the context menu
    - Click **Remove Overrides**:

RESULT

Any overrides you made to the master page format on the selected pages are removed. Empty pages that are considered overrides are removed completely.

RELATED LINKS
Master page overrides on page 138

Removing all master page overrides

You can remove all overrides that you have made to all pages in your layout, 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.

PROCEDURE

1. Open the layout whose master page overrides you want to remove in the music area.

2. Right-click in the **Pages** section of the Pages panel, but not on any of the pages.

3. Choose **Remove All Page Overrides** from the context menu.

RESULT

Any overrides you made to the master page format are removed from all pages in the layout currently open in the music area. Empty pages that are considered overrides are removed completely.

RELATED LINKS
Master page overrides on page 138

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:

    *   Right-click in the **Pages** section of the Pages panel and choose **Insert Pages** from the context menu.

    *   Click a page in the **Pages** section of the Pages panel 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**.

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Page number changes

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**.

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.

The **Page Number Change** dialog contains the following options:

From page

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

Enter the page number from which you want the selected page to start.

Sequence type

Select the type of number that the selected page and subsequent pages should have.

Visibility

Specify if a page number is shown or hidden. You can also specify that the page number is hidden on the page where the page number change occurs.

Subordinate number type

Add a subordinate number to the page number and to specify a type.

Subordinate number

Enter the number from which you want the subordinate numbers to start.

RELATED LINKS
Inserting page number changes on page 141
Master page overrides on page 138

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 may want to 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 even numbered pages should always be on the left-hand page, and odd numbered pages should always be on the right-hand page.

PROCEDURE

1. Open the layout whose page numbers you want to change in the music area.

2. Select a page in the **Pages** section of the Pages panel.

3. Open the **Page Number Change** dialog in any of the following ways:

    - Right-click and choose **Insert Page Number Change** from the context menu.

    - Click **Insert Page Number Change**:

        `#`

4. Enter the number of the page from which you want the page number change to start in the **From page** field in the **Page Number Change** dialog. 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**.

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

Removing individual page number changes

You can remove individual page numbers changes made to the layout currently open in the music area, and revert the page number for individual pages back to the default page number.

Any pages whose page number has been changed are shown with a marking in their bottom right corner in the **Pages** section of the Pages panel.

PROCEDURE

1. Open the layout whose page number changes you want to remove in the music area.

2. Select pages in the **Pages** section of the Pages panel in one of the following ways:

    - Click a single page

    - **Ctrl/Cmd**-click multiple pages

        NOTE

        If no page is selected, all page number changes for all pages are removed.

3. Right-click in the **Pages** section of the Pages panel.

4. Choose **Remove Page Number Change(s)** from the context menu.

RESULT

The page number change for the selected page in the layout currently open in the music area is removed. The page number sequence is restored to the default page number sequence 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.

Removing all page number changes

You can remove all page number changes made to the layout currently open in the music area, and revert all pages to the default page numbers.

PROCEDURE

1. Open the layout whose page number changes you want to remove in the music area.

2. Right-click in the **Pages** section of the Pages panel, but not on any of the pages.

3. Choose **Remove All Page Number Changes** from the context menu.

RESULT

All page number changes in the layout currently open in the music area are removed.

RELATED LINKS
Removing individual page number changes on page 142

Assigning master pages to pages

For every page in your layout, you can assign a different master page.

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. Click the page for which you want to change the master page assignment in the **Pages** section of the Pages panel.

2. Click **Insert Master Page Change**:

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**

     If you activate this option, only the selected page is assigned a different master page.

   - **From this Page Onwards**

     If you activate this option, the selected page and subsequent pages are assigned a different master page.

6. Click **OK**.

Removing individual master page changes

You can remove master page changes for 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. Open the layout whose master page changes you want to remove in the music area.

2. Select the pages whose master page changes you want to remove in the **Pages** section of the Pages panel in one of the following ways:

- Click a single page.
- **Ctrl/Cmd**-click multiple pages.

NOTE

If no page is selected, all master page changes for all pages are removed.

3. Right-click in the **Pages** section of the Pages panel.

4. Choose **Remove Master Page Change(s)** from the context menu.

RESULT

All master page changes made on the selected pages are removed. The format of the selected pages returns to the overall master page format applied to the layout.

Removing all master page changes

You can remove master page changes for all pages in the layout currently open in the music area. 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. Open the layout whose master page changes you want to remove in the music area.

2. Right-click in the **Pages** section of the Pages panel, but not on any of the pages.

3. Choose **Remove All Master Page Changes** from the context menu.

RESULT

All master page changes on all pages in the layout currently open in the music area are removed. All pages return to the master page format applied to the layout.

Swapping pages

You can swap pages that have overrides with adjacent pages.

PROCEDURE

1. On the pages panel, in the **Panels** display, select a page with an override.

NOTE

A page with an override has a marking in the upper left corner.

2. Do one of the following:

- Right-click and from the context menu, select **Swap with Previous Page** or **Swap with Next Page**.

- Click **Swap with Previous Page** ◀ or **Swap with Next 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 138

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 for the first and subsequent pages that show the music from a selected layout

- Text frames that allow you to enter text

- 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
Flows on page 32
Layouts on page 32
Constraints on page 158

Inserting frames into pages

PROCEDURE

1. In Engrave mode, activate **Frames** in the Formatting panel.
2. Select the type of frame you want to insert by clicking one of the available options:

    - **Insert Music Frame** 🎵
    - **Insert Text Frame** 🔤
    - **Insert Graphics Frame** 🖼

3. Click and drag to draw a frame of the size and shape you want on the page where you want to insert a frame.
4. Release the mouse button.

RESULT

The frame is inserted on the page.

AFTER COMPLETING THIS TASK

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.

Moving frames individually

PROCEDURE

-

Changing the size and shape of frames individually

PROCEDURE

-

Music frames
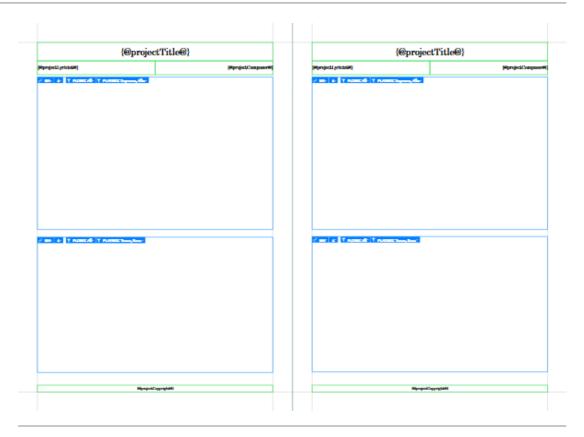
Music frames show the music from a selected layout and allow you to change the position and order of music on a page. Dorico features master page music frames and layout music frames.

Master Page Music Frames

All notes and notation items that you input are automatically placed within master page music frames. They are available by default on the master pages in the master page sets that Dorico provides. You can create and edit master page music frames only in the master page editor. They are configured as such that they are automatically repeated on all pages in your layout.

TIP

You can use different master page music frames for different players. To do this, you must create separate identical master page music frames on the **First** and the **Default** master pages for left and right pages. The following example shows two master page music frames on the left and right pages of the **First** master page pair:

Layout Music Frames

You can create and edit layout music frames only on individual pages in your layout. You can insert layout music frames anywhere on a page in any kind of size and connect them with other layout music frames by assigning them to the same layout frame chain.

> **TIP**
>
> Layout music frames allow you to insert small musical excerpts from a different flow within footnotes, for example.

> **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 the pages in your layout, the master page music frames never allow you to change the assignment to individual flows or players. Those music frame selectors are grayed out and can only be edited 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
Frame chains on page 148
Master pages on page 133

Frame chains

A frame chain can be understood as a collection of music frames that show the music in a predefined order.

Frame chains are automatically created when you create a music frame on a page. Since every project in Dorico has at least one music frame, you already have at least one frame chain that you can edit. The following types of frame chains can be created and edited:

Master Page Frame Chains

Master page frame chains can be created and fully edited only on master pages. Whenever you create a music frame on a master page, you automatically start a frame chain. Frames are automatically recreated and assigned to each subsequent page of a frame chain.

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.
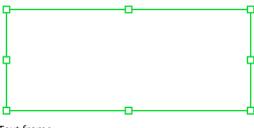
Layout Frame Chains

Layout frame chains can only be created and edited for layout music frames on individual pages. If you create a layout music frame on a page in your layout, this layout music frame is only displayed on that page, but starts its own frame chain. If you want the music frame to be continued on subsequent pages, you must create this music frame on all pages in your notation and assign all of these frames to the layout frame chain of the initial layout music frame.

RELATED LINKS

Text frames

Text frames allow you to add text that is independent of rhythmic positions in the score. If you add a text frame, the formatting of your layout pages is changed.

Text frame

RELATED LINKS

Entering text in text frames

You can enter text in text frames.

PROCEDURE

1.   Select the text frame into which you want to enter text.

2.   Open the text editor in one of the following ways:

-    Press **Enter**

-    Double-click within the text frame

3.   Enter the text you want.

4.   Optional: Format the text using options in the text editor.

5.   Close the text editor in any of the following ways:

-    Press **Esc**

-    Press **Ctrl/Cmd**-**Enter**

-    Click anywhere outside the text editor

RELATED LINKS
[Text Editor](#) on page 151

Inserting new paragraphs

You can insert new paragraphs while entering text into a text frame.

PROCEDURE

1.   Enter text.

2.   Press **Enter**.

RESULT

A new paragraph is inserted. The cursor jumps to the beginning of the new paragraph.

Inserting line breaks

You can insert line breaks while entering text into a text frame.

PROCEDURE

1.   Enter text.

2.   Press **Shift**-**Enter**.

RESULT

A new line is inserted. The cursor jumps to the beginning of the new line.

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. In Engrave mode, activate **Frames** in the Formatting panel.
2. Select the text frame containing the text whose horizontal alignment you want to change.

    NOTE

    If you want to change the horizontal alignment of text on a master page, open the master page editor and then select a text frame.

3. Open the text editor in one of the following ways:
    - Press **Enter**.
    - Double-click within the text frame.
4. Select the text in the text frame whose horizontal alignment you want to change.

    TIP

    You do not have to change the horizontal alignment of all text in the text frame.

5. Choose the horizontal alignment you want from the following options in the text editor:
    - **Align Left**
    - **Align Center**
    - **Align Right**
    - **Justify**
6. Close the text editor in any of the following ways:
    - Press **Esc** or **Ctrl/Cmd-Enter**.
    - Click anywhere outside the text editor.

RESULT

The alignment of the selected text is changed.

NOTE

You can change the alignment of text styles project-wide in the **Paragraph Styles** dialog.

RELATED LINKS
Paragraph styles on page 152
Customizing master pages on page 137

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
Removing individual master page overrides on page 139
Removing all master page overrides on page 140

Text Editor

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.

The text editor provides the following options:

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.

Character Style

Determines the appearance of marked 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.

Font

Allows you to change the font family of marked text.

Font Style

Allows you to change the font style of marked text.

Font Size

Allows you to change the size of marked text.

Font Stretch

Allows you to make marked text wider or narrower.

Baseline Shift

Allows you to gradually shift the baseline of marked text up or down.

Letter Spacing

Allows you to increase/decrease the space between the characters of marked text.

Word Spacing

> Allows you to increase/decrease the space between the words of marked text.

Foreground Color

> Allows you to change the foreground color of marked text.

Background Color

> Allows you to change the background color of marked text.

Align Left

> Allows you to align text to the left 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.

Align Center

> Allows you to centers the text relative to the rhythmic position of the text in the score. For text in a text frame, the text is centered between the left and right margins of a text frame.

Align Right

> Allows you to align text to the right relative to the rhythmic position of the text in the score. For text in a text frame, the text is aligned along the right margin of a text frame.

Justify

> For text in a text frame, the space between words is adjusted so that each line spans the full width of a text frame.

Underline

> Allows you underline selected text.

Overline

> Allows you to overline selected text.

Strikethrough

> Allows you to strike through selected text.

Superscript

> Allows you to position selected text higher than the text on the baseline.

Subscript

> Allows you to position selected text lower than the text on the baseline.

RELATED LINKS
Adding text on page 112
Entering text in text frames on page 149
Paragraph styles on page 152
Character styles on page 155

Paragraph styles

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.

You can open the **Paragraph Styles** dialog by choosing **Engrave** > **Paragraph Styles** in Engrave mode.

The **Paragraph Styles** dialog lists the available paragraph styles and provides the following options:

New

Allows you to create a new style with default values.

New From Selection

Allows you to create a new style based on the style that you selected in the list of styles.

Save As Default

Allows you to save a style as default style for other projects.

Revert To Factory

Only available for predefined styles in Dorico. If you have changed a predefined style, this option allows you to restore the factory settings of the style.

Delete

Allows you to delete a style.

NOTE

You can only delete styles that are neither predefined nor used in the score.

Name

Allows you to specify the name for a style.

Parent

Allows you to select a style from which a new or a selected style inherits its properties.

Font

Allows you to change the font family.

Style

Allows you to change the font style.

Size

Allows you to change the font size and to specify if the size is an absolute value or relative to the staff.

Size in parts

Allows you to change the font size in parts and to specify if the size is an absolute value or relative to the staff.

Stretch

Allows you to make the font wider or narrower.

Letter spacing

Allows you to increase/decrease the space between characters.

Word spacing

Allows you to increase/decrease the space between words.

Text decorations

Allows you to add lines to a style.

- **Underline**

    Draws a line under all text.

- **Overline**

    Draws a line over all text.

Indentation

Allows you to specify extra space to the left of a paragraph.

First line indent

Allows you to add further indentation that only applies to the first line of each paragraph.

Leading

Allows you to specify the amount of space between each line of text within a paragraph in percent of the font size.

Gap after paragraph

Allows you to specify the space that is added between each paragraph.

Alignment

Allows you to specify how text in a paragraph is aligned.

- **Left-align**

  Aligns all text to the left, relative to the rhythmic position of the text in the score. Within a text frame in **Engrave** mode, the text is aligned along the left margin of the frame.

- **Center-align**

  Centers all text relative to the rhythmic position of the text in the score. Within a text frame, the text is aligned relative to the left and right margins of the frame.

- **Right-align**

  Aligns all text to the right, relative to the rhythmic position of the text in the score. Within a text frame, the text is aligned along the right margin of the frame.

- **Justify**

  Adjusts the space between words so that each line spans the full width of the text frame.

- **Inside Edge**

  Allows you to align text towards the inside edge of odd- and even-numbered pages. For example, in a book this is the edge closest to the binding.

- **Outside Edge**

  Allows you to align text towards the outside edge of odd- and even-numbered pages. For example, in a book, this is the edge opposite to the binding.

Foreground color

Allows you to change the foreground color.

Background color

Allows you to change the background color.

Creating paragraph styles

You can create new paragraph styles.

PROCEDURE

1. In Engrave mode, open the **Paragraph Styles** dialog by choosing **Engrave** > **Paragraph Styles**.

2. 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**.

Creating paragraph styles based on other styles

You can create paragraph styles that are based on other styles.

PROCEDURE

1. In Engrave mode, open the **Paragraph Styles** dialog by choosing **Engrave** > **Paragraph Styles**.

2. Select the style on which you want to base a new paragraph style from the list on the left of the dialog.

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 the sliders for the options that you want to override and make your changes.

7. Click **OK**.

Deleting paragraph styles

You can delete paragraph styles.

PROCEDURE

1. In Engrave mode, open the **Paragraph Styles** dialog by choosing **Engrave** > **Paragraph Styles**.

2. Select the style that you want to delete from the list on the left of the dialog.

3. Click **Delete**.

4. Click **OK**.

Character styles

The text editor allows you to choose from different character styles for text that you use in your scores. In the **Character Styles** dialog, you can change these styles and create new styles.

To open the **Character Styles** dialog, in Engrave mode, select **Engrave** > **Character Styles**.

The **Character Styles** dialog lists the available character styles and provides the following options:

New

Allows you to create a new style with default values.

New From Selection

Allows you to create a new style based on the style that you selected in the list of styles.

Save As Default

Allows you to save a style as default style for other projects.

Revert To Factory

Only available for predefined styles in Dorico. If you have changed a predefined style, this option allows you to restore the factory settings of the style.

Delete

Allows you to delete a style.

NOTE

You can only delete styles that are neither predefined nor used in the score.

Name

Allows you to specify the name for a style.

Font

Allows you to change the font family.

Style

Allows you to change the font style.

Relative Size

Allows you to specify how the font size is scaled relative to the prevailing paragraph style.

Stretch

Allows you to make the font wider or narrower.

Baseline shift

Allows you to gradually shift the text baseline up or down.

Letter spacing

Allows you to increase/decrease the space between characters.

Word spacing

Allows you to increase/decrease the space between words.

Text decorations

Allows you to add lines to a style.

- **Underline**

  Draws a line under all text.

- **Overline**

  Draws a line over all text.

- **Strikethrough**

  Strikes through all text.

Character alignment

- **Subscript**

  Positions text lower than the text on the baseline.

- **Superscript**

  Positions text higher than the text on the baseline.

Foreground color

Allows you to change the foreground color.

Background color

Allows you to change the background color.

Creating character styles

You can create new character styles.

PROCEDURE

1. In Engrave mode, select **Engrave** > **Character Styles**.

2. In the **Character Styles** dialog, do one of the following:

- 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. In the **Name** field, enter a name for the style.

4. Activate the sliders for the options that you want to change and make your changes.

  IMPORTANT

  Only options with activated sliders have an effect on the text. If you deactivate the sliders, their settings are deleted.

5. Click **OK**.

Deleting character styles

You can delete character styles.

PROCEDURE

1. In Engrave mode, select **Engrave** > **Character Styles**.

2. Select the style that you want to delete in the styles list.

3. Click **Delete**.

4. Click **OK**.

Moving text manually

In Engrave mode, you can manually move text that you added with the text editor in Write mode.

PROCEDURE

1. Select the text that you want to move.

2. Click and drag the text in any direction to the position you want.

3. Release the mouse button.

  NOTE

  Alternatively, you can move the text by changing the **X** and **Y** values of the **Offset** option in the **Common** group of the Properties panel.
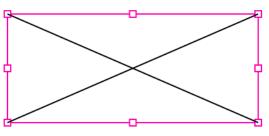
RELATED LINKS
Text Editor on page 151
Common section on page 165

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`, `.jpeg`
- `.png`
- `.svg`

Graphics frame

RELATED LINKS
Loading images into graphics frames on page 158

Loading images into graphics frames

You can load images from your computer or server into your score.

PROCEDURE

1. Double-click in the graphics frame.
2. In the dialog that opens, search for the file that you want to load.
3. Click **Open**.

RESULT

The image is loaded into the frame.

RELATED LINKS
Graphics frames on page 158

Constraints

In Dorico, constraints define the relationship between the four sides of a frame and the corresponding page margins.

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 abut the page margins. If you change the page size or the area that is defined by the page margin, the edges of the frames still abut the page margins, but the frame grows or shrinks, as the constraints lock the frame to the page margins.

NOTE

Page size and margins are specified in the layout options.

If you remove a constraint from one side of a frame, that is, you unlock that side from the page margin, you can determine a fixed width or height that prevents the side to adjust if the page size changes.

EXAMPLE

If you have set a frame for a header, you may 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 may also want to lock it to the top margin, but the height of the header should be 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 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 left or right margin.

RELATED LINKS
Defining constraints on page 159
Layout Options on page 85

Defining constraints

You can determine on which sides of frames you want to apply constraints.

PROCEDURE

1. On the formatting panel, activate the **Frames** section.

2. In the music area, select the frame for which you want to edit the constraints.

3. In the **Frames** section, below **Constraints**, click the lock 🔒 that corresponds to the side of the frame that you want to change.

4. Do one of the following:

    - 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
Constraints on page 158

Frame breaks

Frame breaks allow you to insert page turns for the players if you need to insert them in particular places in the music.

Frame breaks are inserted in music frames. If you insert a frame break at a specific place in your music, existing notation that follows it is moved to the next music frame in the frame chain.

Inserting frame breaks

You can insert frame breaks that allow you to insert page turns in a particular place in your music.

PROCEDURE

1. Select the note or notation item where you want to insert a frame break.

    NOTE

    If you select a clef, for example, the clef is placed at the end of the frame, and the notes are moved to the start of the next music frame.

2. Do one of the following:

- Press **Shift-F**.
- Select **Engrave** > **Format Music Frames** > **Frame Break**.

RESULT

All notation after the frame break is moved to the next music frame.

Music frame selectors

If you activate **Frames** on the formatting panel, the music frames show several selectors that allow you to change the visible notation.

Every music frame shows the following selectors:

NOTE

The **Filter by Flow** and the **Filter by Player** selectors of master page music frames can only be edited on master pages.

1 **Frame Chain**

Allows you to select which frame chain the music frame should follow. Frames that start with an "M" are master page music frames; frames that start with an "L" are layout music frames.

2 **Frame Order**

If you have at least two music frames that follow 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.

3 **Filter by Flow**

If you have several flows in your project, you can specify which flow you want to display in this frame.

4 **Filter by Player**

If you have several players in your project, you can specify which player you want to display in this frame.

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 music frames to frame chains

You can assign a new music frame to an existing frame chain or change the assignment of a music frame to a frame chain using the **Frame Chain** selector.

PREREQUISITE

If you assign a music frame to a layout frame chain, you must activate the **Frames** section on the formatting panel.

NOTE

New music frames on a page always start a new frame chain, independent of what type they are.

PROCEDURE

1. In the layout music frame or in the master page music frame, open **Frame Chain** and select the frame chain that you want to use.

2. Close the selector.

RESULT

The frame chain is assigned to the frame. All settings from the frame chain are applied to the frame.

RELATED LINKS
Music frames on page 146
Music frame selectors on page 160
Frame chains on page 148

Unlinking music frames from frame chains

You can unlink music frames from frame chains.

PROCEDURE

1. In the layout music frame or in the master page music frame, open **Frame Chain** and click **Unlink**.

2. Close the selector.

Changing frame orders on pages

If you have at least two music frames of the same type on a page, you can change in which frame you want the notes to be input first.

PROCEDURE

1. Select one of the music frames.

2. In the frame, open **Frame Order** and select the ordinal number for this frame.

3. Close the selector.

RESULT

The frame exchanges the number with the number of the frame that used to be assigned the selected ordinal number.

RELATED LINKS
Music frame selectors on page 160

Assigning flows to frame chains

You can show different flows in different frame chains.

NOTE

You can assign flows only to master page music frames.

PROCEDURE

1. On the pages panel, in the **Master Pages** section, double-click a master page pair to open the master page editor.

2. In the master page music frame, open **Flows** and select the flow that you want the music frame to display.

3. Close the selector and the master page editor.

RESULT

The music frame shows the selected flow.

RELATED LINKS
Music frames on page 146
Music frame selectors on page 160
Frame chains on page 148

Assigning players to frame chains

You can show different players in different frame chains.

NOTE

You can assign players only to master page frame chains.

PROCEDURE

1. On the pages panel, in the **Master Pages** section, double-click a master page pair to open the master page editor.

2. In the master page music frame, open **Filter by Player** and select the player or players that you want the music frame to display.

3. Close the selector and the master page editor.

RELATED LINKS
Music frames on page 146
Music frame selectors on page 160
Frame chains on page 148

Properties in Engrave mode

In Engrave mode, you can edit notes, notations, or parts of them individually or project-wide.

If you want to edit notes or notations individually, you can use the properties panel that allows you to make direct changes to selected items in the score. To change them project-wide, you can use **Engrave** > **Engraving Options** |(key command **Ctrl/Cmd-Shift-E**).

Engraving Options

The **Engraving Options** dialog provides multiple options that allow you to make project-wide changes to the graphical appearance of the music.

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 default values for new projects by clicking **Save As Default**.

TIP

If you want to make changes to individual notes, notations, or parts of them, 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 dialog

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.

Making project-wide changes in Engrave mode

You can make project-wide changes for notes and notations in **Engraving Options**.

NOTE

If you make changes and close the dialog without clicking **Apply**, you are prompted to save or discard your changes.

PROCEDURE

1. Choose **Engrave** > **Engraving Options**, or use the key command **Ctrl/Cmd**-**Shift**-**E**.
2. Select a category from the list of notations.
3. Look through the available settings, and choose your preferred options.
4. Click **Apply**, then **Close**.

RESULT

The changes are immediately displayed in the music area.

Options in the Properties panel

The Properties panel in Engrave mode provides options that allow you to edit notes, notations, and parts of them individually.

All the options that are available in the Properties panel in Write mode are also available in the Properties panel in Engrave mode. Engrave mode, however, provides additional options that allow you to edit notes, notations, and parts of them in more detail.

The options that are available in the Properties panel depend on the item that you select in your score. This means that whenever 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 the respective options that you may require to edit the selected item. If you select multiple different types of notation items, only the sections are displayed that they have in common.

For example, if you select a note, at least 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

This shows you all the options that you may want to change for that note.

Changing the properties of individual items in Engrave mode

You can view and change the properties of notes, notations, or parts of them.

NOTE

To change notes and notations project-wide, you must use the **Engraving Options** dialog.

PROCEDURE

1. Select a note, notation, or individual parts of them in the score.
2. Open the properties panel.

3. Make your settings.

RESULT

The changes are immediately displayed in the music area.

RELATED LINKS

Common section

The **Common** section of the properties panel is available for all items in the music area.

NOTE

If you select different types of items in the music area at the same time, only the **Common** section is available for editing purposes.

Position

Shows the rhythmic position of a selected item, expressed as a number of quarter note beats from the start of a flow.

Offset

If you activate this option, you can move a selected item horizontally or vertically in fractions of spaces according to the value that you enter or select in the **X** and **Y** fields. The **X** value moves the item horizontally, the **Y** value moves the item vertically.

Muted

If you activate this option, you can mute selected notes or chords during playback. You can also mute any other notation that affects playback, such as dynamics.

Color

If you activate this option, you can change the color of a selected item. Click the box to the right. In the **Select Color** dialog that opens, select one of the available basic colors, pick a color from the screen, or specify a custom color.

Articulations section

In the **Articulations** section of the properties panel, you can edit the position and the visibility of articulations.

NOTE

To edit an articulation, you must select the note to which the articulation belongs.

Placement

Allows you to change the placement of an articulation of a selected note. You can decide whether you want the articulation placed on the notehead side or on the stem side.

Hidden

Allows you to hide an articulation of a selected note. If an articulation is hidden, it is still played back, but it is not visible in the score. You can instead show a signpost that you can activate by selecting **View** > **Signposts**.

Pos. in tie chain

Allows you to specify whether an articulation of a tied note is positioned at the start or end note in the tie chain.

Offset Y

Allows you to move the articulation vertically according to the value that you enter or select in the **Spaces** field.

Dynamics section

In the **Dynamics** section of the Properties panel, you can edit the position and change the style of selected dynamics.

Common Options for All Dynamics

Start offset

If you activate this option, you can move a selected dynamic horizontally and vertically in fractions of spaces according to the values that you enter or select in the **X** and **Y** fields. The **X** value moves the dynamic horizontally, the **Y** value moves the dynamic vertically. If you move an immediate dynamic, the entire symbol is moved. If you move a gradual dynamic, its start is moved.

Placement

If you activate this option, you can place a selected dynamic above or below the staff.

Parenthesized

Adds parentheses to a selected dynamic.

Prefix

Allows you to add or edit a custom prefix to a selected dynamic. For example, you can add `sempre` before fortissimo (ff).

Suffix

Allows you to add or edit a custom suffix to a selected dynamic. For example, you can add `strongly` after fortissimo (ff).

Show intensity marking

Only available for immediate or combined dynamics and for markings of force/intensity of attack.

Dorico allows you to input a custom dynamic into your score, such as `sempre` or `strongly`, if you combine it with another dynamic that is used as an intensifier. If you activate/deactivate this option, the intensifier is shown/hidden.

Beat-relative position

Only available for immediate or combined dynamics and for markings of force/intensity of attack.

Normally, the optical center of a dynamic is aligned with the rhythmic position of the note or chord. If you activate this option, you can specify if you want to position the dynamic at the end of the beat before that rhythmic position. In the case that a dynamic is preceded by a crescendo or diminuendo, and there is no note or chord at the rhythmic position at which the gradual dynamic ends, the dynamic is automatically positioned at the end of the last beat that is affected by the gradual dynamic. In this case, you can move the dynamic to the next rhythmic position.

The following options are available:

● **Before**

Positions the dynamic at the end of the last beat.

● **After**

Positions the dynamic to the next rhythmic position after the last beat.

Text alignment

Only available for immediate dynamics or combined dynamics and for markings of force/intensity of attack.

If you activate this option, you can align a dynamic with the note to which it is assigned. You have the following options:

- **Align optical center with notehead**

  The centers of the dynamic and the notehead are aligned.

- **Left-align with notehead**

  The dynamic starts at the start of the notehead.

Gradual Dynamics Options

End offset

If you activate this option, you can move the end of a selected dynamic horizontally and vertically in fractions of spaces according to the values that you enter or select in the **X** and **Y** fields. The **X** value moves the dynamic horizontally, the **Y** value moves the dynamic vertically.

Type

Allows you to select between **Cresc. or dim.** and **Messa di voce** as types of gradual dynamics. **Cresc. or dim.** enables the **Gradual style** pop-up menu that allows you to choose between different crescendo/diminuendo hairpins or text.

Gradual style

Only available if you activate **Cresc. or dim.** as type of gradual dynamic.

Allows you to select between hairpins, short text instructions, or hyphenated text instructions.

Hairpin line style

Only available if you select **Hairpin** from the **Gradual style** menu, or if you select **Messa di voce** as type of gradual dynamic.

Allows you to select how you want the lines of a hairpin to be shown. You have the following options:

- **Solid**

  Shows the hairpin with solid lines.

- **Dashed**

  Shows the hairpin with dashed lines.

- **Dotted**

  Shows the hairpin with dotted lines.

Niente

Adds niente to a crescendo, diminuendo, or messa di voce.

Niente style

Only available if you select **Hairpin** from the **Gradual style** menu or if you activate **Messa di voce** as type of gradual dynamic.

If you activate this option, you can select one of the following styles for the selected niente:

- **Circle on hairpin**

Adds a small circle to the end of the diminuendo or to the start of the crescendo.

- **Text**

  Adds an "n" to the end of the diminuendo or to the start of the crescendo.

Poco a poco (little by little)

Adds poco a poco to a crescendo, diminuendo, or messa di voce.

Abbreviate

Only available if you select a crescendo/diminuendo text style from the **Gradual style** menu.

If you activate this option, the text for the selected crescendo/diminuendo is abbreviated.

Hairpin shown as continuation

Only available for adjacent hairpins that point in the same direction and that are interrupted by an immediate dynamic.

If you activate this option, the hairpins are adjusted to be displayed as one hairpin.

Messa di voce inflection

Only available if you activate **Messa di voce** as type of gradual dynamic.

The inflection point of a messa di voce is the point at which the first hairpin ends and the second begins. The inflection point is determined automatically when the messa di voce is created based on the rhythm of the notes in the span of the dynamic.

If you activate this option, you can adjust the rhythmic position of the inflection point. The value in the left field specifies the primary rhythmic position, expressed in fractions of quarter notes. The value in the right field allows you to specify a secondary rhythmic position within a run of grace notes at the primary rhythmic position.

Hairpin open aperture

Only available if you select **Hairpin** from the **Gradual style** menu or if you select **Messa di voce** as type of gradual dynamic.

If you activate this option, you can change the space between the lines at the open end of a hairpin. If you select **Messa di voce** as type of dynamic, the space between the lines at the position of the inflection is changed. In the **Spaces** field, you can enter or select the size of the space.

NOTE

If you edit the **Hairpin closed aperture** option and its space exceeds the **Spaces** value of the **Hairpin open aperture** option, the space for the open aperture is automatically adjusted to ensure that it is always larger than the closed end aperture. Thus, the two lines of the hairpin never appear completely parallel.

Hairpin closed aperture

Only available if you select **Hairpin** from the **Gradual style** menu or if you select **Messa di voce** as type of gradual dynamic.

If you activate this option, you can change the space between the lines at the closed end of a hairpin. If you select **Messa di voce** as type of dynamic, the space between the lines at the position of the inflection is changed. In the **Spaces** field, you can enter or select the size of the space.

NOTE

If you edit the **Hairpin closed aperture** option and its space exceeds the **Spaces** value of the **Hairpin open aperture** option, the space for the open aperture

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is automatically adjusted to ensure that it is always larger than the closed end aperture. Thus, the two lines of the hairpin never appear completely parallel.

Hairpin thickness

Only available if you select **Hairpin** as gradual style or if you select **Messa di voce** as type of gradual dynamic.

If you activate this option, you can change the thickness of the hairpin lines in the **Spaces** field.

Diminuendo style

Only available if you select **cresc./dim.** for a diminuendo from the **Gradual style** menu.

If you activate this option, you can select the text that you want to display for a diminuendo and thus use the terms "diminuendo" and "decrescendo" interchangeably.

NOTE

You can specify the default text appearance for a diminuendo in the engraving options by selecting **Engrave** > **Engraving Options** > **Dynamics** > **Appearance of gradual reduction in dynamic**.

Barline Interaction

If you activate this option, you can set a hairpin to stop before a barline or to continue after a barline.

Continuation line style

Only available if you select **cresc....** from the **Gradual style** menu.

If you activate this option, you can specify whether the line that indicates the duration of the dynamic change is dashed or dotted.

Continuation line dot size

Only available if you select **cresc....** from the **Gradual style** menu and activate **Dotted** as **Continuation line style**.

If you activate this option, you can change the size of the dots that are used for the continuation line in the **Spaces** field.

Continuation line dot gap

Only available if you select **cresc....** from the **Gradual style** menu and activate **Dotted** as **Continuation line style**.

If you activate this option, you can change the size of the gaps between the dots that are used for the continuation line in the **Spaces** field.

Force/Intensity of Attack Options

rfz/sfz style

If you activate this option, you can decide whether you want to show markings of force/intensity of attack with an ending "z" or not.

Combined Dynamics Options

Separator shown

If you activate this option, you can insert a separator between the combined dynamics.

Separator

If you activate this option, you can specify the type of separator by selecting the one you want from the menu.

Lyrics section

In the **Lyrics** section of the properties panel, you can make changes to selected syllables or whole lines of lyrics.

Syllable type

Allows you to change the type of selected syllables.

Line placement

Allows you to move selected syllables above or below a staff.

Line number

Allows you to change the line number for selected syllables.

Chorus

If you activate this option, you can select syllables and designate them as chorus lyrics that are centered vertically in relation to other preceding lines of lyrics. Chorus lyrics are displayed in italics.

Is translation

If you activate this option, you can specify lines of lyrics as translations of song lyrics. Translations are displayed in italics.

Lyric text alignment

If you activate this option, you can align selected syllables horizontally in relation to the noteheads. By default, syllables are centered below the notes.

RELATED LINKS

Rehearsal marks section

In the **Rehearsal Marks** section of the properties panel, you can change the type of selected rehearsal marks and the number or letter with which they should start.

Sequence type

If you activate this option, you can choose whether the selected rehearsal mark is displayed as a letter, a number, or whether it shows the current bar number.

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If you selected **Numbers** or **Letters** as **Sequence type** and activate this option, you can increase or decrease the number or the letter with which the selected rehearsal mark should start.

Trills section

In the **Trills** section on the properties panel, you can change the placement and appearance of selected trills and trill lines.

Placement

If you activate this option, you can move a trill above or below a staff.

Start speed

If you activate this option, you can specify how fast a trill starts. The trill line automatically changes its form according to your setting.

End speed

If you activate this option, you can specify how fast a trill ends. The trill line automatically changes its form according to your setting.

Has trill line

If you activate this option, you can specify if a trill has a trill line.

Start position

If you activate this option, you can specify if you want a trill to be positioned starting at the notehead or at the accidental of the note.

Extra gap position

If you activate this option, you can specify if you want a gap position at the start or at the end of the trill line.

Interval

If you activate this option, you can choose the number of half-steps between the two notes of a trill.

Accidental position

If you activate this option and you are using an accidental as trill interval, you can specify if you want the accidental to be placed above, below, or in line with the trill.

Start offset

If you activate this option, you can move the start of a selected trill horizontally and vertically in fractions of spaces according to the values that you enter or select in the **X** and **Y** fields. The **X** value moves the trill horizontally away from its starting point, the **Y** value moves the trill vertically.

End offset X

If you activate this option, you can move the end of a selected trill line by the value that you enter or select in the **X** field.

Inside slurs, tuplets, and octave lines

If you activate this option, the selected trill is positioned inside slurs, tuplets, and octave lines.

Note spacing

The positions of notes relative to each other, and the automatic gaps between notes, is known as note spacing. You can change note spacing values for each layout project-wide on the **Note Spacing** page in **Setup** > **Layout Options**, and individually in Engrave mode.

- Rhythmic spacing project-wide per layout in **Layout Options**
- Rhythmic spacing: changing from a specified point in Engrave mode using the **Engrave** > **Note Spacing Change** dialog (per layout, and per frame chain)
- Rhythmic spacing/Note spacing: changing for individual rhythmic positions when **Note Spacing** is activated in Engrave mode

Adjusting note spacing at individual rhythmic positions in Engrave mode

You can make adjustments to the note spacing at individual rhythmic positions in Engrave mode, independently of your project-wide settings for note spacing.

NOTE

Moving notes graphically away from their rhythmic positions can be misleading for players reading the music.

and to move individual notes graphically, you need to activate **Note Spacing** in the 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.

An example of the handles and dashed lines that appear when **Note Spacing** is activated.

Each rhythmic position that contains a significant item, such as noteheads, grace notes, and rests, can be adjusted using the square handles. Square handles allow you to adjust the spacing of the selected rhythmic position, which changes the position of everything at that rhythmic position.

Selecting square handles direction above significant 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.

When note spacing handles have been moved, their color changes to red.

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.

To make spacing adjustments to notes according to their rhythmic positions:

PROCEDURE

1. In Engrave mode, activate **Note Spacing** in the Formatting panel on the left of the window.

2. Select one of the square handles on the dashed line at the rhythmic position whose spacing you want to adjust.

3. Adjust the spacing in the following ways:

   - **Alt**-**Right Arrow** to increase the space to the left of the rhythmic position of the selected handle.

- • **Alt**-**Left Arrow** to decrease the space to the left of the rhythmic position 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

EXAMPLE

The red square handle has been nudged to the left, decreasing the spacing to the left of its rhythmic position.

Spacing adjustments can be made to rhythmic positions in any rhythmic combination.

RELATED LINKS
Layout Options on page 85
Project-wide Engraving Options for notes on page 453

Adjusting the note spacing of individual notes, independently of their rhythmic positions

You can change the graphical position of individual notes independently of their rhythmic positions in Engrave mode.

PROCEDURE

1. In Engrave mode, activate **Note Spacing** in the Formatting panel on the left of the window.
2. Select the square handle at the rhythmic position of the note you want to move graphically.

3. Select the circular handle that appears beside the note.

4. Move the note to the left or to the right using the following key commands:

- • **Alt**-**Right Arrow**
- • **Alt**-**Left Arrow**

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> **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 graphical position of the selected note is changed without changing the rhythmic spacing of its rhythmic position.

EXAMPLE

Removing individual adjustments to note spacing

You can remove changes to note spacing in Engrave mode and restore note spacing handles to their original default positions.

PROCEDURE

1. In Engrave mode, activate **Note Spacing** in the Formatting panel on the left of the window.
2. Select the handles you want to restore to their original position.
3. Reset their positions in any of the following ways:

    -   Press **Backspace** or **Delete**.
    -   Choose **Edit** > **Delete**.

Print mode

Print mode allows you to print your layouts or to export them as graphic files.

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.

To open Print mode, **Ctrl/Cmd**you have the following options:

- Select **Print** on the toolbar.
- Select **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.

2 Print options panel

Contains options for printing or exporting your layouts.

3 OS X/macOS: **OS X Dialogs** section

Contains Mac OS-specific printing options.

Layouts panel

In Print mode, the **Layouts** panel shows a list of all layouts in your project and allows you to select what 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 or exported when you click **Print** or **Export**.

> NOTE
>
> If you have selected multiple layouts, and some are set to print while others are 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 on the print options panel are saved with your project. The options are divided into five 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 multiple layouts, and some are set to print while others are 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.

Printing your layouts

PROCEDURE

1. On the **Layouts** panel, select the layout that you want to print.
2. On the print options panel, in the **Destination** section, select **Printer**.
3. Set the other print options as required.
4. Click **Print**.

RELATED LINKS
Printing/exporting multiple layouts on page 183

Selecting a printer

For each layout, you can select a printer that is most useful to return appropriate results.

Dorico sets the default printer as designated by the operating system, unless you specify another printer. In this case, the settings in the following sections 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.

PROCEDURE

● In the **Destination** section, select a printer from the pop-up menu.

RESULT

The printer pop-up-menu in the **Destination** section only shows the name of a printer if all of the selected layouts are set to print to the same printer. If you select a new printer, all selected layouts are set to print to that printer.

RELATED LINKS
Printing/exporting multiple layouts on page 183

Specifying the number of copies to be printed

For each layout, you can specify how many copies you want to print.

PROCEDURE

1. On the **Layouts** panel, select a layout.

2.   To change the number of copies, do one of the following:

- Click **+** or **-** in the selected layout.

- On the print options panel, in the **Destination** section, enter the number of copies in the **Copies** field.

RESULT

If you have selected multiple layouts, the **Copies** field only shows a number if all of the selected layouts are set to print the same number of copies. If you enter a new number of copies in the **Copies** field, the number of copies that has been set for each selected layout is overridden.

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.

Print on

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.

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.

Flip the Printed Image

The lower menus allow you to set how the printed image is flipped when printing on the reverse side of the paper.

Flip Image for Reverse Side for Portrait Paper Feed

Determines how the image should be flipped when 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 for Reverse Side for Landscape Paper Feed

Determines how the image should be flipped when 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.

Setting up duplex printing

PROCEDURE

1. Select one of the available options from the **Print on** menu in the **Duplex Printing** section:

    - **One side only**

    - **Both sides manually**

    - **Both sides automatically**

2. Optional: Use the lower menus to select how the printed image is flipped when printing on the reverse side of the paper.

Specifying Mac OS-specific printing options (OS X only)/(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 on the print options panel are ignored. Mac OS-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. On the **Layouts** panel, in the **OS X Dialogs** section, click **Page Setup**.

2. In the dialog that opens, set the paper size.

3. In the **OS X Dialogs** section, click **Print**.

4. In the dialog that opens, set up the printing options.

Exporting your layouts as graphic files

PROCEDURE

1. On the **Layouts** panel, select the layout that you want to export.

2. On the print options panel, in the **Destination** section, select **Graphics**.

3. Set the export options as required.

4. Click **Export**.

Specifying the output format of exported graphics

You can export your layouts in various graphical output formats.

PREREQUISITE

In the **Destination** section, you have selected **Graphics**.

PROCEDURE

1.   From the **File Format** pop-up menu, select a file format.
2.   Specify 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.

3.   Optional and for PNG and TIFF file formats only: From the **Resolution** pop-up menu, select one of the dpi values.

   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
Monochrome and color graphics processing on page 181
Embedding of fonts in PDF and SVG files on page 182

Monochrome and color graphics processing

Most musical scores are monochrome, that is, they use only black ink and are normally printed on white or 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 may 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.

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 Knowledge Base: https://www.steinberg.net/en/support/knowledgebase_new.html

Specifying an export path

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, next to the **Destination folder** box, click **Choose Folder**.

2. In the dialog, choose a directory and click **Open**.
   The new path is inserted in the **Destination folder** field.

3. Optionally, to include the date and time of export in the file names, activate **Include date in file name**.

   NOTE

   Date and time are included in the ISO 8602 format, for example 2016-05-01-143723.

RESULT

Exported files are saved as follows:
<project name> <layout name> <date and time>.<file extension>.

Example: `MyProject Soprano 2016-05-01-143723.pdf`

Printing/exporting multiple layouts

You can print or export several layouts at the same time.

PROCEDURE

1. On the **Layouts** panel, select the layouts that you want to print or export.

   - To select a range of layouts, press **Shift** and select the first and last layout of the range.

   - To select individual layouts, press **Ctrl/Cmd** and select the layouts.

2. Click **Print/Export/Print and Export**.

RELATED LINKS

Layout page arrangements for printing/exporting

Dorico provides several page arrangements that you can use for printing/exporting your layouts.

Job Type

In the **Job Type** section, you can specify how you want the layouts to be printed/exported. On the **Job Type** pop-up menu, the following job types are available:

Normal

Prints one page on each sheet of paper.

Spreads

Prints two pages side-by-side on each sheet of paper, with odd-numbered pages on the right-hand side and even-numbered pages on the left-hand side.

2-up

Prints two pages side-by-side on each sheet of paper. The first page in the range is printed on the left-hand side of the first sheet of paper.

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.

NOTE

Booklets can only be printed 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 should typically use portrait orientation, unless the layout itself uses landscape orientation.

Page Ranges

In the **Job Type** section, you can specify a range of pages to be printed/exported. You have the following options:

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.

Printing/exporting a page range

You can specify a range of pages to be printed/exported.

By default, Dorico prints/exports all pages of the selected layouts. You can change this by specifying a page range.

NOTE

Booklets can only be printed 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**.

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 in the 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 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, such as A4 may be used. If they are set to a North American country, one of the typical standards, such as US Letter may be used.

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

For each layout to be printed or exported, you can specify different paper sizes and orientation settings.

In the **Page Setup** section, you have the following options:

Paper Size

Allows you to select one of the available paper sizes. In addition, you can specify if you want to print or export in **Portrait** or **Landscape** orientation.

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. In the **Scale factor** field, enter the required percentage value.

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.

In the **Annotations** section, you have 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

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, accidentals may be required for some or all notes, depending on the notation convention in use.

Dorico provides comprehensive duration rules that determine when accidentals should be shown, and also allows you to control how accidentals are arranged in complex chords.

RELATED LINKS

Inputting notes with accidentals

PROCEDURE

1. In Write mode, start note input.
2. Prepare a common accidental, such as natural ♮, sharp ♯, or flat ♭, in the following ways:
    - Click the button of the relevant accidental in the Notes panel on the left of the window
    - Press **0** for natural
    - Press **-** for flat
    - Press **=** for sharp

    Uncommon accidentals, such as double sharps and flats, or microtonal accidentals, can be found in the **Accidentals** section of the **Key Signatures** panel on the right of the window.
3. Enter notes with your selected accidental or accidentals in any of the following ways:
    - Press the corresponding letters on the computer keyboard. For example, press **=-F** to input an F♯.
    - Click the staff positions of the pitches you want with the mouse
    - Play in the pitches you want on a MIDI keyboard.

      NOTE

      If you input notes via 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.

RELATED LINKS

Adding accidentals to existing notes

To add accidentals to notes that have already been input:

PROCEDURE

1. In Write mode, select the note or notes you wish to change.

2. Select the accidental you want in one of the following ways:

- Click the corresponding button in the Notes panel

- Press **-** for flat

- Press **=** for sharp

- Press **0** for natural

NOTE

Depending on the accidental duration system in place, subsequent accidentals for the same note in the same register may not appear in the same bar.

RELATED LINKS
Accidental duration rules on page 196

Accidental selection during MIDI input

Dorico interprets MIDI data to create accidentals, and automatically determines the spelling of accidentals 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 an accidental's spelling, Dorico follows your spelling preference whenever that note is used again in the score.

In 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. For example, a major third rather than a diminished fourth.

Dorico may make 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 **Note Input Options**.

RELATED LINKS
Respelling accidentals on page 193

Disabling automatic accidental respelling

To turn off 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 list at the left of the dialog.

3. Deactivate **Allow spelling of notes to be adjusted retrospectively**.

4. Click **Apply**, then **Close**.

Changing accidentals

To change the accidental of selected notes:

PROCEDURE

1. In Write mode, select the notes whose accidental you want to change.

2. Change the accidental in one of the following ways:

- Click the button of the type of accidental that you want to use in the Notes panel

- Press **0** to change the accidental to a natural

- Press **-** to change the accidental to a flat

- Press **=** to change the accidental to a sharp

RELATED LINKS
Adding accidentals on page 103
Key commands in Dorico on page 10

Deleting accidentals

PROCEDURE

1. In Write mode, select the note whose accidental you want to delete.

2. Deactivate the accidental in any of the following ways:

- Click the button of the accidental in the Notes panel.

- Press **0** to delete naturals.

- Press **-** to delete flats.

- Press **=** to delete sharps.

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
Adding accidentals to existing notes on page 189
Key commands in Dorico on page 10

Deleting accidentals from multiple notes

Deleting accidentals from multiple 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 follow each other consecutively: select the first note of the group, hold down **Shift**, then select the last note of the group.

    - If the notes are separate with other notes in between: hold down **Ctrl/Cmd** and click on each note you want to remove an accidental from individually.

2. For a selection including just one type of accidental, deactivate that accidental in one of the following ways:

    - Click on the button of that accidental in the Notes panel

    - Press **0** to delete naturals

    - Press **-** to delete flats

    - Press **=** to delete sharps

3. 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, changes everything in that selection to the accidental you choose. For example, two G♯s followed by two G♭s become four G♯s if you re-input a sharp. If you click on the **sharp** button, or press **=**, twice more, all accidentals are deleted.

    Therefore, to delete accidentals from a selection with multiple accidentals, it is recommended that you input a natural by click on its button in the Notes panel, or by pressing **0**.

Individual changes to the appearance of accidentals

You can change the appearance of individual accidentals in further detail by using the Properties panel at the bottom of the window.

For example, you can hide, show, or parenthesize individually selected accidentals.

You can hide and show the Properties panel in the following ways:

- Press **Ctrl/Cmd-8**.

- Click its disclosure arrow.

NOTE

Only options relevant to the selected items appear in the Properties panel. Options for accidentals only appear if your selection contains only notes.

There are more options for accidentals in the Properties panel in Engrave mode than in Write mode.

RELATED LINKS

Showing accidentals in parentheses individually

You can show individual accidentals in parentheses, and also hide or show accidentals individually. For example, you can show an accidental in parentheses on subsequent notes in tie chains that cross system breaks.

PROCEDURE

1. Select the notes whose accidental appearance you want to change. You can do this in Write mode and Engrave mode.

   NOTE

   You can only select individual noteheads within tie chains in Engrave mode.

2. Activate the **Accidental** property in the **Notes and Rests** group of the Properties panel.

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, according to your selection.

NOTE

If you find that you need to hide or show lots of accidentals in your project, it may be easier to change the accidental duration rule for the project.

RELATED LINKS
Accidental duration rules on page 196

Project-wide Engraving Options for accidentals

Options for the appearance and positions of accidentals project-wide can be found on the **Accidentals** page in **Engraving Options**.

The options on this page allow you to change the order of accidentals in chords and the precise positioning of accidentals relative to noteheads and parentheses.

Many options are accompanied by musical examples to demonstrate how each option affects the appearance of your music.

You can open **Engraving Options** in 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.

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.

As demonstrated in the examples, this means the same note can sometimes 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.

In the examples, 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 or 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 |
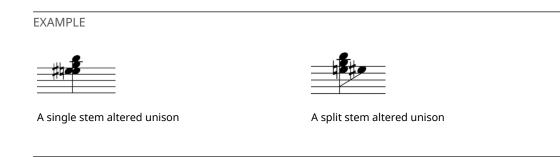
Altered unisons

Altered unisons occur when two or more notes of the same name in the same octave have different accidentals in the same chord, for example 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 choose to have altered unisons appear with a single stem: the noteheads appear directly beside each other, and the two accidentals are shown beside each other to the left of the chord.

A single stem altered unison

A split stem altered unison

Inputting altered unisons

To input a chord with two notes in the same octave, but with different accidentals:

PROCEDURE

1. Activate the **Chords** input tool in one of the following ways:

   - Click **Chords** in the Notes toolbox:

   - Press **Q**

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

   - Press the corresponding letters on the computer keyboard, such as **C**, **D**, **E** and so on.

   - Play in the pitches on a MIDI keyboard.

   - Click the staff positions of the pitches you want.

RESULT

Multiple notes are input at the same rhythmic position as a chord.

NOTE

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 transpose it down an octave by selecting the note and pressing **Ctrl/Cmd**-**Shift**-**Down Arrow**.

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. Activate the **Split stem** property in the **Notes and Rests** group of the Properties panel.

3. Change the appearance of altered unisons by checking or unchecking the box beside the property:

   - Check the box for split stems

   - Uncheck the box for single stems

RESULT

The appearance of the selected altered unison notes is changed.

NOTE

The **Split stem** property applies to notes individually. 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 in the **Altered unisons** section of the **Accidentals** page in **Notation Options**. They can appear either side-by-side or as split stems.

PROCEDURE

1. In Write mode, choose **Write** > **Notation Options**.
2. Select **Accidentals** from the **Category** menu.
3. Choose one of the following options for **Appearance of altered unisons** in the **Altered unisons** section:
    *   **Single stem**
    *   **Split stem**
4. Click **Apply**, then **Close**.

Changing how chords with multiple altered unisons appear project-wide

You can change how split stem chords that contain multiple altered unisons appear project-wide in the **Altered unisons** section of the **Accidentals** page in **Notation Options**. Notes can be allocated on one side of the original stem or on both sides of the original stem.

PROCEDURE

1. In Write mode, choose **Write** > **Notation Options**.
2. Select **Accidentals** from the **Category** menu.
3. Choose one of the following options for **Chords with multiple altered unisons** in the **Altered unisons** section:
    *   **Allocate only to the left**
    *   **Alternate between left and right**
4. Click **Apply**, then **Close**.

Microtonal accidentals

Microtonal accidentals can be highly customized in Dorico.

The default tonality system can be found in the **Key Signatures, Tonality Systems and Accidentals** panel on the right of the screen. 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: sharp, flat, double flat, and so on.

To use microtonal accidentals:

1   Select the **Equal temperament (24-EDO)** tonality system in the **Tonality Systems** section of the **Key Signatures** panel.

2 Create a key signature in the flow.

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.

You can also define your own tonality systems, custom key signatures, and accidentals.

RELATED LINKS
Inputting microtonal accidentals on page 196
Tonality systems on page 404

Inputting microtonal accidentals

Before you can input microtonal accidentals, you must first input an atonal key signature.

PROCEDURE

1. Open the key signatures popover in any of the following ways:

- Press **Shift**+**K**
- Choose **Write** > **Create Key Signature**

2. Enter `atonal` into the popover, and press **Return** to close the popover.

The open or atonal key signature appears in the music as a signpost, and microtonal accidentals now appear in the **Accidentals** section of the Notations panel.

3. Select the note or notes to which you want to apply a microtonal accidental.

4. Click on the microtonal accidental you want to input in the **Accidentals** section of the **Key Signatures** panel.

RESULT

The selected microtonal accidental appears beside the selected note or notes.

NOTE

Only one type of accidental can be added at a time.

Accidental duration rules

Accidental duration rules determine how long an accidental applies, for example 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.

Changing the accidental duration rule

To change the accidental duration rule to the one most appropriate for your project:

PROCEDURE

1. In Write mode, choose **Write** > **Notation Options**.

2. Select **Accidentals** from the **Category** menu.

3. Select the flows in which you want to change the cancelation rule for double accidentals in the list on the left of the dialog in the following ways:

   - **Ctrl**-click individual flows.
   - **Shift**-click adjacent flows.
   - Click **Select All**.

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

4. Choose one of the following options for **Accidental duration rule** in the **Basic** section:

   - **Common Practice**
   - **Second Viennese School**
   - **Modernist**

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

Canceling double accidentals

If a double sharp is canceled by a single sharp, or a double flat is canceled by a single flat, then by default 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 canceled project-wide in the **Basic** section of the **Accidentals** page in **Write** > **Notation Options**.

- **Archaic** shows a natural sign before new accidentals that come after double accidentals.
- **Modern** replaces double accidentals immediately with a new accidental.

EXAMPLE

Use archaic cancelation

Archaic cancelation puts a natural before a new accidental after a double accidental.

Use modern cancelation

Modern cancelation replaces the double accidental with the new one, without showing a natural sign first.

RELATED LINKS
Notation Options on page 119

Common practice

In common practice, an accidental affects all notes of the same pitch in the same octave within the same bar, unless it is canceled by another accidental. If it is not canceled, it is automatically canceled in the following bar.

NOTE

To ensure that the cancelation is unambiguous, it is customary to add a cautionary or courtesy 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 canceled 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 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 cancelations, 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.
- A tied note appears at the start of the next system and the accidental is held over a system break.
- Notes appear at the same staff position, but belong to another player when condensed.
- 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 197

Canceling double accidentals (Common practice)

You can change the way double accidentals are canceled if you use the common practice accidental duration rule.

PROCEDURE

1. In Write mode, choose **Write** > **Notation Options**.

2. Select **Accidentals** from the **Category** menu.

3. Select the flows in which you want to change the cancelation rule for double accidentals in the list on the left of the dialog in the following ways:

    - **Ctrl**-click individual flows.

    - **Shift**-click adjacent flows.

    - Click **Select All**.

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

4. Choose one of the following options for **Single accidentals canceling double accidentals** in the **Basic** section:

    - **Use archaic cancelation**: double accidentals are canceled by a natural-sharp or a natural-flat sign.

    - **Use modern cancelation**: double accidentals are canceled by a single sharp or a single flat sign.

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

Showing and hiding cautionary accidentals

You can show and hide cautionary accidentals, if you use the common practice accidental duration rule.

PROCEDURE

1. In Write mode, choose **Write** > **Notation Options**.

2. Select **Accidentals** from the **Category** menu.

3. Select the flows in which you want to show or hide cautionary accidentals in the list on the left of the dialog in the following ways:

    - **Ctrl**-click individual flows.

    - **Shift**-click adjacent flows.

    - Click **Select All**.

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

4. Choose the options that you want to apply to your project in the **Cautionary (courtesy) accidentals** section.

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

RELATED LINKS
Common practice on page 198

Second Viennese School

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 Schönberg 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**.
2. Select **Accidentals** from the **Category** menu.
3. Select the flows in which you want to change the Second Viennese School rule for restating accidentals in the list on the left of the dialog in the following ways:
   - **Ctrl**-click individual flows.
   - **Shift**-click adjacent flows.
   - Click **Select All**.

   By default, only the current flow is selected when you open the dialog.
4. Choose **Restate after intervening change of pitch** for **Accidentals on immediate repetitions of the same note within a bar** in the **Second Viennese School options** section.
5. Click **Apply**, then **Close**.

Modernist

The Modernist accidental duration rule states that only notes that have been altered from the key signature show accidentals. Naturals are not shown. However, accidentals that are shown only apply to the notes on which they are written, as with the Second Viennese School.

You can change the accidental duration rule on the **Accidentals** page in **Notation Options**.

RELATED LINKS
Second Viennese School on page 200

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**.

2. Select **Accidentals** from the **Category** menu.

3. Select the flows in which you want to change the Modernist rule for restating accidentals in the list on the left of the dialog in the following ways:

- **Ctrl**-click individual flows.

- **Shift**-click adjacent flows.

- Click **Select All**.

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

4. Choose one of the following options for **Accidental duration rule** in the **Basic** section:

- **Common Practice**

- **Second Viennese School**

- **Modernist**

5. Choose **Restate after intervening change of pitch** for **Accidentals on immediate repetitions of the same note within a bar** in the **Modernist options** section.

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**.

2. Select **Accidentals** from the **Category** menu.

3. Select the flows in which you want to change the Modernist rule for restating accidentals in the list on the left of the dialog in the following ways:

- **Ctrl**-click individual flows.

- **Shift**-click adjacent flows.

- Click **Select All**.

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

4. Choose **Do not restate within a beamed group** for **Accidentals on repetitions of the same note within a beamed group** in the **Modernist options** section.

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 are 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**.

2. Click **Accidentals** in the page list.

3. Choose **Arrange stacks high to low** for **Order of accidental stacks in lattice arrangement** in the **Stacking** section.

4. Click **Apply**, then **Close**.

Applying standard stacking rules to dense chords

To apply the standard accidental stacking rule for dense chords:

PROCEDURE

1. In Engrave mode, select **Engrave** > **Engraving Options**.

2. Select the **Accidentals** page.

3. Activate **Use zig-zag arrangement** in the **Close Position and Cluster Chords** subcategory of the **Arrangement for dense chords with many accidentals** section.

4. Click **Apply**, then **Close**.

NOTE

The standard rule produces a wider arrangement and 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 may be tucked above the low note, to prevent the rhythmic 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 rhythmic 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 a note should be relative to its notated duration.

In Dorico, articulations are defined as something that alters the way a note should be 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 three types:

- Articulations of force: 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: staccatissimo, staccato, tenuto, and staccato-tenuto, which is sometimes called louré. If a note includes a tie or ties, Dorico shows these articulations above the last note in the chain by default.

- Articulations of stress: stress and unstress. 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 the following ways:

- Choose **Play** > **Playback Options** in Play mode
- Press **Ctrl/Cmd-Shift-P** in any mode

RELATED LINKS
Adding articulations on page 104

Project-wide Engraving Options for articulations

Options for the appearance and placement of articulations project-wide can be found 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, and the positions of articulations relative to ties and slurs.

Many options are accompanied by musical examples to demonstrate how each option affects the appearance of your music.

You can open **Engraving Options** in 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.

Inputting articulations during step input with the keyboard

To input notes with articulations during step input with the keyboard:

PROCEDURE

1. In Write mode, start note input.
2. Press the key commands for your preferred articulations.
3. Enter the note or chord you want.

RESULT

The selected articulations are added to all notes that are input until the articulations are deselected.

RELATED LINKS
Note input on page 92
Articulation input methods when using the keyboard on page 205

Articulation input methods when using the keyboard

You can input articulations by using the following key commands:

Press:	For articulation:
[	accent
'	marcato
Shift-[	stress
Shift-'	unstress
]	staccato
\	tenuto

Press:	For articulation:
Shift-]	staccatissimo
Shift-\	combined tenuto and staccato

Adding articulations to existing notes with the keyboard

To add articulation to existing notes with the keyboard:

PROCEDURE

1.   In Write mode, select the note or notes to which you want to add articulations.

2.   Press the keys or key commands that correspond to your preferred articulations.

RELATED LINKS
Articulation input methods when using the keyboard on page 205

Inputting articulations during step input with the mouse

You can input notes with articulations during step input with the mouse.

PROCEDURE

1.   In Write mode, start note input.

2.   Click the articulations you want in the Notes panel on the left of the window.

3.   Click or play in the notes or chords you want.

RESULT

The selected articulations are added to all notes that are input until the articulations are deselected.

RELATED LINKS
Note input on page 92

Adding articulations to existing notes with the mouse

To add articulations to existing notes with the mouse:

PROCEDURE

1.   In Write mode, select the note or notes to which you want to add articulation.

2.   Select the articulation you want in the Notes panel on the left of the window.

RESULT

The articulation is added to the selected note or notes.

Copying articulations

Articulations are automatically included if you copy a note or notes, but they cannot be copied and pasted independently of notes.

You can copy notes in the following ways:

- Select the material you want to duplicate and press **R**. This repeats material directly after itself.
- Select the material you want to duplicate, choose **Edit** > **Copy**, then select where you want to copy to 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.

- Select the material you want to duplicate, hold down **Alt**, then click with the mouse cursor at the point the phrase should start.

Changing articulations

To change articulations for a selected note:

PROCEDURE

1. In Write mode, select the note.
2. Do one of the following:
   - On the Notes panel, activate the button for the articulation you want to add.
   - On the keyboard, press the respective key command.

RESULT

The new articulation is added. This replaces any existing articulation of the same type.

RELATED LINKS
Adding articulations on page 104

Deleting articulations

Individual articulation markings cannot be selected 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 from which you want to delete articulation.
2. Delete the articulation in any of the following ways:
   - Press the key command of the articulation you want to delete.
   - Click the button of the articulation you want to delete in the Notes panel.

RELATED LINKS
Articulation input methods when using the keyboard on page 205

Positions of articulations

Articulations are placed on the notehead side by default, with the following exceptions:

- In a single-voice context, marcato is always placed above the staff, regardless of the stem direction of the note or chord on which it is used. In a multiple-voice context, marcato may 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 notes or chords have several types of articulations, the order in which they are positioned is:

1 Articulations of duration are positioned closest to notes or stems.

2 Articulations of force are positioned outside articulations of duration.

3 Articulations of stress are positioned furthest from notes or stems.

Order of articulations in relation to slurs

Articulations of duration are positioned as follows:

- Inside slurs that start or 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 or 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 end of the slur.

Duration articulations inside the end of a slur.

Articulation tucking index property

Project-wide changes to the positions of articulations

The positions of articulations can be changed project-wide on the **Articulations** page in **Engraving Options**.

RELATED LINKS

Changing the vertical gaps between articulations and other notation project-wide

To change the distances between articulations and noteheads/stems, or the gaps between different articulations on the same note or chord in fractions of spaces:

For example, you might want to increase the distance between articulations if your score has lots of stacked articulations, and they are hard to read.

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Engraving Options**.

2. Click **Articulations** in the page list.

3. In the **Vertical Position** section, adjust the values for the vertical positions you want to change for your project.

4. Click **Apply**, then **Close**.

RESULT

The vertical position of articulations is changed project-wide, as shown by these examples.

EXAMPLE

Stacked articulations with default vertical spacing settings.

Stacked articulations with modified vertical spacing settings.

Changing the positions of articulations on tied notes project-wide

By default, articulations of force and stress are shown on the first note or chord of a chain of tied notes, while articulations of duration are shown on the last note or chord.

To change the default position of articulations in tie chains:

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Engraving Options**.
2. Click **Articulations** in the page list.
3. In the **Ties** section, select one of the following positions for the articulation type that you want to change:

    - **Start of tie chain**

      Positions the articulation on the first note or chord of a chain of tied notes.

    - **End of tie chain**

      Positions the articulation on the last note or chord of a chain of tied notes.

4. Click **Apply**, then **Close**.

Changing the horizontal position of staccato marks project-wide

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.

By default, staccato and staccatissimo articulations are centered on the stem when on the stem side.

To change the default horizontal position of staccato and staccatissimo articulations when they are on the stem side:

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Engraving Options**.
2. Click **Articulations** in the page list.
3. Choose from the following options for **Horizontal position of staccato on the stem side** in the **Horizontal Position** section:

    - **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.

Individual changes to the positions of articulations

You can change the positions of articulations in Engrave mode by selecting them and moving them, or by using properties in the Properties panel.

Moving individual articulations vertically

You can move individual articulations graphically upwards and downwards so they are closer to or 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 **AltDown Arrow** to move them downwards.

     TIP

     If you want to move articulations 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 and downwards to the positions you want.

RELATED LINKS
Moving individual articulations vertically using the Properties panel on page 211

Moving individual articulations vertically using the Properties panel

You can move individual articulations graphically upwards and downwards using the Properties panel so they are closer to or further away from notes.

PROCEDURE

1. In Engrave mode, select the noteheads to which the articulations you want to move are attached.

2. Activate **Offset Y** property in the **Articulations** group of the Properties panel for the articulation type that you want to move. For example, activate **Offset Y** under the **Articulations of force** heading to move accents.

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 **Offset Y** value moves articulations upwards. Decreasing the **Offset Y** value moves articulations downwards.

Changing the placement of articulations individually

You can change where individual articulations are placed.

PROCEDURE

1. In Engrave mode, select the notes or chords whose articulation positions you want to change.

2. Activate the **Placement** property in the **Articulations** group of the Properties panel.

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 would create 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 211

Changing the positions of articulations on tied notes individually

By default, articulations of force and stress are shown on the first note or chord of a chain of tied notes, while articulations of duration are shown on the last note or chord.

PROCEDURE

1. Select the tied note or 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 the **Pos. in tie chain** option for the articulation type that 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**

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 causes a note to sound shorter than normal, and an accent causes a note to sound louder than normal.

The **Timings** page in **Play** > **Playback Options** (key command **Ctrl/Cmd-Shift-P**), 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, Dorico loads the specific sample for an articulation if such a sample is included in your 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.

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 231

Inputting bars with the keyboard

Normally you do not need to create bars in Dorico, as they are created automatically as needed when you input music.

However, you may want to add bars in advance if, for example, you are copying or arranging an existing piece of music.

One 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 by pressing **Space** repeatedly during step input.

Alternatively, you can input bars with the keyboard by using the bars and barlines popover in Write mode. You can open the bars and barlines popover in 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.

The bars and barlines popover with an example entry for inputting bars

The bars and barlines button in the Notations toolbox

The bars and barlines popover for bars

Here are some examples of what to enter into the bars and barlines popover if you want to input and delete bars, and what is input in the music as a result.

You can open the bars and barlines popover in Write mode in the following ways:

- Press **Shift**-**B**.

● Choose **Write** > **Create Bar or Barline**.

Enter:	Result:
+2	Add two bars
+14	Add fourteen bars
−1	Delete one bar
−6	Delete six bars
rest	Add a bar rest

This list is not comprehensive: it is intended to illustrate how you can structure your entry to input and delete bars, and input bar rests.

RELATED LINKS

Inputting bars during step input with the keyboard

You can input bars during step input with the keyboard.

PROCEDURE

1. In Write mode, start note input.
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 added 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.

RELATED LINKS

Adding bars into existing music with the keyboard

PROCEDURE

1. In Write mode, select one of the following:
   ● The barline after which you want to add new bars.
   ● The note or whole bar before which you want new bars to be added.
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 added directly after a selected barline, and directly before a selected note or bar.

Inputting bar rests during step input with the keyboard

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 keyboard.

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

The bar rest is added 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.

RELATED LINKS
Inputting multiple voices during step input on page 708
Switching between voices during step input on page 708

Inputting bars with the mouse

You can input bars 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:

In the panel, there are three sections:

- **Insert Bars**
- **Insert Bar Rest**
- **Insert Barline**

The panel can be hidden and shown in the following ways:

- Press **Ctrl/Cmd-9**.
- Click its disclosure arrow.

Inputting bars during step input with the mouse

You can input bars during step input with the mouse.

PROCEDURE

1. In Write mode, start note input.
2. Using the **Insert Bars** section of the **Bars and Barlines** panel, select the number of bars you want to add.

   In the **Insert Bars** section, you can decide how many bars you want to add by entering a number into the value field, or using the up and down arrows to increase or decrease the number. The minimum number is 1. You can also select where they are input in your project:

   - **Start of Flow**: bars are added at the beginning of the flow.
   - **Start of Selection**: bars are added from the selected note or rest. During step input, bars are added from the caret position.
   - **End of Flow**: bars are added at the end of the flow.

   NOTE

   If you want the bars to be added from the caret position, make sure that you have selected **Start of Selection** from the menu.

3. Click **Insert Bars**.

RESULT

The number of bars specified is added.

RELATED LINKS
Inputting bars during step input with the keyboard on page 214

Adding bars into existing music with the mouse

PROCEDURE

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

   - The barline after which you want to add new bars.
   - The note or whole bar before which you want new bars to be added.

2. Using the **Insert Bars** section of the **Bars and Barlines** panel, select the number of bars you want to add.

   In the **Insert Bars** section, you can decide how many bars you want to add by entering a number into the value field, or using the up and down arrows to increase or decrease the number. The minimum number is 1. You can also select where they are input in your project:

   - **Start of Flow**: bars are added at the beginning of the flow.

- **Start of Selection**: bars are added from the selected note or rest. During step input, bars are added from the caret position.

- **End of Flow**: bars are added at the end of the flow.

3. Click **Insert Bars**.

RESULT

The number of bars specified is added directly after a selected barline, and directly before a selected note or bar.

Inputting bar rests during step input with the mouse

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 mouse.

PROCEDURE

1. In Write mode, start note input.

2. Click **Insert Bar Rest** in the **Bars and Barlines** panel.

   You may need to click on the **Insert Bar Rest** section title to disclose this button.

3. Continue inputting notes after the bar rest.

RESULT

The bar rest is added 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.

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 barline 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, starting from the selected bar.

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

RESULT

The number of bars specified is deleted. For example, if you enter -6, then the bar you selected and the subsequent five bars are deleted.

Deleting empty bars at the end of flows

You can delete any empty bars left at the ends of flows.

In Write mode, choose **Write** > **Trim Flow** to delete empty bars at the end of the current flow.

Deleting the contents of bars

You can delete just the contents of bars without deleting barlines or the bars themselves.

PROCEDURE

1. Select the bars whose contents you want to delete by clicking on an empty part of the staff.

   TIP

   Notes, rests, and other objects are highlighted orange when selected.

2. Delete the selected contents in any of the following ways:

   - Press **Backspace**.
   - Choose **Edit** > **Delete**.

RESULT

The contents of the selected bars are deleted.

Changing 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

Changing the width of empty bars

You can change the width of empty bars individually by activating **Note Spacing** in Engrave mode.

With **Note Spacing** activated in Engrave mode, you can select a handle at the position of a barline and use the following key commands to adjust the spacing of empty bars:

- **Alt**-**Right Arrow**
- **Alt**-**Left Arrow**

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 thinner. If you select the barline on the right of a bar and nudge the handle to the right, the bar appears wider.

RELATED LINKS

Moving bar rest symbols

Although Dorico automatically positions rests in multiple voices to avoid collisions, you can move bar rests vertically. For example, when you are using multiple voices.

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. Activate **Rest pos.** in the **Notes and Rests** group of the Properties panel.

3. Change the position by increasing or decreasing the value 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.** restores the bar rest to its default position.

Splits in bars
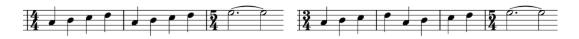
You can split bars rhythmically by changing the number of beats in each bar, and visually by splitting single bars across systems or page breaks, which may be required in music in an irregular meter or in passages of polymeter.

You can split bars into two or more bars by changing the time signature, or by inserting a barline.

The new time signature you add 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, inputting a 3/4 time signature two bars before an existing time signature of 5/4 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, but 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.

You can see this shown in this example. 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

Splitting bars across system or frame breaks

System breaks and frame breaks can be created at any point in the score, including in the middle of bars.

PROCEDURE

1.   In Engrave mode, select an item in the bar, such as a notehead or a rest.

2.   Insert a system break or frame break in the following ways:

- Press **Shift-S** to insert a system break.

- Choose **Engrave** > **Format Systems** > **System Break**.

- Click **Insert System Break**

- Press **Shift-F** to insert a frame break.

- Choose **Engrave** > **Format Music Frames** > **Frame Break**.

- Click **Insert Frame Break** in the **Format Systems** section of the **Formatting** panel:

RESULT

The system break or frame break is created immediately to the left of your selected item. Your selected item is shown at the first rhythmic position on the next system.

Splitting bars by inputting new time signatures

You can split a bar into smaller bars by changing the time signature for those bars. For example, if you want to change one 4/4 bar into two 2/4 bars.

The new time signature you add applies until the next existing time signature or the end of the flow, whichever comes first.

Therefore, if you want your existing time signature to continue from a certain rhythmic position in a flow, follow the following steps:

PROCEDURE

1.	Re-input your current time signature at the point you want to return to it after the section you want to change.

2.	Input the new time signature at the rhythmic position you want it to start.

RESULT

The new time signature continues until the position of the next time signature you input in step 1.

If your new time signature does not fit completely in the space before the next existing time signature, the final bar is made shorter. Your next existing time signature is not overridden.

However, extra beats are added before the next existing time signature if you have Insert mode activated.

RELATED LINKS
Splits in bars on page 219
Changing time signatures on page 625

Combining bars

You can combine two or more bars into one, longer bar by deleting the barline between them to combine 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**.

	•	Choose **Edit** > **Delete**.

RESULT

The bars on either side of the deleted barline combine into one bar. The notes inside may be re-beamed if appropriate.

However, deleting a barline does not automatically change the time signature. To avoid confusion, you may want to add a new time signature to reflect the new rhythmic duration of the bar.

RELATED LINKS
Deleting barlines on page 227

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 barline 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 either:

- 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.

Start and end 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.

Inputting and changing barlines with the keyboard

You can input barlines using the bars and barlines popover.

You can open the bars and barlines popover in 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.

The bars and barlines popover with an example entry for a barline

The bars and barlines button in the Notations toolbox

The bars and barlines popover for barlines

To create different barlines, you can enter text or symbols into the bars and barlines popover.

You can open the bars and barlines popover in Write mode by pressing **Shift**-**B**, or by choosing **Write** > **Create Bar or Barline**.

Enter:	For barline:
|	Normal (Single)
||	Double
|]	Final
: or `dashed`	Dashed
` or `tick`	Tick
, or `short`	Short
`thick`	Thick
|: or `start`	Start repeat
:| or `end`	End repeat
:|: or :||: or `end-start` or `endstart`	End/start repeat

You can also add and delete bars using this popover.

Inputting barlines during step input with the keyboard

PROCEDURE

1. In Write mode, start note input.
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 ⊩ for a double barline.

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

RESULT

The barline is added at the caret position. Surrounding music automatically adjusts to accommodate the barline. For example, note grouping, rests, and tied notes all adjust if necessary.

RELATED LINKS
[Inputting notes](#) on page 94

Adding barlines to existing music with the keyboard

To add a barline to existing music with the keyboard:

PROCEDURE

1. In Write mode, select the note or rest immediately to the right of where you want a barline to appear.

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 ⊩ for a double barline.

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

RESULT

The barline is added immediately to the left of the selected note or rest. Surrounding music automatically adjusts to accommodate the barline. For example, note grouping, rests, and tied notes all adjust if necessary.

RELATED LINKS
[The bars and barlines popover for barlines](#) on page 224

Changing the type of an existing barline with the keyboard

To change an existing barline to a different type with the keyboard:

PROCEDURE

1. In Write mode, select the barline you want to change, or select the note immediately to the right of it.

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 to which you want to change the selected barline into the popover.

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

RELATED LINKS
[The bars and barlines popover for barlines](#) on page 224

Inputting and changing barlines with the mouse

You can input 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:

There are three sections in the panel:

- **Insert Bars**
- **Insert Bar Rest**
- **Insert Barline**

You can hide and show the panel by clicking its disclosure arrow, or by pressing **Ctrl/Cmd-9**.

Inputting barlines during step input with the mouse

To input a barline during step input with the mouse:

PROCEDURE

1. In Write mode, start note input.

2. Input a barline in one of the following ways:

    - Select your preferred barline in the **Bars and Barlines** panel on the right of the window.

    - Choose **Write** > **Create Bar or Barline** to open the bars and barlines popover, and enter your preferred barline type into the popover. For example, enter **||** to input a double barline.

RESULT

The barline is added at the caret position. Surrounding music automatically adjusts to accommodate the barline. For example, note grouping, rests, and tied notes all adjust if necessary.

RELATED LINKS
The bars and barlines popover for barlines on page 224
Inputting notes on page 94

Adding barlines to existing music with the mouse

To add a barline to existing music with the mouse:

PROCEDURE

1. In Write mode, select the note or rest immediately to the right of where you want to input a barline.

2. Input a barline in one of the following ways:

    - Select your preferred barline in the **Bars and Barlines** panel

    - Choose **Write** > **Create Bar or Barline** to open the bars and barlines popover, and enter your preferred barline type into the popover. For example, enter || to input a double barline

RESULT

The barline is added immediately to the left of the selected note or rest. Surrounding music automatically adjusts to accommodate the barline. For example, note grouping, rests, and tied notes all adjust if necessary.

RELATED LINKS
The bars and barlines popover for barlines on page 224

Changing the type of an existing barline with the mouse

To change an existing barline to a different type with the mouse:

PROCEDURE

1. In Write mode, select the barline you want to change, or select the note immediately to the right of it.

2. Input a barline in one of the following ways:

   - Select your preferred barline in the **Bars and Barlines** panel

   - Choose **Write** > **Create Bar or Barline** to open the bars and barlines popover, and enter your preferred barline type into the popover. For example, enter ⏐⏐ to input a double barline

RELATED LINKS
The bars and barlines popover for barlines on page 224

Deleting barlines

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**.

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 over the number of beats in the bar, you may want to add a new time signature to reflect the new rhythmic duration of the bar.

RELATED LINKS
Adding time signatures to existing music with the keyboard on page 620
Adding time signatures to existing music with the mouse on page 623

Barline spacing

Options for the default spacing of barlines project-wide can be found on the **Spacing Gaps** page in **Engraving Options**.

On **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.

You can open **Engraving Options** in the following ways:

- Press **Ctrl/Cmd-Shift-E** in any mode.

- Choose **Engrave** > **Engraving Options** in Engrave mode.

Changing the rhythmic positions of barlines

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.

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 panel on the left of the window.

2. Select one of the handles at the rhythmic position of the barline, such as the one highlighted in this example:

3. Move the handle to the right or to the left using the following key commands:

- Press **Alt-Right Arrow**.

- Press **Alt-Left Arrow**.

NOTE

Note spacing handles cannot be moved using the mouse.

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

In the example on the left, the barline only appears on individual staves, which makes it much harder to locate individual lines at a glance. In the example on the right, the barline continues

across the instrumental groups in the score, which shows the instrument families as blocks and 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 a project with only a few instruments the barline does 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, for example in a concerto.

RELATED LINKS

Project-wide Engraving Options for barlines

Options for how barlines appear project-wide can be found on the **Barlines** page in **Engraving Options**.

The options on this page allow you to change the appearance and thickness of barlines, and which barlines are used in different contexts.

Many options are accompanied by musical examples to demonstrate how each option affects the appearance of your music.

You can open **Engraving Options** in 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.

RELATED LINKS
[Barline spacing](#) on page 227

Changing the default barline at the ends 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**.
2. Select **Barlines** from the **Category** menu.
3. Select the flows in which you want to change the default barline in the list on the left of the dialog in any of the following ways:
   - **Ctrl**-click individual flows.
   - **Shift**-click adjacent flows.
   - Click **Select All**.

   By default, only the current flow is selected when you open the dialog.
4. Select one of the following:
   - Final
   - Double
   - Normal
   - Dashed
   - Thick
   - No barline

   > TIP
   >
   > The final barline can always be overridden individually by changing it to a different type, although it cannot be deleted.

RELATED LINKS
[Changing the type of an existing barline with the keyboard](#) on page 225
[Changing the type of an existing barline with the mouse](#) on page 227

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 tell you where you are in the piece, and allow players 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 bar numbers 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, however this can be misleading as it can give the impression that those bars are significant, particularly if your bar number style includes an enclosure line.

Project-wide changes to the appearance of bar numbers

Different aspects of the appearance, frequency, and position of bar numbers can be changed in three places in Dorico. Changes made in any of these places affect the appearance of bar numbers project-wide.

The three places you can change the appearance of bar numbers are:

- On the **Bar Numbers** page in **Setup** > **Layout Options**
- On the **Bar Numbers** page in **Engrave** > **Engraving Options**
- In the **Engrave** > **Font Styles** dialog

Layout Options

On the **Bar Numbers** page in **Layout Options** you can change the following aspects of bar number appearance:

- Bar number frequency
- Placement above or below the staff
- Distance from the staff and from other objects
- Horizontal position: Centered on barline or Centered on bar
- Enclosure type: None, Rectangular, or Circular
- Whether bar numbers are hidden or shown at rehearsal marks.
- Whether bar numbers are shown below the bottom staff.

You can change options for bar numbers for each instrument layout and full score layouts independently of each other within the dialog.

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

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

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.

You can open **Engraving Options** in the following ways:

- Press **Ctrl/Cmd-Shift-E** in any mode.
- Choose **Engrave** > **Engraving Options** in Engrave mode.

Font Styles dialog

In the **Engrave** > **Font Styles** dialog, select **Bar Number Font** from the menu to change different aspects of the font.

This is where you can change the size of bar numbers by increasing the font size.

NOTE

Changes made to font styles apply to the entire project, including parts.

The different aspects of the bar number font style that you can change are:

Font family

Sets the overall font style.

Size

Sets the size of bar numbers for all layouts in the project, meaning the size is the same in the score and parts. Bar number size can be:

- **Absolute**: always the set size, regardless of the staff size.
- **Staff-relative**: the size of bar numbers is proportional to the staff size, which means bar numbers appear smaller than the set value on smaller staves, and larger than the set value on larger staves.

Style

This sets the bar number font appearance. The bar number font can be:

- **Regular**
- **Italic** (default)
- **Bold**
- **Bold Italic**

Underlined

The bar number font appears underlined if the box beside the **Underlined** activation switch is checked.

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 the score compared to individual parts.

PROCEDURE

1. In Setup mode, choose **Setup** > **Layout Options**.
2. Select **Bar Numbers** from the **Category** menu.
3. Select the layouts in which you want to change the bar number frequency in the **Layouts** list on the left of the dialog in the following ways:

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

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

4. For the **Show bar numbers** option, select one of the following:

- **Every system**
- **Every n bars**
- **Every bar**
- **None**

Selecting **Every n bars** activates the **Interval** value field below. You can change the value for **Interval** in the following ways to change how frequently bar numbers are shown:

- Enter a value into the value field.
- Click the arrows beside the value field.

For example, setting an interval value of ten means that bar numbers are shown every tenth bar.

RELATED LINKS
Project-wide changes to the appearance of bar numbers on page 231

Changing the bar number font style

To change the font style used for bar numbers:

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Font Styles** to open the **Font Styles** dialog.
2. Select **Bar Number Font** from the **Font style** menu.
3. Activate the switches beside the following options to change the corresponding aspects 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
Project-wide changes to the appearance of bar numbers on page 231

Changing bar number enclosure type

If you want bar numbers to be clearly distinguished, you may want them to appear enclosed in a square or circular box. 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 the score compared to individual parts.

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.

2. Select **Bar Numbers** from the **Category** menu.

3. Select the layouts in which you want to change the bar number enclosure type in the **Layouts** list on the left of the dialog in the following ways:

    - Click **Select All**.

    - Click **Select All Full Score Layouts**.

    - Click **Select All Part Layouts**.

    - Click **Select All Custom Score Layouts**.

    - **Ctrl**-click individual flows.

    - **Shift**-click adjacent flows.

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

4. Choose one of the following options for **Enclosure type**:

    - **None**

    - **Rectangular**

    - **Circular**

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

RESULT

Bar numbers in the selected layout are shown within your selected enclosure. 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	10	10
Bar number with no enclosure	Bar number with rectangular enclosure	Bar number with circular enclosure

Changing bar number enclosure size and padding values

In the **Enclosures** 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.

Rectangular bar number enclosure

The default settings for a rectangular enclosure create an enclosure like this one. 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 the **Minimum width** value to reduce the difference in size creates a more consistent visual effect, as demonstrated in this example:

Bar numbers with rectangular enclosures, default minimum width

Bar numbers with rectangular enclosures, minimum width increased to 5

Minimum width

Sets a minimum value for how wide the enclosure appears, such as in this example where the value has been increased from 2 to 6 spaces:

Minimum height

Sets a minimum value for how high the enclosure appears, such as in this example where the value has been increased from 2 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, such as in this example where the value has been increased from 1/2 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, such as in this example where the value has been increased from 1/8 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, such as in this example where the value has been increased from 1/8 to 2 spaces:

Circular bar number enclosure
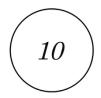
The default settings for a circular enclosure create an enclosure like this one. The minimum diameter is 2 spaces, and the minimum padding is 1/6 of a space.

Minimum diameter

Sets a minimum value for the diameter of the enclosure, such as in this example, where the value has been increased from 2 to 8 spaces:

Minimum padding

Sets a minimum value for the distance between the enclosure line and the bar number within, such as in this example where the value has been increased from 1/6 to 1 space:

All enclosures

Enclosure line thickness

This allows you to control how thick the enclosure line appears. The default is 1/8 of a space. These examples demonstrate a thickness of 1/2 a space.

Changes to the positions of bar numbers

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 different horizontal bar number positions in the score compared to individual parts.

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.

2. Select **Bar Numbers** from the **Category** menu.

3. Select the layouts in which you want to change from the list on the left of the dialog.

4. Select the layouts in which you want to change the horizontal bar number position in the **Layouts** list on the left of the dialog in the following ways:

    - Click **Select All**.

    - Click **Select All Full Score Layouts**.

    - Click **Select All Part Layouts**.

    - Click **Select All Custom Score Layouts**.

    - **Ctrl**-click individual flows.

    - **Shift**-click adjacent flows.

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

5. For the **Horizontal position** option, select one of the following:

    - **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 position of bar numbers relative to 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 the score compared to individual parts.

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.

2. Select **Bar Numbers** from the **Category** menu.

3. Select the layouts in which you want to change the minimum distance of bar numbers relative to the staff in the **Layouts** list on the left of the dialog in the following ways:
   - Click **Select All**.
   - Click **Select All Full Score Layouts**.
   - Click **Select All Part Layouts**.
   - Click **Select All Custom Score Layouts**.
   - **Ctrl**-click individual flows.
   - **Shift**-click adjacent flows.

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

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 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 the other objects.

However, this is the minimum distance away from the staff, so bar numbers may be positioned further away than this to avoid collisions.

RELATED LINKS
Changing the placement of bar numbers relative to the staff on page 239

Changing the position of bar numbers relative to other objects

To change the minimum value for how far away from other objects bar numbers appear:

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.

2. Select **Bar Numbers** from the **Category** menu.

3. Select the layouts for which you want to change the minimum distance of bar numbers relative to other objects from the list on the left of the dialog. For example, you can have bar numbers appear with different frequencies in the score compared to individual parts.

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.

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, you can have bar numbers appear with different frequencies in the score compared to individual parts.

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.

2. Select **Bar Numbers** from the **Category** menu.

3. Select the layouts in which you want to change the bar number placement in the **Layouts** list on the left of the dialog in the following ways:

- Click **Select All**.

- Click **Select All Full Score Layouts**.

- Click **Select All Part Layouts**.

- Click **Select All Custom Score Layouts**.

- **Ctrl**-click individual flows.

- **Shift**-click adjacent flows.

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

4. For the **Placement relative to staff** option, select one of the following:

- **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.

NOTE

If you want to move bar numbers 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.

RELATED LINKS

Moving bar numbers graphically using the Properties panel

You can move bar numbers graphically without changing the rhythmic positions to which they apply using the Properties panel.

PROCEDURE

1. In Engrave mode, select the bar numbers you want to move graphically.

2. Activate the following properties, individually or together, in the **Time Signatures** group of the Properties panel:

   - **Bar number X**

   - **Bar number Y**

3. Change the values in the value fields in the following ways:

   - Enter values into the value fields.

   - Click the arrows beside the value fields.

4. The properties move bar numbers in the following ways:

   - **Bar number X** moves bar numbers horizontally: increasing the value moves them to the right, decreasing the value moves them to the left.

   - **Bar number Y** moves bar numbers vertically: increasing the value moves them upwards, decreasing the value moves them downwards.

Bar numbers at multiple positions in systems

Bar numbers can currently only be shown at one position in the score.

Being able to show bar numbers at multiple positions, like tempo changes, is planned for future versions.

Bar number changes

Adding bar number changes

To add a bar number change to the primary bar number sequence manually:

PROCEDURE

1. In Write mode, select a note in the bar from which you want to change the bar numbers.

NOTE

The dialog does not open if you select existing bar numbers or rests.

2. Choose **Edit** > **Bar Numbers** > **Add Bar Number Change**, or right-click and choose **Bar Numbers** > **Add Bar Number Change** from the context menu.

3. In the dialog that opens, click **Primary**. This activates the **Primary** value field.

4. Change the value in any of the following ways:

- Enter a value into the value field.

- Click the arrows beside the value field.

5. Click **OK** or press **Return** to close the dialog.

RESULT

The primary bar number sequence changes, starting from the bar in which you selected a note. The primary bar number sequence continues from the changed bar number until the next bar number change, or until the end of the flow.

Deleting bar number changes

PROCEDURE

1. 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**.

RESULT

The bar number changes are deleted, and the original bar number sequence is restored. The original bar number sequence continues 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, subordinate bar numbers can be used 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, as shown in these examples.

4a

Lower case subordinate bar number.

4A

Upper case subordinate bar number.

Adding subordinate bar numbers

To create a subordinate bar number sequence:

PROCEDURE

1. Select a note in the bar where you want the subordinate bar numbers to start.

NOTE

The dialog does not open if you select existing bar numbers or rests.

2. Open the **Insert Bar Number Change** dialog in any of the following ways:

- Choose **Edit** > **Bar Numbers** > **Add Bar Number Change**.

- Right-click and choose **Bar Numbers** > **Add Bar Number Change** from the context menu.

3. Click **Subordinate**. 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. Close the dialog in any of the following ways:

- Press **Return**

- Click **OK**

RESULT

The subordinate bar number sequence starts from the bar in which you selected a note. 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

To return to the primary bar number sequence after a section of subordinate bar numbers:

PROCEDURE

1. Select a note in the bar from which you want the primary bar number sequence to continue.

2. Choose **Edit** > **Bar Numbers** > **Add Bar Number Change**, or right-click and choose **Bar Numbers** > **Add Bar Number Change** from the context menu.

3. In the dialog that opens, click **Continue primary**.

Text appears below the value fields for **Primary** and **Subordinate**. For example, **Primary sequence will continue from bar 5**.

4. Save your changes and close the dialog in any of the following ways:

- Press **Return**.

- Click **OK**.

RESULT

The primary bar number sequence resumes from the bar in which you selected a note.

TIP

Subordinate bar number changes do not have to be added 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

Subordinate bar numbers can be presented as either lower case or upper case letters.

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Engraving Options**.

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

Bar numbers can appear differently for some aspects in parts compared to the score.

Bar number frequency

You can choose how frequently bar numbers appear in each part independently of the score, and independently of other parts.

To change the bar number frequency in parts, follow the procedure described in **Changing the bar number frequency**. For step 3, select part layouts instead of the full score from the list on the left of the dialog.

Minimum distance from staff and other objects

You can also set the minimum distance of bar numbers from the staff, and the minimum distance of bar numbers from other objects, in each part independently of the score, and independently of other parts.

This can be particularly useful if one part has a lot of notes far above or below the staff, and you want to have bar numbers positioned further away for clarity.

To change the bar number position in parts, follow the procedure described in **Changing bar number position relative to the staff** and **Changing bar number position relative to other objects**. For step 3, select part layouts instead of the full score from the list on the left of the dialog.

Horizontal position of bar numbers

You can set the horizontal position of bar numbers in each part independently of the score, and independently of other parts.

This can be useful if you want bar numbers to be shown on every bar and centered on the bar in the score, but not in the parts, as bar numbers are typically shown centered on the barline at the start of each system.

To change the horizontal position of bar numbers in parts, follow the procedure described in **Changing the horizontal position of bar numbers**. For step 3, select part layouts instead of the full score from the list on the left of the dialog.

Enclosure

You can set the enclosure type in each part independently of the score, and independently of other parts.

However, changing the value for **Enclosure line thickness** changes the thickness of bar number enclosures in all layouts in the project. Changing any padding values for rectangular enclosures affects all layouts with rectangular enclosures, and changing any padding values for circular enclosures affects all layouts with circular enclosures.

To change the enclosure type of bar numbers in parts, follow the procedure described in **Changing bar number enclosure type**. For step 3, select part layouts instead of the full score from the list on the left of the dialog.

Size

The size of bar numbers currently cannot be changed in the parts independently of the score. The same font size applies to all layouts in the project.

RELATED LINKS

Bar numbers in repeat endings

By default in Dorico, bar numbers continue through a repeat structure.

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.

Changing bar numbers in repeat endings

You can change the bar numbers so that the second time section reflects the number of bars played up to that point, rather than reflecting the number of bars on the page.

For example, if the first ten bars are repeated, then the bar number at the start of the second time section is bar 21 instead of bar 11.

To do this, you can add in a bar number change at the start of the second time section. This can be done in the same way as adding bar number changes.

RESULT

The bar number is changed from the start of the second time section until the next bar number change, or until the end of the flow.

EXAMPLE

Default bar numbers in a repeat ending.

Bar numbers changed to reflect total number of bars played.

RELATED LINKS

Pick-up bars

Pick-up bars, or "upbeat bars", do not contribute to the bar number count. Bar numbers are counted from the first full bar in the flow.

You can input pick-up bars with the keyboard and with the mouse.

As pick-up bars are a specified number of beats that lead into time signatures, and so are not bars in their own right, how to input pick-up bars is included in the **Time signatures** chapter.

RELATED LINKS

Beaming

A beam is a line that connects notes with tails together to show rhythmic groupings, 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.

Over time, there have been many different accepted standards for how to present beams, so Dorico offers a number of customizing options. These can be found on the **Beams** page in **Engraving Options**. You can open **Engraving Options** in the following ways:

- Press **Ctrl/Cmd-Shift-E** in any mode.
- Choose **Engrave** > **Engraving Options** in Engrave mode.

You can find options that control how beams are grouped on the **Beam Grouping** page in **Notation Options**. You can open **Notation Options** in 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.

Creating beams

If appropriate for the current meter and position in the bar, a beam is automatically formed when there are two or more adjacent notes or chords that are an eighth note or shorter in duration.

PROCEDURE

1. In Write mode, start note input.
2. Select a note duration that forms beams, such as the following:
   - Press **5** for eighth notes.
   - Press **4** for 16th notes.
   - Press **3** for 32nd notes.

   You can also find these durations in the Notes panel.
3. Input notes in any of the following ways:
   - Press the relevant keys for the pitches you want, such as **A**.
   - Play the pitches you want on a MIDI device.
   - Click in the staff at the positions of the pitches you want.

RESULT

Adjacent notes of these values automatically beam together, according to the time signature.

Changing beam groups

You can control how notes are beamed in several different ways in Dorico.

- You can set beaming defaults in each flow in your project separately in **Notation Options**.
- You can set beam groups by controlling subdivisions of time signatures.
- You can change beam groups individually using the Properties panel.
- You can change beam groups individually by choosing functions from the **Edit** > **Beaming** menu.

Changing beam grouping defaults

You can change the default beam grouping rules project-wide 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 (quavers) 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 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.

Setting beaming within time signatures

Default beaming groups are determined by the time signature, which you can customize by specifying the subdivision of beats within bars.

Dorico has default beaming settings for most time signatures, based on general conventions and your chosen settings. For example, phrases are beamed in quarter notes when in 3/4, but in dotted quarter notes when in 6/8.

For situations where you want to control the beaming pattern 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 are beamed together, whereas entering `[2+2+3]/8` subdivides the seven eighth notes into two, then two, then three.

Changing beamed groups individually

You can change which notes are beamed together individually, independently of your default beam grouping settings for the current flow.

PROCEDURE

1. Select the notes you want to beam together. You can do this in Write mode and Engrave mode.

2. Beam the selected notes together in any of the following ways:

   - Choose **Edit** > **Beaming** > **Beam Together**.

   - Right-click and choose **Beaming** > **Beam Together** from the context menu.

RELATED LINKS
Creating fanned beams on page 260

Showing stemlets in beam groups individually

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 all notes in the beam in which you to show stemlets 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. Show stemlets in any of the following ways:

   - Choose **Edit** > **Beaming** > **Stemlets** > **Force Stemlet Beam**.

   - Right-click and choose **Beaming** > **Stemlets** > **Force Stemlet Beam** from the context menu.

RESULT

Stemlets are shown on rests according to your selection.

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 individually

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 beams from which you to remove stemlets on rests.

2. Remove all stemlets from the selected beams in any of the following ways:

   - Choose **Edit** > **Beaming** > **Stemlets** > **Suppress Stemlet Beam**.
   - Right-click and choose **Beaming** > **Stemlets** > **Suppress Stemlet Beam** 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

Splitting beam groups

You can split beams into two beam groups at specific rhythmic positions. You can also split secondary beams within beamed groups.

PROCEDURE

1. Select the note to the right of where you want the split to occur.

2.
   - Choose **Edit** > **Beaming** > **Split Beam**.
   - Right-click and choose **Beaming** > **Split Beam** from the context menu.
   - Choose **Edit** > **Beaming** > **Split Secondary Beam**.
   - Right-click and choose **Beaming** > **Slit Secondary Beam** from the context menu.

RESULT

The beam or secondary beam divides to the left of the selected note, but the notes either side of the split remain grouped if there are at least two beam 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

Changing the direction of partial beams

Dorico automatically inputs a partial beam if one is required, however, you may wish to change which side of a stem the partial beam appears.

PROCEDURE

1. Select a note with a partial beam.

    NOTE

    This property cannot be activated on a note without a partial beam.

2. Activate the **Partial beam direction** property in the **Beaming** group of the Properties panel.
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. Remove beaming from the selected notes in any of the following ways:

    *   Choose **Edit** > **Beaming** > **Make Unbeamed**.
    *   Right-click and choose **Beaming** > **Make Unbeamed** from the context menu.

Resetting beam grouping

You can remove all changes made to the beam grouping of beams, notes, and chords.

PROCEDURE

1. Select the notes whose beaming you want to reset. You can do this in Write mode and Engrave mode.

2. Reset the beaming in any of the following ways:

- Choose **Edit** > **Beaming** > **Reset Beaming**.
- Right-click and choose **Beaming** > **Reset Beaming** from the context menu.

RESULT

Beam grouping is reset to your default settings in **Notation Options** for the current flow and time signature.

Beaming notes together

You can beam notes together manually that are not automatically beamed together.

To force notes that are not automatically grouped into a single beam:

PROCEDURE

1. Select the notes you want to beam together.

2. Choose **Edit** > **Beaming** > **Beam Together**.

RESULT

The selected notes are beamed together.

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 the beam grouping settings for the flow.

Beaming notes over barlines, system breaks, and frame breaks

Default settings keep beaming within bars, but you can force individual beams to cross barlines as well as system breaks and frame breaks.

Beams by default stay within their bar, so to have a beam cross a barline you must force the phrase to beam together.

This method works across system and frame breaks as well as barlines.

PROCEDURE

1. Select all the notes you want to include in the beam. You can do this in Write mode and Engrave mode.

2. Beam the selected notes together in any of the following ways:

- Choose **Edit** > **Beaming** > **Beam Together**.
- Right-click and choose **Beaming** > **Beam Together** from the context menu.

RESULT

The selected notes are beamed together, even if they cross barlines, system breaks, or frame breaks.

NOTE

Even if part of the beamed group previously had a centered beam, the new beam is not centered.

RELATED LINKS

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.

Changing the placement of beams relative to the staff

To change which side of the staff a beam appears, you force 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 or 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**.
   - Right-click and choose **Stem** > **Force Stem Up** from the context menu.
   - Choose **Edit** > **Stem** > **Force Stem Down**.
   - Right-click and choose **Stem** > **Force Stem Down** 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

To undo changes to the placement of beams relative to the staff, you 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 or Engrave mode.
2. Remove beam placement changes in any of the following ways:
   - Choose **Edit** > **Stem** > **Remove Forced Stem**.

- Right-click and choose **Stem** > **Remove Forced Stem** 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 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.

Changing the default settings for beam slants

You can change the default settings for all beam slants project-wide on the **Beams** and **Notes** pages in **Engraving Options**.

When a beam is drawn inside the staff, each end of the beam (or, more accurately, 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; these three positions are described as "sit", "straddle", and "hang" respectively in Ted Ross's book "Teach Yourself the Art and Practice of Music Engraving", which is perhaps the authoritative book on the subject.

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), with smaller intervals requiring a shallower slant, and larger intervals 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 should if possible be positioned relative to the staff lines such that it does not form a wedge (a tiny triangle formed by the horizontal staff line, the vertical stem and the angled line of the slanted beam), which can cause problems in reproduction (in lithographic printing, such wedges would be liable to fill in with ink, and even when using digital printing techniques wedges can still look poor).

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 specify settings for how beams appear in two places:

- You can specify the minimum stem length for notes of different durations on the **Notes** page in **Engraving Options**.

- You can set ideal beam slants on the **Beams** page in **Engraving Options**.

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Engraving Options**.

2. Click one of the following in the page list:

   - **Beams**

- **Notes**

3. Change the options that apply to beam slants that apply to your project.

4. Click **Apply**, then **Close**.

Changing beam slants individually

You can change individual beam slants in Engrave mode with the keyboard and mouse.

PROCEDURE

1. In Engrave mode, select the square handle on one of the beam corners of the beams whose slants you want to change.

2. Change the slants 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.
   - Click and drag them upwards and downwards to the positions you want.

3. Optional: repeat steps 1 and 2 to change the positions of the other ends of the selected beams.

RESULT

The slants of the selected beams are changed.

RELATED LINKS
Changing beam slants individually using the Properties panel on page 254

Changing beam slants individually using the Properties panel

You can change the slants, or angles, of beams using the Properties panel.

PROCEDURE

1. Select notes in the beams whose slant you want to adjust. You can do this in Write mode and Engrave mode.

2. Activate the **Beam direction** property in the **Beaming** group of the Properties panel.

3. Select one of the following options from the menu:
   - **Flat**
   - **Up**
   - **Down**

RESULT

The slant of the beams of the selected notes is changed.

NOTE

You can revert the slant of the selected beams at any time by deactivating the **Beam direction** property in the **Beaming** group of the Properties panel.

RELATED LINKS
Changing beam slants individually on page 254

Centered beaming

A centered beam is positioned between high and low notes within the same beamed group, typically drawn in the middle of the staff.

Centered beams are sometimes known as "kneed" or "elbowed" beams. This example demonstrates the sometimes angular shape that inspired these names:

These examples show the difference between a normal beam and a centered beam when a beamed phrase spans a large pitch range.

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 255
Changing the placement of beams relative to the staff on page 252

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.

As this action needs to change 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. Make sure all the notes you want to include in centered beams are beamed together.

2. Create centered beams containing the selected notes in any of the following ways:

- Choose **Edit** > **Stem** > **Force Centered Beam**.

- Right-click and choose **Stem** > **Force Centered Beam** from the context menu.

RESULT

The beams are placed between the selected notes.

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.

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. Remove the centered beams in any of the following ways:

   - Choose **Edit** > **Stem** > **Remove Centered Beam**.

   - Right-click and choose **Stem** > **Remove Centered Beam** from the context menu.

Creating cross-staff beams

Cross-staff beams work in a similar way to normal beams, but allow a phrase covering a wide pitch range to be shown on two staves.

PROCEDURE

1. Input your whole chord on one staff.

2. Select the notes that you want to move to another staff.

3. Cross notes to other staves in the following ways:

   - Press **N** to cross notes to the staff above.

   - Press **M** to cross notes to the staff below.

   - Choose **Edit** > **Cross Staff** > **Cross to Staff Above**.

   - Choose **Edit** > **Cross Staff** > **Cross to Staff Below**.

Optimized spacing for cross-staff beams

Normally, we perceive the evenness of rhythmic spacing according to the distance between noteheads. However, for cross-staff beams we perceive the distance between stems, rather than the noteheads, to be making the music look even.

You can make stems evenly spaced, rather than noteheads, by activating the **Use optimal spacing for beams between staves** option for layouts in your project that contain cross-staff beams on the **Note Spacing** page in **Layout Options**.

Default spacing: the distance between noteheads is optimized.

Optimized spacing for cross-staff beaming: the distance between stems is optimized

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

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

Cross-staff beam placement in multiple staves

When instruments have three or more staves, there are multiple options for where cross-staff beams can go. 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, as shown in these examples:

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 crosses all three staves, the beam appears either between the upper two staves or the lower two staves, depending on the notes within the beam.
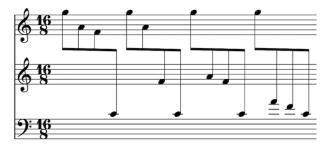
These examples show how the beam of the same phrase moves when notes are crossed to different staves:
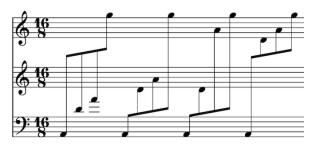
The beam is placed between the top two staves as that shows the ledger lines clearly.

The beam is placed between the lower two staves, as ledger lines for the third note are no longer needed.

Here are some further examples demonstrating how cross-staff beams are presented in Dorico:

Cross-staff beams: descending phrases starting with most notes on the top staff

Cross-staff beams: ascending phrases starting with most notes on the lowest staff

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.

These examples show that 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, which are broken in order to make the metrical groupings of the beam clearer.

Below is an example to demonstrate this:

A phrase of 64th notes, where the secondary beams are subdivided to show 16th and 8th note groups.

Per-flow options for how secondary beams should appear can be set on the **Beam Grouping** page in **Write** > **Notation Options**.

Editing secondary beams

Secondary beams can be adjusted locally by using properties in the Properties panel at the bottom of the window.

PROCEDURE

1. When the selection consists of only one or more notes, you the **Beaming** section appears in the Properties panel.
2. Select the note to the right of where you want the beaming to change, and activate the **Split secondary beam** property.
3. Choose how many beam lines are shown from the menu beside the property.

RESULT

The beaming is changed according to your preference. This is applied immediately to the left of the selected note.

Resetting secondary beam editing

Changes to secondary beams can be reset back to default by using the Properties panel at the bottom of the window.

● Switch off **Split secondary beam** in the Properties panel.

● Alternatively, choose **Edit** > **Beaming** > **Reset Beaming**.

Tuplets within beams

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.

You can alter the appearance of the bracket by selecting the bracket and changing relevant properties in the **Tuplets** group of the Properties panel.

The default setting for a tuplet in a beamed group with only a primary beam is not to separate the tuplet entirely, as the alternative is not as clear. This is demonstrated by this quaver tuplet followed by two quavers. However, you can change this setting on the **Beam Grouping** page in **Notation Options**.

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.

A fanned beam accelerando with three lines.

Creating fanned beams
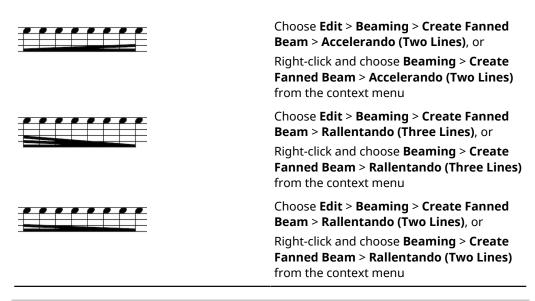
You can create fanned beams across a group of any notes that can be beamed, such as eighth notes, 16th notes, and 32nd notes.

PROCEDURE

1. Select the notes you want to include in a fanned beam. You can do this in Write mode and Engrave mode.

2. Select one of the following options:

Choose **Edit** > **Beaming** > **Create Fanned Beam** > **Accelerando (Three Lines)**, or

Right-click and choose **Beaming** > **Create Fanned Beam** > **Accelerando (Three Lines)** from the context menu

	Choose **Edit** > **Beaming** > **Create Fanned Beam** > **Accelerando (Two Lines)**, or Right-click and choose **Beaming** > **Create Fanned Beam** > **Accelerando (Two Lines)** from the context menu
	Choose **Edit** > **Beaming** > **Create Fanned Beam** > **Rallentando (Three Lines)**, or Right-click and choose **Beaming** > **Create Fanned Beam** > **Rallentando (Three Lines)** from the context menu
	Choose **Edit** > **Beaming** > **Create Fanned Beam** > **Rallentando (Two Lines)**, or Right-click and choose **Beaming** > **Create Fanned Beam** > **Rallentando (Two Lines)** from the context menu

TIP

Add a bracket above the staff with the relevant note duration symbol to clarify the rhythmic duration of the fanned beam, if the fanned beam group makes the beat division unclear.

NOTE

The durations of the notes you select are ignored when showing a fanned beam.

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, as shown in the example.

2. Activate the **Change fanned beam direction** property in the **Beaming** group of the Properties panel.

EXAMPLE

Fanned beam with multiple changes of direction

Note and rest grouping

Creating custom beam groupings for meters

If your music requires a different beam grouping for a particular meter than the default setting for that time signature, you can specify your preferred beam grouping within the time signature. You can choose whether or not the time signature shows this custom beam grouping or not.

PROCEDURE

1. Open the time signatures popover in any of the following ways:
   - Press **Shift-M**
   - Choose **Write** > **Create Time Signature**
2. Enter the division you want in square brackets into the popover.

   For example, if you want a 7/8 time signature to be divided into 2+3+2, enter `[2+3+2]/8` into the popover. If you want a 5/4 time signature to be divided into 2+3 rather than 3+2, enter `[2+3]/4` into the popover.
3. 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 preference for this option on the **Time Signatures** page of **Engrave** > **Engraving Options**.

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

Default beam groupings according to meter

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 8th notes, whereas music in 6/8 is beamed in two groups, each the value of a dotted quarter note. 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 beat boundaries in 3/4.

Default beam grouping in 6/8.

For irregular time signatures, like 5/8 or 7/8, Dorico beams notes by default according to the most common practices for those signatures, as demonstrated below.
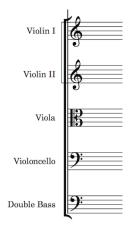
Brackets and braces

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 and braces 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, for example 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.

An example of a brace, connecting the two staves of a piano.

RELATED LINKS

Changing bracket grouping according to ensemble type

One way to change which staves are included in brackets is to change the project-wide setting for ensemble type, which can be found in the **Approach** section on the **Brackets and Braces** page in **Engraving Options**.

The default setting is **Orchestral**. You should change this setting for projects for small ensembles.

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Engraving Options**.

2. Click **Brackets and Braces** in the page list.

3. In the **Approach** section, choose from the available options in the **Ensemble type** group:

- **No brackets**: all staves appear separately.

- **Orchestral**: staves are bracketed according to their instrument family (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 would be bracketed together, but separately from other woodwinds.

- **Big band**: staves are bracketed according to instrument family, except for brass instruments which are all bracketed according to instrument type. Rhythm section instruments are bracketed together. Percussion and Timpani are bracketed together.

- **British big band**: staves are bracketed according to instrument family, except for brass instruments which are all bracketed according to instrument type, although horns and trumpets are bracketed together. Percussion and Timpani are bracketed separately.

RELATED LINKS

Creating player groups in Setup mode

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), because all voices are in the same family, they are joined by a single bracket by default. However, if you add each choir to its own group, they are bracketed separately.

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, creating a player group changes the order of players in the score project-wide.

PROCEDURE

1. In Setup mode, select the players you want to group together from the list on the left.
2. Click on the **Add Group** button at the bottom of the window.

3. Alternatively, you can select a single player, click on the **Add Group** button, or right-click and choose **Add Player to Group** > **New Player Group**. Then add other players to the group by either:

    - Right-clicking on the player you want to add, and choosing, for example, **Add Player to Group** > **Group 1**.
    - Clicking and dragging the player on top of the group. A blue line shows you where in the group it will be placed.

Project-wide Engraving Options for brackets and braces

Options for the appearance of brackets and braces project-wide can be found 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 the following ways:

- Press **Ctrl/Cmd-Shift-E** in any mode.
- Choose **Engrave** > **Engraving Options** in Engrave mode.

Changing appearance of bracket ends

There are three options for how bracket ends should appear in Dorico: **Winged**, **Horizontal line**, or **None**.
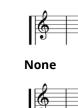
To change the appearance of bracket ends project-wide:

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Engraving Options**.
2. Click **Brackets and Braces** in the page list.
3. In the **Design** section, choose from the available options in the **Brackets end design** group:

    - **Winged** (default)

- **Horizontal line**

- **None**

Secondary brackets (sub-brackets)

Secondary brackets can appear in two ways in Dorico: as a brace (positioned outside the bracket), or as a sub-bracket.

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** group 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 if you prefer.

You can change the distance between braces and brackets, in the **Sub-brackets** group of the **Design** section of the **Brackets and Braces** page in **Engraving Options**.

Clefs and octave lines

Clefs and octave lines provide crucial information about which notes are desired, and how high or low they should be.

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 are played sufficiently high or low to require many ledger lines.

In Dorico they 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.

For staves with a treble clef, the note in the space above is an A, and the note in the space below is an F, and so on.

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 bracket to the right of the clef's thick vertical line meet at the line that corresponds to C, normally middle C.

The C clef today is commonly used at two position 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.

All of these clefs are used to match the register of the instrument for which they are being used, to minimize the number of ledger lines required.

The E below middle C shown in a treble clef.

The E below middle C shown in a bass clef.

In Dorico, clefs and octave lines can be found in the same section of the Notations panel on the right of the window. The panel is divided into four sections, three of which are for clefs:

- **Common clefs**: including treble, bass, alto, and tenor.
- **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.

Inputting clefs with the keyboard

You can input clefs with the keyboard by using the clefs and octave lines popover in Write mode. Clefs and octave lines are input using the same popover, as both affect the pitch and register of notes on the staff.

You can open the clefs and octave lines popover in 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.

The clefs and octave lines popover with an example entry for a clef

The clefs and octave lines button in the Notations toolbox

The clefs and octave lines popover for clefs

Enter the following commands into the clefs and octave lines popover to create the different clefs available.

You can open the clefs and octave lines popover in Write mode by pressing **Shift-C**, or by choosing **Write** > **Create Clef**.

Enter:	For clef:
`g` or `G` or `treble`	Treble G clef
`f` or `F` or `bass`	Bass F clef
`ct` or `CT` or `tenor`	Tenor C clef
`ca` or `CA` or `alto`	Alto C clef
`g8ba` or `G8ba` or `g8d` or `G8d` or `treble8ba` or `treble8d`	Treble G clef, octave below
`g15ba` or `G15ba` or `g15d` or `G15d` or `treble15ba` or `treble15d`	Treble G clef, two octaves below
`g8va` or `G8va` or `g8u` or `G8u` or `treble8va` or `treble8u`	Treble G clef, octave above

Enter:	For clef:
`g15ma` or `G15ma` or `g15u` or `G15u` or `treble15ma` or `treble15u`	Treble G clef, two octaves above
`ca8ba` or `CA8ba` or `ca8d` or `CA8d` or `alto8ba` or `alto8d`	Alto C clef, octave below
`ct8ba` or `CT8ba` or `ct8d` or `CT8d` or `tenor8ba` or `tenor8d`	Tenor C clef, octave below
`f8ba` or **F8ba** or `f8d` or `F8d` or `bass8ba` or `bass8d`	Bass F clef, octave below
`f15ba` or `F15ba` or `f15d` or `F15d` or `bass15ba` or `bass15d`	Bass F clef, two octaves below
`f8va` or `F8va` or `f8u` or `F8u` or `bass8va` or `bass8u`	Bass F clef, octave above
`f15ma` or `F15ma` or `f15u` or `F15u` or `bass15ma` or `bass15u`	Bass F clef, two octaves above
`perc`	Unpitched percussion
`tab4`	4-string tablature
`tab6`	6-string tablature
`baritonebass`	Baritone bass clef
`baritone`	Baritone clef
`mezzo`	Mezzo-soprano clef
`soprano`	Soprano G clef
`subbass`	Sub-bass clef
`invisible`	Invisible clef

NOTE

More clefs are available in the **Clefs** panel, including Indian drum clef and Percussion clef (rectangular).

Inputting clefs during step input with the keyboard

To input clefs during step input with the keyboard:

PROCEDURE

1. In Write mode, start note input.
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 your preferred clef into the popover, such as `bass` or `G8ba`.

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

RESULT

The clef is added at the caret position, and applies to all notes on that staff until the next clef, or the end of the flow. Note input continues after inputting the clef, so you can continue inputting notes and clefs as required.

RELATED LINKS
The clefs and octave lines popover for clefs on page 269

Adding clefs to existing music with the keyboard

To add a clef to existing music with the keyboard:

PROCEDURE

1. In Write mode, select the note from which you want a new clef to start.

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 your preferred clef into the popover, such as `treble` or `f8ba`.

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

RESULT

The clef is added directly before the selected notehead, and applies to all notes on that staff until the next clef, or the end of the flow. Clefs cannot be added by selecting barlines or time signatures, if they apply to multiple staves. Clefs can be added to barlines on single staves or time signatures on single stave, and are added directly before the selected single-staff barline or single-staff time signature.

Changing the type of an existing clef with the keyboard

To change the type of an existing clef with the keyboard:

PROCEDURE

1. In Write mode, 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 your preferred clef into the popover, such as `alto` or `g8va`.

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

RESULT

The clef is changed to the one you specified.

Inputting clefs with the mouse

Clefs can be input with the mouse using the **Clefs** panel on the right of the window in Write mode.

You can open this panel by clicking **Clefs** in the Notations toolbox:

You can also hide and show the panel by clicking on its disclosure arrow, or by pressing **Ctrl/Cmd**-**9**.

In the **Clefs** panel, clefs are divided up into three sections:

1   **Common clefs**

These are the clefs you are most likely to need.

2   **Uncommon clefs**

These are less frequently used clefs, but still sometimes used.

3   **Archaic clefs**

These are clefs that are not commonly used any more.

Inputting clefs during step input with the mouse

To input clefs during step input with the mouse:

PROCEDURE

1.   In Write mode, start note input.

2.   Click the clef you want in the **Clefs** panel on the right of the window.

RESULT

The clef is added at the caret position, and applies to all notes on that staff until the next clef, or the end of the flow. Note input continues after inputting the clef, so you can continue inputting notes and clefs as you need.

RELATED LINKS

Adding clefs to existing music with the mouse

To add a clef to existing music with the mouse:

PROCEDURE

1.   In Write mode, select the note from which you want a new clef to start.

2.   Click on your preferred clef in the **Clefs** panel on the right of the window.

RESULT

The clef is added directly before the selected notehead, and applies to all notes on that staff until the next clef, or the end of the flow. A clef cannot be added by selecting a barline or time signature, if it applies to multiple staves. A clef can be added to an individual barline or individual time signature, and is added directly before a selected individual barline or individual time signature.

Changing the type of an existing clef with the mouse

PROCEDURE

1. In Write mode, select the clef you want to change.
2. Click on your preferred clef in the **Clefs** panel on the right of the window.

RESULT

The clef is changed to the one you specified.

Project-wide spacing gaps for clefs

You can change the minimum gaps between objects, including clefs, on the **Spacing Gaps** page in **Engraving Options**.

Amongst the available values, 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, cancelation 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 the following ways:

- Press **Ctrl/Cmd-Shift-E** in any mode.
- Choose **Engrave** > **Engraving Options** in Engrave mode.

Moving clefs rhythmically

You can move clefs to new rhythmic positions after they have been input.

NOTE

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. Select the clefs you want to move.
2. Move the clefs to the next or previous rhythmic position, according to the rhythmic grid currently set, in 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 a clef to the position you want.

     NOTE

     Only one clef can be moved rhythmically at a time when using the mouse.

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**
>
> Clefs can only be moved along staves. If you want to move a clef across staves, you must first delete the clef from its first position, then add a new clef to the staff you wanted to move it to.

> **NOTE**
>
> 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.
>
> If you moved clefs using the keyboard, you can undo the move to restore any clefs deleted in the process.
>
> However, if you moved clefs using the mouse, undoing the move does not restore any clefs deleted in the process.
>
> Moving clefs back to their previous positions later does not restore any clefs deleted when they were moved previously. The deleted clefs must be re-input if necessary.

Moving clefs graphically

Clefs can be moved individually to new graphical positions in Engrave mode without affecting the positions of any other items.

> **NOTE**
>
> You cannot change the positions of **Note Spacing** handles with the mouse, they can only be moved using the keyboard.

PROCEDURE

1. In Engrave mode, activate **Note Spacing** in the panel on the left of the window.
2. Select the square handle above the clef you want to move, as shown in the example below.

3. Once you have selected a square handle, a smaller circular handle appears beside the clef.
4. Select the circular handle.

5. Nudge the clef 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 clefs by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

RESULT

The clef is moved graphically to the right or to the left.

Moving clefs graphically using the Properties panel

You can move clefs graphically using the Properties panel.

NOTE

Changing the value for the **Spacing Offset** property also affects the positions of notes, rests, time signatures, and key signatures in the bars either side of the clef.

PROCEDURE

1. In Engrave mode, select the clefs you want to move.

2. Activate the **Spacing Offset** property in the **Clefs** 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.

4. The **Spacing Offset** property moves clefs in the following ways:

   • Increasing the **Spacing Offset** value moves clefs to the right.

   • Decreasing the **Spacing Offset** value moves clefs to the left.

Deleting clefs

PROCEDURE

1. Select the clefs you want to delete.

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

   • Press **Backspace** or **Delete**.

   • Choose **Edit** > **Delete**.

RESULT

The selected clefs are deleted. Any music on the staff is respelled according to the previous clef, up until the next existing clef or the end of the flow.

NOTE

You cannot delete the initial clef in a flow. If you do not want any clef to appear on a staff, you should input an invisible clef. See the links below for more information on how to do this.

Hiding clefs

Clefs provide crucial information about which notes should be played, and should not be omitted from the score. However, should you need to hide an individual clef, you can change its color so that it cannot be seen in the score.

PROCEDURE

1. Select the clef you want to hide.

2. Activate the **Color** property in the **Common** group of the Properties panel. You can hide and show this panel in the following ways:

   - Press **Ctrl/Cmd-8**

   - Click the disclosure arrow at the bottom of the window

3. Click on the color square that is now shown beside the property. The default color is black.

4. In the color dialog that appears, set the **Opacity** value to 0% in any of the following ways:

   - Enter 0

   - Drag the slider all the way to the left

5. Press **Return**, or click **OK** to close the dialog.

RESULT

The clef is no longer visible in the score, however it can still be selected if you click on its position in the staff, or if you use the arrow keys to navigate to it from elsewhere in the layout.

NOTE

This method does not change the spacing at the position of the clef. If you want no clef to appear and also to adjust the spacing accordingly, you should input an invisible clef. See the links below for more information on how to do this.

RELATED LINKS
The clefs and octave lines popover for clefs on page 269
Inputting clefs with the mouse on page 272

Changing the size of clef changes

The scale factor of clef changes project-wide can be changed on the **Clefs** page in **Engraving Options**.

You can open **Engraving Options** in the following ways:

- Press **Ctrl/Cmd-Shift-E** in any mode.

- Choose **Engrave** > **Engraving Options** in Engrave mode.

The default **Clef change scale factor** is 2/3.

Increasing the scale factor makes clef changes appear larger, while decreasing the scale factor makes clef changes appear smaller. However, the size of clefs at the start of each system is not affected.

The smallest scale factor you can have that is above 0 is 1/8. There is no maximum limit, however 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. If you input the clef first, or the grace note first, Dorico makes sure that the clef placement is correct.

However, in some circumstances you may want your clef to be positioned between a note and its grace note. To do this:

PROCEDURE

1. Select the clef whose position you want to change.
2. Choose **Edit** > **Clef Position** > **After Grace Notes**, or right-click and choose **Clef Position** > **After Grace Notes** from the context menu.

RESULT

The clef is positioned between a note and its grace note.

RELATED LINKS
Resetting the position of clefs relative to grace notes on page 277

Resetting the position of clefs relative to grace notes

To reset the position of a clef relative to grace notes after positioning it between a note and its grace note:

PROCEDURE

1. Select the clef whose position you want to change.
2. Choose **Edit** > **Clef Position** > **Reset Clef Position**, or right-click and choose **Clef Position** > **Reset Clef Position** from the context menu.

RESULT

The clef is positioned between a note and its grace note.

Transposing clefs

While most instruments produce notes at concert pitch, there are a number of instruments that produce a note that is different to the one that is written. These instruments are known as transposing instruments.

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 are: piccolo (sounding an octave above written), double bass (sounding an octave below written), and glockenspiel (sounding two octaves above written).

Dorico automatically handles these transpositions, which you can see taking effect if you input notes into the staff of a transposing instrument, and then compare those notes in the full score layout to how they appear in the part layout.

As all note information is stored in concert pitch and then transposed as necessary, you can change instruments at any time, and the music is adjusted automatically to ensure the correct result.

There are also clefs that specify that notes should be played in a different register to the one notated. A number above the clef indicates notes should be played higher than notated, while a number below the clef indicates notes should be played lower than notated. Apart from the

treble clef 8 below, which is often used for tenor vocal parts and can be seen on the left of the below examples, most of these are not frequently used.

Octave lines

Octave lines indicate where the notes played should be higher or lower than they appear in the score or part.

Octave lines are horizontal lines, either dashed or dotted, with an italic numeral at the start that indicates the number of pitches the phrase should be changed by, such as 8 for an octave and 15 for two octaves.

Octave lines that indicate notes should be played higher than notated are positioned above the staff, while octave lines that indicate notes should be played lower than notated are positioned below the staff.

A phrase shown (left to right): at pitch, with an octave above line, and with a two octaves above line with default settings.

A phrase shown (left to right): at pitch, with an octave below line, and with a two octaves below line with default settings.

In Dorico, the adjustment of pitches is done automatically when an octave line is present. There is no need for you to change the register of the notes within the line.

Octave lines can be used for whole phrases, many phrases, or short sections, but they should never confuse the contour of the music. As demonstrated below, if used excessively and for inappropriate sections, the octave line can mask the shape of the original melody. However, careful usage of octave lines can make music easier to read quickly as they can reduce the number of ledger lines a player has to count. Nonetheless it is generally better to use a different clef for a whole phrase if appropriate for that instrument, or to put an octave line above or below the whole phrase in order to ensure the shape and register are clear to the player.

An angular phrase with no octave lines.

The same phrase with lots of octave lines, which distort the overall shape of the phrase.

The same phrase again, but with just two octave lines to reduce ledger lines, but which do not change the overall shape of the phrase.

Wherever possible, they should remain completely horizontal. This means that they may take up significant vertical space, as they should be positioned outside all other notations. However, they

may be positioned 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, which is usually parenthesized, but the suffix does not have to be included.

Inputting octave lines with the keyboard

You can input octave lines with the keyboard by using the clefs and octave lines popover in Write mode. Clefs and octave lines are input using the same popover, as both affect the pitch and register of notes on the staff.

To open the clefs and octave lines popover, press **Shift**-**C** (C for "clef"), or 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.

The clefs and octave lines popover with an example entry for an octave line

The clefs and octave lines button in the Notations toolbox

The clefs and octave lines popover for octave lines

Enter the following commands and symbols into the clefs and octave lines popover to create the different octave lines available.

You can open the clefs and octave lines popover in Write mode by pressing **Shift**-**C**, or by choosing **Write** > **Create Clef**.

Enter:	Result:
`8va` or `8` or `8u` or `1u`	Shift notes up by 1 octave.
`15ma` or `15` or `15u` or `2u`	Shift notes up by 2 octaves.
`22ma` or `22` or `22u` or `3u`	Shift notes up by 3 octaves.
`8ba` or `8vb` or `8d` or `1d`	Shift notes down by 1 octave.
`15ba` or `15vb` or `15d` or `2d`	Shift notes down by 2 octaves.
`22ba` or `22vb` or `22d` or `3d`	Shift notes down by 3 octaves.
`|` or `stop`	End of octave line.

Inputting octave lines during step input with the keyboard

To input octave lines during step input with the keyboard:

PROCEDURE

1. In Write mode, start note input.
2. Position the caret at the rhythmic position where the line should begin.

3. Open the clefs and octave lines popover in any of the following ways:

    - Press **Shift**-**C**

    - Choose **Write** > **Create Clef**

4. Enter the appropriate short-hand for your preferred octave line into the popover, such as `8va` or `15d`.

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

6. Press **Space** to advance the caret and extend the octave line.

    The octave line also extends automatically as you continue inputting notes.

7. Stop any octave line by opening the clefs and octave lines popover again, and entering one of the following:

    - `|`

    - `stop`

RESULT

The octave line is input from the caret position at its start, and ends at the caret position.

RELATED LINKS
The clefs and octave lines popover for octave lines on page 279

Adding octave lines to existing notes with the keyboard

You can add octave lines to existing notes with the keyboard.

PROCEDURE

1. In Write mode, select the note or 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 your preferred octave line into the popover, such as `1u` or `15ba`.

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

RESULT

The octave line is added above your selection if it indicates notes should be played higher than notated, or below your selection if it indicates note should be played lower than notated.

NOTE

You can also change the lengths of octave lines after they have been input.

RELATED LINKS
Lengthening and shortening octave lines with the keyboard on page 284

Inputting octave lines with the mouse

Octave lines can be input with the mouse using the **Octave Lines** section of the **Clefs** panel on the right of the window in Write mode.

The **Clefs** panel is activated by selecting this button from the Notations toolbox on the right of the window:

Clicking on the disclosure arrow to show the **Octave Lines** section shows these options:

The top row has three options for octave lines that indicate music should be played higher than written:

- One octave up, or 8va

- Two octaves up, or 15va

- Three octaves up, or 22va

The middle row has three options for octave lines that indicate music should be played lower than written:

- One octave down, or 8ba

- Two octaves down, or 15ba

- Three octaves down, or 22ba

The bottom row has a loco line that indicates music should be played as written, which can be useful for clarity when lots of octave transpositions are used.

Inputting octave lines during step input with the mouse

To input octave lines during step input with the mouse:

PROCEDURE

1. In Write mode, start note input.

2. Position the caret at the rhythmic position where the line should begin.

3. Click on the button of your preferred octave line in the **Clefs** panel on the right of the window.

RESULT

The octave line is added at the caret position. However, if input using the mouse, an octave line does not automatically extend as you continue inputting notes.

NOTE

You can also change the lengths of octave lines after they have been input.

RELATED LINKS
Lengthening and shortening octave lines with the mouse on page 284

Adding octave lines to existing notes with the mouse

To add octave lines to existing notes with the mouse:

PROCEDURE

1. In Write mode, select the note or notes to which you want to add an octave line.

2. Click on the button of your preferred octave line in the **Clefs** panel on the right of the window.

Alternatively, click on the button of your preferred octave line in the **Clefs** panel first, and then click and drag to input an octave line and extend it to your preferred length.

Positions of octave lines

You can change the positions of octave lines by moving individual octave lines to different rhythmic positions in Write mode, moving them to different graphical positions in Engrave mode, and by changing the default positions of all octave lines project-wide.

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.

Project-wide settings for the default positions of octave lines can be set on the **Octave Lines** page in **Engrave** > **Engraving Options**.

RELATED LINKS
Project-wide Engraving Options for octave lines on page 285

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.

2. Move the octave lines to the next or previous notehead on the staff, while maintaining their total durations, in the following ways:

- Press **Alt-Right Arrow** to move them to the next notehead.
- Press **Alt-Left Arrow** to move them to the previous notehead.
- Click and drag it to the position you want.

  NOTE

  Only one octave line can be moved rhythmically at a time when using the mouse.

RESULT

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 first delete the octave line from its first position, then add a new octave line to the staff you wanted to move it to.

Moving octave lines graphically

You can move octave lines graphically without changing the rhythmic positions to which they apply.

PROCEDURE

1. In Engrave mode, select the octave lines you want to move.

2. Move the octave 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.

   - Press **Alt-Up Arrow** to move them upwards.

   - Press **Alt-Down Arrow** to move them downwards.

     NOTE

     If you want to move octave lines 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 to the positions you want.

RELATED LINKS
Moving octave lines graphically using the Properties panel on page 283

Moving octave lines graphically using the Properties panel

You can move octave lines graphically using the Properties panel in Engrave mode.

PROCEDURE

1. In Engrave mode, select the dynamics you want to move.

2. Activate the following properties, individually or together, in the **Octave Lines** group of the Properties panel:

   - **Start X offset**

   - **End X offset**

   - **Y offset**

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.

4. The properties move dynamics in the following ways:

   - **Start X offset** moves the start of octave lines horizontally: increasing the value moves the start of octave lines to the right, decreasing the value moves the start of octave lines to the left.

   - **End X offset** moves the end hooks of octave lines horizontally: increasing the value moves the end hooks of octave lines to the right, decreasing the value moves the end hooks of octave lines to the left.

   - **Y offset** moves octave lines vertically: increasing the value moves them upwards, decreasing the value moves them downwards.

Lengthening and shortening octave lines

You can change the length of octave lines after they have been input with the keyboard and with the mouse.

When lengthening and shortening octave lines with the keyboard, you can lengthen and shorten octave lines according to the rhythmic grid currently set, and by snapping the ends of octave lines to the next or previous notehead.

When lengthening and shortening octave lines with the mouse, you can only lengthen and shorten them by dragging the ends of octave lines to the next or previous notehead along the staff.

Lengthening and shortening octave lines with the keyboard

You can lengthen and shorten octave lines after they have been input.

PROCEDURE

1. In Write mode, select the octave lines you want to lengthen or shorten.
2. Lengthen and shorten the selected octave lines using the following key commands:
   - Press **Shift**-**Alt**-**Right Arrow** to lengthen octave lines by the current rhythmic grid value
   - Press **Shift**-**Alt**-**Left Arrow** to shorten octave lines 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 or shorten octave lines by the current rhythmic grid value when multiple octave lines are selected.

RELATED LINKS
Positions of octave lines on page 282

Lengthening and shortening octave lines with the mouse

You can lengthen and shorten octave lines after they have been input.

PROCEDURE

1. In Write mode, select the octave line you want to lengthen or shorten.

   NOTE

   You can only lengthen or shorten one octave line at a time with the mouse.

2. Select the circular handle at the end of the octave line.
3. Click and drag the handle to noteheads to the right or left.

RESULT

The end of the selected octave line snaps to noteheads as you drag it along the staff.

Deleting octave lines

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**.

RESULT

The selected octave lines are deleted. Any music on the staff is shown at either concert pitch or transposed pitch, depending on your current setting for the layout.

RELATED LINKS

Changes to the appearance and placement of octave lines

The appearance and placement of octave lines can be changed project-wide on the **Octave Lines** page in **Engrave** > **Engraving Options**, and individually using properties in the Properties panel in Engrave mode.

Project-wide Engraving Options for octave lines

There are many options for how octave lines should appear on the **Octave Lines** page in **Engrave** > **Engraving Options**.

The options on this page allow you to change the appearance of the numeral at the start of octave lines, continuation lines, and continuation labels, and the position of octave lines relative to accidentals, noteheads, and the staff.

Many options are accompanied by musical examples to demonstrate how each option affects the appearance of your music.

You can open **Engraving Options** in 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.

Editing individual octave lines using the Properties panel

You can move and change the appearance of individual octave lines by using properties in the Properties panel, without changing your project-wide settings on the **Octave Lines** page in **Engrave** > **Engraving Options**.

Properties panel

The Properties panel is available in both Write mode and Engrave mode, but there are more options available in Engrave mode than Write mode. These options are:

Placement

Choose whether an octave lines is placed **Above** or **Below** the staff.

L position

Choose whether the numeral of an octave line is aligned with a **Notehead** or with an **Accidental**.

L alignment

Choose whether the numeral of an octave is aligned:

- **Left**: left end of the numeral aligned with the stem.
- **Center**: numeral centered on stem.
- **Right**: right end of the numeral aligned with the stem.

Start X offset

Increasing the value moves the start of octave lines to the right, decreasing the value moves the start of octave lines to the left.

End X offset

Increasing the value moves the ends of octave lines to the right, decreasing the value moves the end of octave lines to the left.

Y offset

Increasing the value moves octave lines upwards, decreasing the value moves octave lines downwards.

Hook length

Increasing the value makes the hook at the end of octave lines longer, decreasing the value makes the hook shorter.

Tucking index

Changing the value for the tucking index changes an octave line's position in the vertical stacking order. According to general convention, octave lines should be 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.

Chord symbols

Chord symbols describe the vertical harmony of the music at a specific moment.

They are commonly used in jazz and pop music, where players commonly improvise around chord progressions.

Depending on the style of music, there are different conventions regarding how to present chord names.

What makes up a chord?

Chord symbols consist of a root and a quality, with (optionally) intervals, alterations, and an altered bass note.

The component parts of a chord symbol are as follows:

Root

The root note of the chord, expressed either as a note name or as a specific degree of a scale.

Quality

What sort of chord it is, such as major, minor, diminished, augmented, half-diminished, or with added notes (such as 6 or 9).

Interval

One or more added intervals (or "extensions"), such as a major seventh or ninth.

Alterations

For example, a sharpened 5th, flattened 9th, suspensions, or omissions.

Altered bass note

If the chord's lowest pitch is not its root note, such as Cm7♭5/E♭.

Creating chord symbols

The appearance of chord symbols is determined by the options you can set on the **Chord Symbols** page in **Engrave** > **Engraving Options**.

Creating chord symbols in Dorico uses the popover mechanic.

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 could choose to enter a C major chord as either **C** or **Cmaj** or **CM**, but in each case the appearance of the resulting chord symbol is the same, as specified in **Engraving Options**.

Inputting chord symbols

To input a chord symbol using the chord symbols popover:

PROCEDURE

1.   In Write mode, select the note or rest where you want the first chord symbol to appear.

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 on the right of the window

3.   Type your desired chord symbol into the chord symbols popover using the computer keyboard, or play the chord using your MIDI keyboard.

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

RESULT

The chord symbol specified is input.

Inputting chord symbols with the computer keyboard

All the different types of chord symbol can be input with the computer keyboard by using the chord symbols popover in Write mode.

To open the chord symbols popover, press **Shift-Q**, or choose **Write** > **Create Chord Symbol**.

The icon on the left-hand side of the popover matches the corresponding button in the Notations toolbox on the right of the window.

The chord symbols popover with an example entry for a chord symbol

The chord symbols button in the Notations toolbox

The chord symbols popover

Here are some examples of what to enter into the chord symbols popover and the chord symbols that are input as a result.

You can open the chord symbols popover in Write mode by pressing **Shift-Q**, or by choosing **Write** > **Create Chord Symbol**.

Enter:	For chord symbol roots:
English note names: `C`, `Db`, `F#`, `B`, and so on	C, D♭, F♯, B, and so on
German note names: `C`, `Des`, `Fis`, `H`, and so on	C, D♭, F♯, B, and so on
Fixed-do solfège: `do`, `reb`, `so`, `so#`, `ti`, and so on	C, D♭, F, F♯, B, and so on
Nashville numbers representing scale degrees: `1`, `2b`, `4#`, `7`, and so on	Assuming C major: C, D♭, F♯, B, and so on

Enter:	For chord symbol quality:
`maj`, `M`, `ma`, or nothing after root	major
`m`, `min`, or `mi`	minor
`dim`, `di`, or `o`	diminished
`aug`, `au`, `ag`, or `+`	augmented
`half-dim`, `halfdim`, or `hd`	half-diminished
`6/9`, `69`, or `%`	6/9

Enter:	For interval:
`^7`	major 7th
`^`	major 7th
`^9`	major 9th
`maj9`	major 9th
`9maj7`	major 9th

Enter:	For chord symbol alteration type:
`b5`, `#9` and so on	alterations
`add#11`, `addF#`, `addBb`, and so on	added notes
`sus4`, `sus9`, and so on	suspensions

Enter:	**For chord symbol alteration type:**
`omit3`, `no7`, and so on	omissions

Enter:	**For altered bass note chord symbol:**
`G7,D`	G7/D
`Gmaj,B`	G/B
`Cmajb5/Eb`	C(♭5)/E♭
`Fmi/D#`	Fm/D♯

Enter:	**For polychord symbol:**
`G7;D`	G7/D
`G;E`	G/E
`Cmaj7|D`	Cmaj7/D
`Fmi|D#`	Fm/D♯

Enter:	**For chord symbol:**
`N.C.`, `NC`, `no chord`, or `none`	no chord

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: it is intended to illustrate how you can structure your entry to input different chord symbols.

Inputting roots with the computer keyboard

Roots are typed into the chord symbols popover.

PROCEDURE

1. In Write mode, open the chord symbols popover.
2. Enter your desired root note into the popover. For example, `C`, `do`, or `1`.
3. Press **Return** to close the popover.

RESULT

The chord symbol specified is input.

NOTE

The chord symbol may look different to what you typed into the popover. For example, entering `do` may appear as "C" in the resulting chord symbol, depending on your settings on the **Chord Symbols** page in **Engrave** > **Engraving Options**.

RELATED LINKS

Inputting quality with the computer keyboard

The qualities of chords can be specified using the chord symbols popover.

PROCEDURE

1. In Write mode, open the chord symbols popover.
2. Enter the root of your desired chord into the popover, such as `E`, followed by one of the ways of expressing its quality. For example, `Emaj` or `Ehalfdim`.
3. Press **Return** to close the popover.

RESULT

The chord symbol specified is input.

NOTE

The chord symbol may look different to what you typed into the popover. For example, entering `E+` may appear as "Eaug" in the resulting chord symbol, depending on your settings on the **Chord Symbols** page in **Engrave** > **Engraving Options**.

RELATED LINKS

Inputting intervals with the computer keyboard

A chord's added interval can be specified using the chord symbols popover.

PROCEDURE

1. In Write mode, open the chord symbols popover.
2. Enter the root of your desired chord into the popover, such as `E`, followed by one of the ways of describing its added interval. For example, `E^7` or `Emaj9`.
3. Press **Return** to close the popover.

RESULT

The chord symbol specified is input.

NOTE

The chord symbol may look different to what you typed into the popover. For example, entering `Cmmaj7` may appear with parentheses as "Cm(maj7)" in the resulting chord symbol, depending on your settings on the **Chord Symbols** page in **Engrave** > **Engraving Options**.

Inputting alterations with the computer keyboard

A chord's alteration can be specified using the chord symbols popover.

PROCEDURE

1. In Write mode, open the chord symbols popover, as described in **Inputting chord symbols**.

2. Enter the root of your desired chord into the popover, such as `E`, followed by one of the ways of expressing its alteration. For example, `Eb5` or `Eomit3`.

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

RESULT

The chord symbol specified is input.

NOTE

The chord symbol may look different to what you typed into the popover. For example, entering `E#5b9` may appear as "E+5-9" in the resulting chord symbol, depending on your settings on the **Chord Symbols** page in **Engrave** > **Engraving Options**.

Inputting altered bass notes with the computer keyboard

PROCEDURE

1. In Write mode, open the chord symbols popover.

2. Enter the root of your desired chord into the popover, such as `C`.

3. Enter a `/` (forward slash) or `,` (comma) into the popover.

4. Enter the altered bass note into the popover, such as `E`.

   For example, the end result of steps 2 to 4 would be **C/E**.

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

RESULT

The chord symbol specified is added.

NOTE

The chord symbol may look different to what you typed into the popover. For example, entering `C/E` may appear as "ConE", depending on your settings on the **Chord Symbols** page in **Engrave** > **Engraving Options**.

Inputting a "no chord" symbol with computer keyboard

To indicate that no specific chord should be played at a given rhythmic position, "N.C.", for "no chord", is shown. This can be entered into the chord symbols popover.

PROCEDURE

1. In Write mode, open the chord symbols popover.

2. Enter one of the ways of expressing a no chord symbol into the popover. For example, `N.C.` or `no chord`.

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

RESULT

A "no chord" symbol is added.

NOTE

The chord symbol may look different to what you typed into the popover. For example, entering `none` may appear as "NC", depending on your settings on the **Chord Symbols** page in **Engrave** > **Engraving Options**.

RELATED LINKS
Inputting chord symbols on page 288
The chord symbols popover on page 288

Inputting "root only" or "bass only" chord symbols with computer keyboard

To indicate a chord should only consist of the root note:

PROCEDURE

1. In Write mode, open the chord symbols popover.

2. Enter the root only or bass only chord you want into the popover. For example, `Cbass` or `Gonly`.

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

RESULT

The chord symbol specified is added.

RELATED LINKS
Inputting chord symbols on page 288
The chord symbols popover on page 288

Inputting polychords with computer keyboard

A polychord is where a single chord symbol describes two simultaneous chords.

PROCEDURE

1. In Write mode, open the chord symbols popover.

2. Enter the two chords you want to include in the polychord.

3. Separate your two desired chords using the pipe character `|`, or semicolon `;`. For example, type **D|C7** for a D major chord over a C7 chord.

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

RESULT

The chord symbol specified is added.

NOTE

The chord symbol may look different to what you typed into the popover. For example, entering `D|C7` may result in two chords placed directly above other, or two chords placed side-by-side, depending on your settings on the **Chord Symbols** page in **Engrave** > **Engraving Options**.

RELATED LINKS

Inputting chord symbols with 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** (key command **Ctrl/Cmd-Shift-I**).

The options include:

- Whether Dorico should 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 Dorico should notate omissions: for example, if you play C and E, should it be notated as "C" or "C(omit5)".
- How it should notate added notes and suspensions.
- How it should handle complex enharmonic relationships between roots and altered bass notes.

Examine these options carefully to make sure your settings suit your needs.

Inputting roots with MIDI keyboard

Once you have opened the chord symbols popover at the point you want to input a chord symbol, there are two ways to make it clear which note should be the root of a chord when inputting with a MIDI keyboard:

- By first playing the root with one finger, and then playing the remaining notes of the chord while still holding down the root.
- By playing all the notes of the chord together, holding them down, then releasing them all and replaying the root note.

TIP

To input a chord symbol that consists only of the root note, just play a single note.

Inputting altered bass notes with MIDI keyboard

Once you have opened the chord symbols popover at the point you want to input a chord symbol, there are two ways to tell Dorico which note is the altered bass note of a chord when inputting with 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 chord's keys depressed.

Inputting polychords with MIDI keyboard

PROCEDURE

1. Play the first chord of the polychord with one hand.

2. Keep the keys of your first chord depressed.

3. Play the second chord with the other hand.

Navigation during chord symbol input

You can input multiple chord symbols without re-opening the popover each time, by navigating through your score in the following ways for both computer keyboard and MIDI keyboard inputting methods.

Navigating with a computer keyboard

Once you have opened the popover, you can move it to add chord symbols to other notes by using the following key commands:

Space

Advance the popover to the next beat.

Shift+Space

Move the popover back to the previous beat.

Tab

Advance the popover to the start of the next bar.

Shift+Tab

Move the popover back to the start of the previous bar.

Left arrow/right arrow

Move the popover to one of the following positions, whichever is closest:

- Previous note
- Next note
- Previous rest
- Next rest
- Previous rhythmic grid position
- Next rhythmic grid position

Ctrl+left arrow/Ctrl+right arrow (Windows) or Command-left arrow/Command-right arrow (Mac)

Move the popover to the previous/next chord symbol.

Backspace

Move the popover back to the previous chord symbol.

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 input** 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 **Note Input** > **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 **Dorico** > **Preferences** (OS X).
   - Choose **Edit** > **Preferences** (Windows).
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**.

Editing existing chord symbols

1. In Write mode, select the chord symbol you want to edit.

2. Press **Return**, or double-click on the chord symbol.

3. The popover opens, with the existing short-hand for the chord symbol inside.

4. Edit the chord symbol in any of the following ways:

- Editing the existing short-hand in the popover.

- Removing the existing short-hand in the popover and typing in an entirely new chord symbol.

- Playing in a new chord symbol using your MIDI keyboard.

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

RESULT

The chord symbol is edited according to your most recent preference.

Transposing chord symbols

Chord symbols can be transposed, and appear at the appropriate transposed pitch when shown on transposing instruments.

Transposing chord symbols

1 In Write mode, select the chord symbols you want to transpose.

2 Choose **Write** > **Transpose**.

3 Select what type of transposition you want in the dialog. The options available include:

- **Transpose by**: transpose by either **Quality** or **Number of Divisions**

- **Direction**: **Up** or **Down**

- **Number of octaves**

- **Interval**

- **Quality**

Showing instrument at transposed pitch

Chord symbols can also appear at the appropriate transposed pitch for transposing instruments, when their part is shown at Transposed Pitch rather than Concert Pitch.

To do this choose **Edit** > **Transposed Pitch**.

IMPORTANT

This changes the shown transposition for all transposing instruments in the layout.

Hiding chord symbols

To hide chord symbols in the current layout:

PROCEDURE

1. Select the chord symbol or chord symbols you want to hide.

2. Activate the **Hidden** property in the **Chord Symbols** group of the Properties panel.

RESULT

A signpost appears in place of the chord symbol.

If you do not want to see these signposts, switch off **View** > **Signposts** > **Chord Symbols**.

Hiding the root and quality of chord symbols

To hide the root and quality of chord symbols in the current layout:

PROCEDURE

1. Select the chord symbol or chord symbols whose root and quality you want to hide.

2. Activate the **Hide root and quality** property in the **Chord Symbols** group of the Properties panel.

3. Check the box beside the activation switch.

RESULT

The root and quality of the selected chords symbols are hidden.
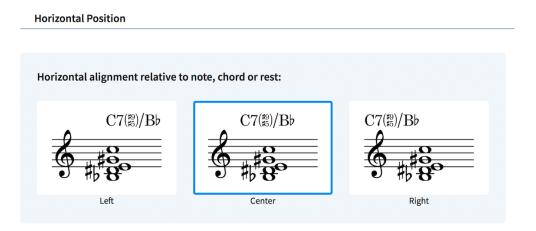
Positions of chord symbols

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.

Aligning chord symbols relative to notes and chords

You can choose whether chord symbol text should be left-aligned above the notehead, center-aligned above the notehead, or right-aligned above the notehead (though right-aligned typically produces unclear results).

These settings can be found under **Horizontal alignment of chord symbols** on the **Chord Symbols** page in **Engraving Options**.

This can also be overridden for an individual selected chord symbol, using the **Horizontal alignment** property in the **Chord Symbols** group of the Properties panel.

Aligning chord symbols across the system

Chord symbols are aligned at the same vertical position across the width of the system by default, but you can switch off **Align chord symbols across width of system** on the **Chord**

Symbols page in **Engraving Options** if you prefer each chord symbol to be positioned above the staff independently.

RELATED LINKS
Project-wide Engraving Options for chord symbols on page 302

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.
2. Move the chord symbols to new rhythmic positions, according to the rhythmic grid currently set, 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 or to the left the position you want.

      NOTE

      Only one chord symbol can be moved rhythmically at a time when using the mouse.

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.

If you moved chord symbols using the keyboard, you can undo the move to restore any chord symbols deleted in the process.

However, if you moved chord symbols using the mouse, undoing the move does not restore any chord symbols deleted in the process.

Moving chord symbols back to their previous positions later does not restore any chord symbols deleted when they were moved previously. The deleted chord symbols must be re-input if necessary.

Moving chord symbols graphically

You can move chord symbols graphically without affect 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.

> **NOTE**
>
> If you want to move chord symbols 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 to the positions you want.

Moving chord symbols graphically using the Properties panel

You can move chord symbols graphically using the Properties panel in Engrave mode.

PROCEDURE

1. In Engrave mode, select the chord symbols you want to move.
2. Activate the **Start offset** property in the **Chord Symbols** group of the Properties panel.
3. The **Start offset** property has **X** and **Y** value fields. 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.
4. The property moves chord symbols in the following ways:
   - **Start offset X** moves chord symbols horizontally: increasing the value moves them to the right, decreasing the value moves them to the left.
   - **Start offset Y** moves chord symbols vertically: increasing the value moves them upwards, decreasing the value moves them downwards.

Deleting chord symbols

To delete a chord symbol or chord symbols:

PROCEDURE

1. In Write mode, select the chord symbols you want to delete.
2. Delete the chord symbols in any of the following ways:
   - Press **Backspace** or **Delete**.
   - Choose **Edit** > **Delete**.

RESULT

The selected chord symbols are deleted.

Changing enharmonic spelling of chord symbols

You can respell a chord symbol for a transposing instrument in a transposing layout by editing the chord symbol as normal.

PROCEDURE

1. In Write mode, select the chord symbol you want to respell.
2. Press **Return**, or double-click on the chord symbol.
3. The popover opens, with the existing short-hand for the chord symbol inside.
4. Change the root name of the chord, but leave other details as they were, such as quality, interval, or alterations.

For example, change just the root of "D♭maj13" from **D♭** 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 an enharmonic spelling override for a chord symbol for the current instrument, or all instruments, by editing the chord symbol as usual.

PROCEDURE

1. In Write mode, select the chord symbol you want to respell.
2. Press **Return** key, or double-click on the chord symbol to open the popover.
   - To remove the enharmonic spelling override for a chord symbol for the instrument above which the popover appears, type **Alt**+**S** into the chord symbol popover.
   - To remove all enharmonic spelling overrides for a chord symbol for all instruments, type **Shift**+**Alt**+**S** into the popover.

Choosing above which staves chord symbols appear

By default, chord symbols appear above the staves belonging to rhythm section instruments, such as keyboards, guitars, and bass guitars.

You can control where chord symbols appear from the **Players** panel in Setup mode.

PROCEDURE

1. Select a player in the **Players** panel in Setup mode.
2. Right-click to access the **Chord Symbols** context menu.
3. Choose from: **Show For All Instruments**, **Show For Rhythm Section Instruments**, or **Hide For All Instruments**.

   NOTE

   Chord symbols may optionally be shown between the two staves of grand staff instruments, such as piano, by setting the **Position of chord symbols on grand staff instruments** option in the **Position** group on the **Chord Symbols** page in **Engraving Options**.

Choosing in which layouts chord symbols appear

By default, chord symbols appear both in full score and part layouts for rhythm section instruments.

If chord symbols are not set to appear for any instrument in the current layout, signposts are shown above the top staff.

To change in which layouts chord symbols are shown:

PROCEDURE

1. Select a player in the **Players** panel in Setup mode.
2. Right-click to access the **Chord Symbols** context menu.

3. Choose from the following options:

- **Show in Full Score and Parts**
- **Show in Full Score Only**
- **Show in Parts Only**

Project-wide Engraving Options for chord symbols

Options for the appearance and position of all chord symbols project-wide can be found on the **Chord Symbols** page in **Engraving Options**.

The options on the **Chord Symbols** page allow you to change the appearance of different types of chords, and their default positions.

You can open **Engraving Options** in the following ways:
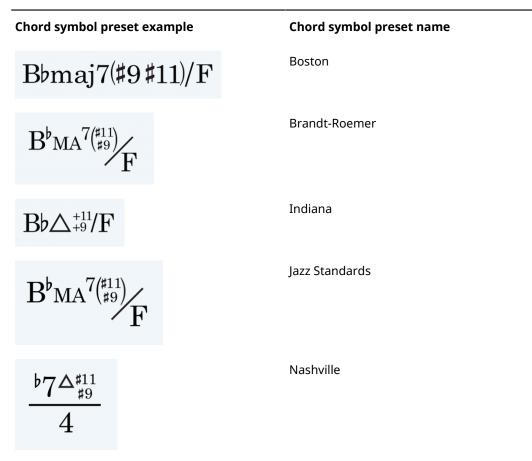
- Press **Ctrl/Cmd-Shift-E** in any mode.
- Choose **Engrave** > **Engraving Options** in Engrave mode.

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.

The presets are found at the top of the **Chord Symbols** page in **Engraving Options**.

Chord symbol preset example	Chord symbol preset name
$B\flat maj7(\sharp9\,\sharp11)/F$	Boston
$B^\flat MA^{7\left(\substack{\sharp11\\\sharp9}\right)}\!\big/\!_F$	Brandt-Roemer
$B\flat\triangle^{+11}_{+9}/F$	Indiana
$B^\flat MA^{7\left(\substack{\sharp11\\\sharp9}\right)}\!\big/\!_F$	Jazz Standards
$\dfrac{\flat7\triangle^{\sharp11}_{\sharp9}}{4}$	Nashville

Chord symbol preset example	Chord symbol preset name
$\text{B}\flat\text{Maj7}^{+11}_{+9}/\text{F}$	New York
$\text{B}\flat\text{M7}\binom{\sharp 11}{\sharp 9} on\ \text{F}$	Japanese
$\text{B}\flat\text{maj7}\binom{\sharp 11}{\sharp 9}/\text{F}$	Default

Default uses a set of symbols intended to be as unambiguous as possible (for example, avoiding the use of symbols for major seventh, augmented, diminished, and half-diminished). This is the preset that is chosen by default in new projects.

The presets simply choose specific combinations of the options on the **Chord Symbols** page.

You can adjust these options to suit your preferences.

Changing chord symbol font

How to change the text font used for chord symbols.

PROCEDURE

1. Choose **Engrave** > **Font Styles**.
2. Change the settings for one or all of the following styles:
   - **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 the **Chord Symbols Altered Bass Separator Font**.

NOTE

It is not advised to edit the **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.

Playback of 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.

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 should be used, and choose the channel or slot containing the desired sound. You can load a new sound manually if you wish.

3. Activate the speaker icon to enable playback.

Importing chord symbols 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 element are ignored during import, as there is no information to specify what notes these chord symbols are meant to describe.

Cues

Cues are passages of music shown in instrumental parts that are played by a different instrument, usually to help orientate players before entries or solos following a significant passage of rests.

Cues are also sometimes used to assist with co-ordination or tuning between players, or to indicate material that the player may be asked to double.

In Dorico, it is quick and easy to input correctly-formatted cues using the cues popover. Cues are automatically input into a new voice, with bar rests shown alongside cues to make sure it is clear that the player reading the cue should 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 is the only scoring program to include dynamic cues that are linked to the original source material, meaning cues are updated in real-time if the source material changes.

RELATED LINKS
Individual changes to the appearance and position of cues on page 316

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 instrument being cued indicated clearly at the start of the passage.

It is generally accepted that full-sized rests are also shown above or below cues, in order to reinforce that the player reading the cue should not play these notes.

Cues may exclude some notations that would be present in the part of the source instrument. However, cues may include slurs, articulations, and dynamics, as these often help the player reading the cue to identify passages.

Depending on the register of the instrument being cued and the *tessitura* of each cue passage, clef changes may also be needed at the start of cues.

Inputting cues

Cues are input using the cues popover. You can open the cues popover in Write mode by selecting the lyrics button in the Notations toolbox, or by pressing **Shift-L**

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 from to show in the cue.

The cues popover with an example entry showing the menu of candidate instruments.

> **NOTE**
>
> The menu of candidate instruments excludes the instrument into which you are inputting the cue, as you cannot cue an instrument with its own music.

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 constituent instrument from the drum set appears as a candidate for cueing. For example, you could show just the kick drum in a cue.

> **NOTE**
>
> You cannot use entire percussion kits in cues.

> **NOTE**
>
> 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 or shorten them later.

To input cues:

PROCEDURE

1. In Write mode, select one of the following in 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

2. Open the cues popover in any of the following ways:

   - Press **Shift-U**
   - Click **Insert Cue** in the **Cues** panel
   - Choose **Write** > **Create Cue**

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.

4. Select the instrument whose music you want to show in the cue in any of the following ways:

   - Use **Up Arrow** and **Down Arrow** to highlight it in the menu, then press **Return**
   - Click it in the menu
   - Enter full name of the instrument into the cues popover yourself, 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

The Cues panel

You can open the **Cues** panel by clicking its button in the Notations toolbox:

This panel can be hidden and shown in the following ways:

- Click its disclosure arrow

- Press **Ctrl/Cmd-9**

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 cue suggestions based on how long players have been
resting.

RELATED LINKS

Cue suggestions

The **Suggest Cues** section of the **Cues** panel can help you determine good locations for cues in
your project. Dorico can find places in the current flow where players in the current layout have
not played for a certain span of time, which is 30 seconds by default.

The **Suggest Cues** section of the **Cues** panel is divided into the following sections that together
help you find useful places to input cues:

Resting for

Specify the duration of 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 *tempi* can change many times throughout a flow, and music may be partially or completely meterless, whereas one second always has the same duration.

Specifying an absolute time ensures consistency in the approach to finding places where cues may be appropriate.

Rehearsal marks

Choose to consider or ignore rehearsal marks when determining the resting period.

Rehearsal marks often coincide with new sections or other landmarks in the music, which may 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

Choose to consider or 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

Click the **Update** button to recalculate cue suggestions based on your **Resting for** duration and inclusion choices for rehearsal marks and cues.

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 has three 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 on rows in the cue suggestions table to navigate directly to that location. By default, an area with an equivalent rhythmic duration to 5-10 seconds prior to the entry in the destination instrument is highlighted in red. The highlighted area is not a specific recommendation for cue length, but it may be a good indication depending on the musical context.

If you create a cue at a location suggestions 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 may reappear.

Highlight suggestions

Highlighted areas before entries in source instruments are shown when this box is checked, and are not shown when the box is unchecked.

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 into which you want to find suitable locations for cues in the music area.

    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 to open the **Cues** panel:

3. Change the value for **Resting for** in the **Suggest Cues** section of the **Cues** panel 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 rows 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 unchecking the box beside **Highlight suggestions**.

8. Select one of the following in 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

9. Open the cues popover in any of the following ways:

    - Press **Shift**-**U**

- Click **Insert Cue** in the **Cues** panel

- Choose **Write** > **Create Cue**

10. 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. 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:

    - Use **Up Arrow** and **Down Arrow** to highlight it in the candidate instrument menu, then press **Return**

    - Click it in the candidate instrument menu

    - Enter full name of the instrument into the cues popover yourself, 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

Changing existing cues to rhythmic cues

Sometimes it is necessary only to provide rhythms in cues. For example, for passages where many instruments play the same distinctive rhythm together.

Rhythmic cues are positioned above the staff, with all notes from the source instrument shown at the same nominal pitch. Rhythmic cues do not show clef changes, accidentals, or ledger lines.

> **NOTE**
>
> Cues containing music from unpitched percussion source instruments are automatically input as rhythmic cues.

You can change existing cues showing pitched material into rhythmic cues.

PROCEDURE

1. Select the cues you want to change to rhythmic cues. You can do this in Write mode and Engrave mode.

2. Activate the **Rhythmic cue** property in the **Cues** group of the Properties panel.

RESULT

The selected cues become rhythmic cues.

They are automatically positioned above the staff according to your setting for the **Distance from space above staff** in the **Rhythmic Cues** section of the **Cues** page in **Engrave** > **Engraving Options**.

NOTE

You can change rhythmic cues, including cues from unpitched percussion instruments that are automatically input as rhythmic cues, into normal cues at any time by deactivating the **Rhythmic cue** property.

RELATED LINKS

Changing the octave of cues from octave transposing instruments

You can change the octave in which cues are shown. For example, if the source instrument plays in a significant different octave to the destination instrument, you may want to shift the octave so the cue fits better in the staff of the source instrument.

PROCEDURE

1. Open the layout in which you want to change the octave of cues in the music area.

2. Select the cues whose octave you want to change. You can do this in Write mode and Engrave mode.

3. Activate the **Octave shift** property in the **Cues** group of the Properties panel.

4. Change the value in the value field to change the number of octaves by which you want to shift the cue in any of the following ways:

    *   Enter a value into the value field.

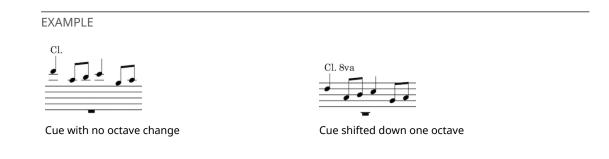   *   Click the arrows beside the value field.

    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, according to the number you entered.

NOTE

If octave transpositions are shown in the cue labels, they are automatically updated to reflect any change in octave.

EXAMPLE

Cue with no octave change	Cue shifted down one octave

Including or excluding octave transpositions in cue labels individually

By default, octave transpositions are included in cue labels when you shift the octaves at which cues are shown. You can choose to include or exclude octave transpositions in cue labels individually, independently of your project-wide setting for octave transpositions in cue labels.

PROCEDURE

1. Select the cue labels in which you want to include or exclude octave transpositions. You can do this in Write mode and Engrave mode.

2. Activate the **Show octave transposition** property in the **Cues** group of the Properties panel.

3. Check or uncheck the box beside the property.

   - Check boxes to include octave transpositions in the selected cues.

   - Uncheck boxes to exclude octave transpositions from the selected cues.

RESULT

Octave transpositions are included in or excluded from the cue labels of the selected cues.

NOTE

You can choose to include octave transpositions in, or exclude octave transpositions from, cue labels for all cues 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.

2. Move the cues, while maintaining their total durations, in the following ways:

   - Press **Alt-Right Arrow** to move multiple cues to the right according to the current rhythmic grid, and single cues to the right depending on the rhythm in the source instrument.

- Press **Alt-Left Arrow** to move multiple cues to the left according to the current rhythmic grid, and single cues to the left depending on the rhythm in the source instrument.
- Click and drag the cue to the right or to the left, according to the rhythm in the source instrument.

NOTE

Only one cue can be moved at a time when using the mouse.

RESULT

If a single cue is selected, it is moved to the right or to the left, depending on the rhythm in the source instrument.

If multiples cues are selected, they are moved to the right or to the left according to the rhythmic grid currently set.

RELATED LINKS

Lengthening and shortening cues

You can change the lengths 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 or shorten.

   NOTE

   You can only lengthen or shorten one cue at a time with the mouse.

2. Lengthen and shorten the cues 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 cue to the next notehead of the source instrument.
   - Press **Ctrl/Cmd-Shift-Alt-Left Arrow** to snap the end of a single cue to the previous notehead of the source instrument.
   - Click and drag the circular handle at the end of a single cue to show noteheads to the right or to the left.

   NOTE

   You can only lengthen or shorten cues by the current rhythmic grid value when multiple cues are selected.

RESULT

The selected cues are lengthened or shortened.

NOTE

You can lengthen cues so that they overlap with other existing cues, as multiple cues can exist at the same rhythmic positions. However, their stem directions are not automatically adjusted so you may need to change the stem directions of cues manually.

RELATED LINKS
Overlapping cues on page 323
Overriding default stem directions in single-voice cues on page 324

Deleting cues

PROCEDURE

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

- The cues you want to delete.

- The signposts of cues not shown in the current layout that you want to delete.

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

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

- Choose **Edit** > **Delete**.

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 the full score layout.

NOTE

Deleting cues does not delete notes from the original instrument.

Project-wide Engraving Options for cues

Options for the appearance, content, and positions of cues project-wide can be found 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 source instruments.

Many options are accompanied by musical examples to demonstrate how each option affects the appearance of your music.

You can open **Engraving Options** in 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.

Changing the information included in cue labels project-wide

You can change the information included as text in cue labels project-wide. Cue labels usually indicate the source instrument from which the music is taken.

By default, cue labels in Dorico use abbreviated instrument names, exclude instrument transpositions (or instrument pitches), include octave transpositions, and do not show an addition label at the end of cues to indicate where players enter after cues.

Additional labels showing "Play" at the ends of cues are sometimes used in jazz scores, where it can be 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 may be asked to play.

You can change these settings for all cues project-wide.

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Engraving Options**.

2. Click **Cues** in the page list.

3. Change any of the following options in the **Cue Labels** section:

    - **Instrument name in label**: full name or abbreviated name

    - **Instrument pitch or transposition**: include or exclude

    - **Octave transposition**: include or exclude

    - **Additional label at end of cue**: show an additional label or show no additional label

4. Click **Apply**, then **Close**.

RESULT

NOTE

You can change cue labels individually. For example, if two instruments are playing in unison, you can change the cue label containing the unison material from one of the instruments to include both instrument names.

RELATED LINKS
Changing the text shown in cue labels individually on page 318

Changing the default note spacing values for cues project-wide

Cues are normally spaced more tightly than the normal-sized music in the destination instrument. You can determine by how much the rhythmic spacing of cues is tightened in each layout on the **Note Spacing** page 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.

2. Select **Note Spacing** from the **Category** menu.

3. Select the layouts in you want to change the rhythmic spacing in cues in the **Layouts** list on the left of the dialog in the following ways:

    - Click **Select All**.

    - Click **Select All Full Score Layouts**.

- Click **Select All Part Layouts**.

- Click **Select All Custom Score Layouts**.

- **Ctrl**-click individual flows.

- **Shift**-click adjacent flows.

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

4. Change the value for **Scale space for cues note by** to change the percentage value in any of the following ways:

- Enter a value into the value field.

- Click the arrows beside the value field.

  By default, ideal rhythmic spacing is scaled to 70% for cues.

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

RESULT

The scale by which the rhythmic spacing of cues is tightened as a percentage of the rhythmic spacing for normal notes is changed.

TIP

You can change settings for other layouts before closing the dialog.

RELATED LINKS
Note spacing on page 171

Individual changes to the appearance and position of cues

You can change the appearance and positions of individual cues and cue labels in each layout independently of other layouts and without changing the source material.

Music in cues is dynamically linked to the source instrument. Any changes you make to the source music is automatically shown in the cue, but the music cannot be selected in the cue. This is to ensure cues are an accurate reflection of the notes being played by the cued instrument.

It is possible to make graphical changes to music in cues without affecting the source instrument. For example, you can adjust the placement of slurs, the angles of glissando lines, or lengthen and shorten stems in cues.

NOTE

Graphical changes to cues are layout-specific, meaning that if you make changes to cues in layouts containing the source instrument or other instruments with the same cue, any changes you make to one cue may affect the source instrument and other instruments with the same cue.

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. Respelling notes in cues does not affect the spelling of notes in the source instrument, if you respell notes in cues in the part layout of the cue. For example, you may want to change the enharmonic spelling of notes in cues in transposing instrument layouts to avoid double accidentals.

NOTE

If you change the enharmonic spelling of notes in cues in a layout that also contains the source instrument, the enharmonic spelling is changed in the source instrument.

Changing the notations included in cues individually

It is often beneficial to include in cues some notations from the source instrument, 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 (if you are cueing vocal music)

NOTE

Not all playing techniques are included in cues. Playing techniques that only indicate important information for the source instrument, such as bowing marks for string players, are not included in cues.

It is not currently possible to change which playing techniques can be included in cues, but this is planned for future versions.

To be included in cues, playing techniques must exist within the range of the cued material. For example, *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 this is useful information to include in cues.

Similarly, slurs must begin and end within the cued material to be included in cues.

NOTE

You can change the text shown in cue labels individually, allowing you to add such information manually.

To 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. Activate the corresponding properties for the notations that you want to include in, or exclude from, the selected cues in the **Cues** group of the Properties panel:

   - **Show articulations**
   - **Show slurs**
   - **Show dynamics**
   - **Show lyrics**
   - **Show playing techniques**
   - **Show ornaments**
   - **Show text**

3. Check or uncheck the boxes beside each property.

- Check boxes to include the corresponding notations in the selected cues.
- Uncheck boxes to exclude the corresponding notations from the selected cues.

RESULT

The different notations are included in or excluded from the selected cues.

NOTE

You can change which notations are included in all cues project-wide on the **Cues** page in **Engrave** > **Engraving Options**.

RELATED LINKS

Changing the text shown in cue labels individually

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 containing the unison material from 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 at the ends of cues.

PROCEDURE

1. Select the cue labels whose text you want to override. You can do this in Write mode and Engrave mode.
2. Activate the following properties, individually or together, in the **Cues** group of the Properties panel:

   - **Start text**: change the label at the start of cues
   - **End text**: change the label at the ends of cues

3. Enter the text you want to be shown in the corresponding cue labels into each property 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 anywhere outside the value field.

RESULT

The cue labels of the selected cues are changed to show the text you entered.

You can revert the cue labels of the selected cues to their default text at any time by deactivating the corresponding property.

NOTE

Deactivating properties permanently deletes any custom text entered.

Changing the note spacing of cues from specific points in layouts

You can have different note spacing values for cues in each layout by adding a note spacing change event at the rhythmic position from which you want the note spacing of cues to change.

PROCEDURE

1. In Engrave mode, open the layout in which you want to change the note spacing in cues at specific points in the music area.

2. Open the **Note Spacing Change** dialog by choosing **Engrave** > **Note Spacing Change**.

3. Activate **Scale space for cues notes by**.

4. Choose **Change**.

5. Change the value in the value field to change the percentage value in any of the following ways:

   - Enter a value into the value field.

   - Click the arrows beside the value field.

   By default, ideal rhythmic spacing is scaled to 70% for cues.

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

RESULT

The scale by which the rhythmic spacing of cues is tightened as a percentage of the rhythmic spacing for normal notes is changed.

TIP

You can change also use the **Note Spacing Change** dialog to reset changes to note spacing you have previous made in the current layout: choose **Reset** instead of **Change** in step 4.

RELATED LINKS
Note spacing on page 171

Changing the staff position of cues from unpitched source instruments individually

You can change the staff positions of cues from unpitched source instruments individually, independently of your project-wide setting for the staff position of cues from unpitched source instruments.

By default, cues from unpitched source instruments are positioned on the middle lines of staves.

PROCEDURE

1. Select the cue label of the cues from unpitched source instruments whose staff position you want to change. You can do this in Write mode and Engrave mode.

2. Activate the **Unpitched notes pos.** property in the **Cues** 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.

4. The value in the value field corresponds to a staff position. For example:

   - 0 is the middle line of the staff

   - 4 is the top line of the staff

- -4 is the bottom line of the staff

RESULT

The staff position of the selected cues is changed.

NOTE

You can change the default staff position of all cues from unpitched 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 314

Changing the distance between rhythmic cues and the staff individually

You can change the distance between individual rhythmic cues and the staff, independently of your project-wide setting for the position of rhythmic cues.

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. Activate the **Distance** property in the **Cues** 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.

4. The value in the value field corresponds to a position above the top line of the staff. For example, entering 0 positions rhythmic cues in the space immediately above the top line in the staff. Higher values increase the distance between rhythmic cues and the staff.

RESULT

The position of the selected cues is changed.

NOTE

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 314

Changing the placement of cue labels relative to the staff individually

You can change the placement of individual cue labels relative to the staff, independently of your project-wide setting for cue label placement.

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. Activate the **Placement** property in the **Cues** group of the Properties panel.

3. Choose one of the following options:

   - **Above**

   - **Below**

RESULT

The placement of the selected cue labels relative to the staff is changed.

NOTE

You can revert the placement of the selected cue labels to your project-wide setting for cue label placement at any time by deactivating the **Placement** property.

You can change the default placement relative to the staff for all cue labels project-wide on the **Cues** page in **Engrave** > **Engraving Options**.

Moving cue labels graphically

You can change the graphical positions of cue labels individually.

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 cue labels 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 to the positions you want.

RESULT

The selected cue labels are moved to new graphical positions.

Moving cue labels graphically using the Properties panel

PROCEDURE

1. In Engrave mode, select the cue labels you want to move.

2. Activate the **Offset** property in the **Cues** group of the Properties panel.

3. The **Offset** property has **X** and **Y** value fields. 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.

4. The property moves cue labels in the following ways:

    -   **Offset X** moves cue labels horizontally: increasing the value moves them to the right, decreasing the value moves them to the left.
    -   **Offset Y** moves cue labels vertically: increasing the value moves them upwards, decreasing the value moves them downwards.

RESULT

The selected cue labels are moved to new graphical positions.

Hiding and showing cues in layouts

You can input cues in any layout, but by default cues do not appear in full score layouts, as most cues are only shown in instrumental parts. Cues signposts are shown in full score layouts by default in page view.

If you are using galley view, the cued music appears in addition to cue signposts.

You can choose to hide or show cues in each layout in your project.

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.

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

3. Select the layouts in which you want to hide or show cues in the **Layouts** list on the left of the dialog in the following ways:

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

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

4. Check or uncheck the box beside **Show cues** in the **Cues** section.

    -   Check the box to show cues in the selected layouts
    -   Uncheck the box to hide cues in the selected layouts

RESULT

All cues in the selected layouts are shown or hidden.

If cues are hidden, signposts are shown where they begin.

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 you have chosen to show cues. For example, if the music of a single player appears in multiple part layouts, you may want to hide cues in certain layouts.

PROCEDURE

1. Open the layout in which you want to hide individual cues in the music area.
2. Select the cues you want to hide. You can do this in Write mode and Engrave mode.
3. Activate the **Hide** property in the **Cues** group of the Properties panel.

RESULT

The selected cues are hidden.

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 and the cues for both instruments are shown in up-stem voices by default, they both 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

The stem direction of the cue with lower notes has been changed.

RELATED LINKS

Stem directions in cues

Notes in cues normally have the same stem direction, as cues usually highlight lines containing only one voice, and because cues shown by default with bar rests alongside them to indicate that the player reading the cue should not play those notes.

However, if cues contain music in multiple voices, the original stem directions of the source music are used instead.

For single-voice cues, Dorico determines the default stem direction depending on the pitches in the cue:

- Most notes in the cue at positions below the middle line of the staff: stems point downwards
- Most notes in the cue at positions above the middle line of the staff: stems point upwards

RELATED LINKS
Overriding default stem directions in single-voice cues on page 324

Overriding default stem directions in single-voice cues

You can override the default stem directions of single-voice cues individually.

PROCEDURE

1. Open the layout in which you want to override the default stem direction in cues in the music area.
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. Activate the **Voice direction** property in the **Cues** group of the Properties panel.
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.

NOTE

You can revert the selected cues back to their default stem direction at any time by deactivating the **Voice direction** property.

Ties starting before and ending after 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 well-positioned by default. However, in complex cases, such as cues involving chords, you may find that the positions of these ties may require some adjustment.

Ties into and out of cues can all be edited in the same way as normal ties in Engrave mode.

RELATED LINKS
Changing the position and shape of ties individually on page 645

Rests in cues

Rests are automatically shown within cues to show the total duration of bars. Full-sized bar rests are also automatically shown either above or below cues to make it clear that notes in cues should not be played.

If cues start or end in the middle of bars, they are padded with appropriate 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 in relation to their existing material.

By default, full-sized bar rests also appear throughout cued passages. This makes it clear that the performer should not play the cued notes.

You can choose to not to show bar rests alongside cues. For example, it may be appropriate not to show bar rests during cues in some jazz scores, or in scores where the cues are provided as potential passages for doubling.

Full-sized bar rests are automatically positioned appropriate 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

NOTE

You can adjust the vertical position of full-sized bar rests individually using the **Rest pos.** property in the **Notes and Rests** group of the Properties panel.

RELATED LINKS
Hiding and showing padding rests in cues on page 325
Hiding and showing bar rests in cues on page 326
Changing the vertical position of rests individually on page 563

Hiding and showing padding rests in cues

You can choose to hide or show padding rests around individual cues.

PROCEDURE

1. Select the cue labels or cue signposts of the cues whose padding rests you want to hide or show. You can do this in Write mode and Engrave mode.

2. Activate the **Hide rests around cue** property in the **Cues** group of the Properties panel.

RESULT

Padding rests around the selected cues are hidden when the **Hide rests around cue** property is activated.

NOTE

You can show padding rests around the selected cues again at any time by deactivating the **Hide rests around cue** property.

Hiding and showing bar rests in cues

You can choose to hide or show bar rests alongside all cues in each flow in your project.

PROCEDURE

1. In Write mode, choose **Write** > **Notation Options**.
2. Select **Rests** from the **Category** menu.
3. Select the flows in which you want to hide or show bar rests in cues in the list on the left of the dialog in the following ways:

    - **Ctrl**-click individual flows.
    - **Shift**-click adjacent flows.
    - Click **Select All**.

    By default, only the current flow is selected when you open the dialog.
4. 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 or shown in all layouts in the selected flows in your project.

RELATED LINKS
Changing the vertical position of rests individually on page 563

Clef changes in cues

If the music for the source instrument is written in a different clef than is used by the destination instrument, Dorico automatically inputs a clef change at the start of cues, and a restorative clef change at the ends of cues.

This changes the clefs at the start of cues to the same clef used by the source instrument, and changes the clef back to the clef used by the destination instrument at the end of the cue.

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 multiple cues abut, clef changes are created as needed:

- If two abutting cues use the same clef that is different than the clef in force on 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 two cues abut and the first cue 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. Dorico can show the following clefs in cues:

- **Treble G clef**
- **Bass F clef**
- **Alto C clef**
- **Tenor C clef**
- **None**

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 on the destination instrument.

Changing the clef shown in individual cues

You can change the clefs shown in individual cues, independently of your project-wide settings for clefs in cues on the **Cues** page in **Engraving Options**.

You can change the clef shown in each cue in each layout in which it appears. For example, you can show a cue with a treble clef in the full score layout but with a bass F clef in the corresponding part layout.

PROCEDURE

1. Open the layout in which you want to change the clefs shown in cues in the music area.
2. Select the cues whose clef you want to change. You can do this in Write mode and Engrave mode.
3. Activate one of the following properties in the **Cues** group of the Properties panel:
   - **Concert clef**: shown in layouts using concert pitch
   - **Transposed clef**: shown in layouts using transposed pitch
4. Select one of the following clefs from the menu:
   - **Treble G clef**
   - **Bass F clef**
   - **Alto C clef**
   - **Tenor C clef**
   - **None**

   The same clefs are available for each property.

RESULT

The clef shown in the selected cues is changed, according to your selection.

Viewing options for cues

You can highlight cues and show cued material in a different color to normal notes in your project to help you identify cues 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 the full score layout in galley view.

Choosing **View** > **Note and Rest Colors** > **Cues** shows cued material in gray, to remind you that this material cannot be edited directly.

Dynamics

Dynamics indicate the loudness of the music, and can be combined with other instructions to give the performer a detailed understanding of how the music should be performed, while leaving a lot of room for interpretation.

For example, *f espressivo* indicates that a passage should be 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.

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 as *cresc.*, *cre-scen-do*, *dim.*, *di-mi-nuen-do*, and so on. They can 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, for example *fz* and *sffz*, indicate a note should have 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.

Dorico has a combined dynamic maker, where you can create custom combined dynamics and control the intensity of each dynamic in the pair. For example, you can make dynamics such as *pppf*, *fff–mp*, and *ffff pppp*.

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 that they can 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 356
Positions of dynamics on page 343
Moving dynamics graphically on page 345
Moving dynamics graphically using the Properties panel on page 346

General placement conventions for hairpins relative to barlines

In Dorico, the ends of hairpins align with the left edge of the note at the end of the hairpin.

Hairpins that end on the first note of a bar can 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 generally looks poor. However, this may mean that the same dynamic phrase on two different staves appears differently if one of the staves does not have the barline extending below it.

The ends of the two hairpins are not aligned despite their duration being identical as the lower is on the bottom staff of the system.

RELATED LINKS
Changing the project-wide position of hairpins relative to barlines on page 330

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.

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Engraving Options**.

2. Click **Dynamics** in the page list.

3. Disclose **Advanced Options** in the **Gradual Dynamics** section.

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**

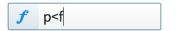**5.** Click **Apply**, then **Close**.

Inputting dynamics with the keyboard

You can input dynamics with the keyboard by using the dynamics popover.

You can open the dynamics popover in Write mode in the following ways:

- Press **Shift**-**D**.

- Choose **Write** > **Create Dynamic**.

You can enter any dynamic into the popover, during step input and later on. However, gradual dynamics ending or starting *niente* cannot be input using the popover. They can only be input using options in the **Dynamics** panel.

The icon on the left-hand side of the popover matches the corresponding button in the Notations toolbox on the right of the window.

The dynamics popover with an example entry for dynamics

The dynamics button in the Notations toolbox

RELATED LINKS
Inputting niente hairpins on page 337
Adding expressive text to existing dynamics on page 338
Inputting voice-specific dynamics with the keyboard on page 341

The 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 the following ways:

- Press **Shift**-**D**.

- Choose **Write** > **Create Dynamic**.

Enter:	For dynamic or expression:
pp	*pianissimo*: ***pp***
p	*piano*: ***p***
mp	*mezzo piano*: ***mp***
mf	*mezzo forte*: ***mf***

Enter:	For dynamic or expression:
f	*forte*: $\boldsymbol{f}$
ff	*fortissimo*: $\boldsymbol{f\!f}$
subito or sub or sub.	*subito*
possibile or poss or poss.	*possibile*
poco	*poco*
molto	*molto*
più or piu	*più*
meno	*meno*
mosso	*mosso*
<	*crescendo*: ⟨
cresc	*cresc.* (text)
>	*diminuendo*: ⟩
dim	*dim.* (text)
<>	*crescendo* then *diminuendo* messa di voce: ⟨⟩
><	*diminuendo* then *crescendo*: ⟩⟨
sfz	*sforzando*: $\boldsymbol{s\!f\!z}$
rfz	*rinforzando*: $\boldsymbol{r\!f\!z}$

This list is not comprehensive and is only intended to illustrate how you can structure your entry to input different types of dynamics.

TIP

Crescendo and diminuendo hairpins can be input directly into the score without the popover by pressing **Shift-,** and **Shift-.**.

The appearance of gradual dynamics can be changed project-wide in **Engraving Options**, or individually by activating the **Gradual style** property 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`, which you can hide later.

RELATED LINKS
Inputting expressive text with the keyboard on page 334
Inputting niente hairpins on page 337
Hiding immediate dynamics on page 355
Changing the appearance of gradual dynamics individually on page 351

Inputting dynamics during step input with the keyboard

You can input dynamics during step input with the keyboard.

PROCEDURE

1. In Write mode, start note input.

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`, `ff`, or `<f`.

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

5. Optional: if you enter an open-ended dynamic into the popover, such as `p<`, the hairpin extends as you continue inputting notes, or if you advance the caret using **Space** or the arrow keys.

6. Stop the hairpin by opening the popover again and entering another immediate dynamic. For example, `f`.

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

RESULT

The dynamic is input at the caret position.

NOTE

If you included hairpins or multiple dynamics in your popover, such as `p<f>p`, each dynamic and hairpin lasts a quarter note (crotchet) by default. You can edit this duration using the handles on each part of the dynamic phrase.

RELATED LINKS
Lengthening and shortening gradual dynamics and groups of dynamics on page 339
Inputting voice-specific dynamics with the keyboard on page 341

Adding dynamics to an existing note with the keyboard

PROCEDURE

1. In Write mode, select the note to which you want to add a dynamic.

2. Open the dynamics popover in any of the following ways:

   - Press **Shift-D**.

   - Choose **Write** > **Create Dynamic**.

3. Enter the dynamics you want into the popover, such as `p`, `mp`, or `molto f<`.

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

RESULT

The dynamic is added to the selected note.

Adding dynamics across multiple existing notes with the keyboard

PROCEDURE

1. In Write mode, select the 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 dynamics you want to use for the selection into the popover, for example, `p<f>p`.

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

RESULT

The dynamic phrase is evenly spread across your selected notes.

You can edit where each element is placed more precisely by clicking and dragging an individual dynamic, or with a keyboard by ungrouping them and moving each dynamic individually. You can later regroup them if you wish.

RELATED LINKS

Inputting expressive text with the keyboard

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 *poco*, *molto*, or *subito*, has to accompany an immediate dynamic level, such as $\boldsymbol{p}$ or $\boldsymbol{f}$. Expressive text cannot be input on its own.

You can input expressive text with the keyboard by using the dynamics popover.

PROCEDURE

1. In Write mode, select the note to which you want to add a dynamic with expressive text.

2. Open the dynamics popover in any of the following ways:

    - Press **Shift**-**D**.

    - Choose **Write** > **Create Dynamic**.

3. Enter your preferred dynamic and expressive text into the popover, separated by a space. For example, `f molto` or `p espressivo`.

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

RESULT

The dynamic with expressive text is input.

NOTE

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.
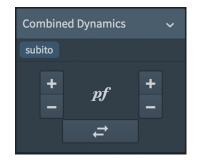
Inputting dynamics with the mouse

Dynamics can be input with the mouse using the **Dynamics** panel.

The **Dynamics** panel is opened by clicking **Dynamics** in the Notations toolbox:

There are four sections in the **Dynamics** panel:

1   **Immediate Dynamics**: dynamics such as *pp*, *f*, *molto*, and *possibile*.

2   **Gradual Dynamics**: dynamics such as ⋖, ⋗, *molto*, and *poco*.

3   **Force/Intensity of Attack**: dynamics such as *sfz* and *fz*.

4   **Combined Dynamics**: create your own combinations, such as *fff pp*.

Inputting dynamics during step input with the mouse

You can input dynamics during step input with the mouse.

PROCEDURE

1.   In Write mode, start note input.

2.   Position the caret at the rhythmic position where you want to input the dynamic.

3.   Click **Dynamics** in the Notations toolbox to open the **Dynamics** panel:

4.   Click the dynamic you want in the **Dynamics** panel on the right of the window.

NOTE

Gradual dynamics are input with a default duration of a quarter note. You can change the length of gradual dynamics later.

RESULT

The selected dynamic is added at the caret position.

RELATED LINKS
Lengthening and shortening gradual dynamics and groups of dynamics on page 339
Inputting voice-specific dynamics with the mouse on page 342

Adding dynamics to an existing note with the mouse

You can add dynamics to an existing note.

NOTE

If you have set your preference for mouse input to **Load cursor with item**, complete the tasks in this order: 2, 3, 1.

PROCEDURE

1. In Write mode, select the note to which you want to add dynamics.

2. Click **Dynamics** in the Notations toolbox to open the **Dynamics** panel:

3. Click the dynamics you want.

RESULT

The dynamics you click are added to the selected note.

Adding gradual dynamics to existing notes with the mouse

You can add gradual dynamics to existing notes.

NOTE

If you have set your preference for mouse input to **Load item at cursor**, gradual dynamics are only added to the single note on which you click. You then need to drag it longer if you want it to appear across multiple notes.

PROCEDURE

1. In Write mode, select the notes to which you want to add dynamics.

2. Click **Dynamics** in the Notations toolbox to open the **Dynamics** panel:

3. Click the gradual dynamic you want in the **Immediate Dynamics** section.

Alternatively, with nothing selected in the music area, click the gradual dynamic you want in the **Dynamics** panel. Then click and drag to input the gradual dynamic and extend it to the length you want.

RESULT

The gradual dynamic is added across the selection.

You can also add a gradual dynamic to an individual note within the phrase to which you want to add it, and drag it to your preferred length using the circular handles at each end.

RELATED LINKS

Inputting expressive text with the mouse

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 *poco*, *molto*, or *subito*, has to accompany a dynamic level, such as p or f. Expressive text cannot be input on its own.

NOTE

If your preference is set to **Load cursor with item**, start at step 2. Then click on the note to which you want to add a dynamic with expressive text.

PROCEDURE

1. In Write mode, select the note to which you want to add a dynamic with expressive text.
2. Click the dynamic level you want in the **Immediate Dynamics** section of the **Dynamics** panel.
   Do not deselect the dynamic.
3. Click the expressive text or texts you want in the same **Immediate Dynamics** section of the **Dynamics** panel.

RESULT

The dynamic with expressive text is input.

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.

Inputting niente hairpins

Adding *niente* markings at the start or end of a gradual dynamic indicates that the dynamic should either increase from, or decrease to, silence.

This effect works very well on strings and singers with vowels, but it is not always possible for this to be played literally, such as for singers on a word beginning with a consonant, and for reed and brass instruments who 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. Both are possible in Dorico.

NOTE

You cannot input niente hairpins using the dynamics popover.

NOTE

If your preference is set to **Load cursor with item**, start at step 2. Then click the note to which you want to add the *niente* hairpin. The *niente* hairpin is input as a quarter note in duration, but you can lengthen or shorten it later.

PROCEDURE

1. In Write mode, select the notes across which you want to input the *niente* hairpin.

2. Click the hairpin you want in the **Gradual Dynamics** section of the **Dynamics** panel.
   Do not deselect the dynamic.

3. Click **niente** in the same **Gradual Dynamics** section.

RESULT

The dynamic is input with a *niente* marking.

EXAMPLE

A niente shown as **Circle on hairpin**

A niente shown as **Text**

RELATED LINKS

Changing the appearance of niente hairpins on page 354
Lengthening and shortening gradual dynamics and groups of dynamics on page 339

Adding expressive text to existing dynamics

You can add expressive text to existing dynamics.

PROCEDURE

1. Select the dynamics to which you want to add expressive text. You can do this in Write mode and Engrave mode.

2. Activate one of the following properties in the **Dynamics** group of the Properties panel:

   - **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 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.

You can remove any added expressive text later by deactivating the corresponding property.

Deactivating expressive text properties cannot be undone. Any text previously entered into the value field is deleted, and must be re-entered later if required.

RELATED LINKS
[Inputting niente hairpins](#) on page 337

Changing dynamics during step input

You can make changes to existing dynamics during step input.

PROCEDURE

1. Reposition the caret so it is immediately to the left of the dynamic you want to change. You can do this in any of the following ways:

    - Use the arrow keys on the keyboard.

    - Double-click the note to the left of the dynamic you want to change.

    - Select the note to the left of the dynamic you want to change and press **Return**.

2. Replace it with the new dynamic you want in any of the following ways:

    - Click the dynamic you want in the **Dynamics** panel.

    - Open the dynamics popover by pressing **Shift-D**, and enter the dynamic you want into the popover.

Lengthening and shortening gradual dynamics and groups of dynamics

You can change the length of gradual dynamics and groups of dynamics after they have been input.

PROCEDURE

1. In Write mode, select the gradual dynamics or groups of dynamics you want to lengthen or shorten.

2. Lengthen or shorten the gradual dynamics or groups of dynamics in any of the following ways:

    - Press **Shift-Alt-Right Arrow** to lengthen dynamics by the current rhythmic grid value.

    - Press **Shift-Alt-Left Arrow** to shorten dynamics by the current rhythmic grid value.

    - Press **Ctrl/Cmd-Shift-Alt-Right Arrow** to snap the ends of dynamics to the next rhythmic position.

    - Press **Ctrl/Cmd-Shift-Alt-Left Arrow** to snap the ends of dynamics to the previous rhythmic position.

    - Click and drag the circular handle at each end of the gradual dynamic or group of dynamics.

      NOTE

      You can only lengthen or shorten one gradual dynamic or group of dynamics at a time when using the mouse.

RESULT

The phrase is lengthened or shortened proportionally, by lengthening or shortening the gradual dynamics and moving any other type of dynamic. This retains the relative durations of the gradual dynamics in the group

All key commands change the length of gradual dynamics or groups of dynamics by changing the position of the end. The start position is not changed.

In the below examples, 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
Positions of dynamics on page 343
Ungrouping dynamics and removing dynamics from groups on page 348

Placement of dynamics

Default settings for the placement of dynamics in Dorico were designed to ensure that dynamics are clear and legible.

You can make changes to your project-wide settings for the placement of dynamics on the **Dynamics** page in **Engrave** > **Engraving Options**.

RELATED LINKS
Project-wide Engraving Options for dynamics on page 356

Placement of dynamics relative to the staff

The placement of dynamics relative to the staff varies, depending on their function. The are different settings for instrumental staves, vocal staves, and grand staff instruments.

In general, dynamics should not be placed within the staff, as hairpins in particular become very hard to read. They should also not be placed within tuplet brackets.

For instrumental staves, dynamics are placed below the staff.

For vocal staves, dynamics are placed above the staff so they do not conflict with lyrics below the staff.

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.

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.

There may be circumstances when you need to change the placement of individual dynamics relative to the staff, for example, if you want to have dynamics above and below the staff for instruments in multiple voices.

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. Activate the **Placement** property in the **Dynamics** group of the Properties panel.

3. Choose one of the following options:

   - **Above**

   - **Below**

RESULT

The placement of the selected dynamics is changed according to your selection.

Showing dynamics for each voice on a staff

You can input different dynamics into each voice independently when there are multiple voices on the staff.

This allows you to show different dynamics for multiple voices on a staff, or to highlight an inner melody voice in a piano texture

During step input, voice-specific dynamics are added to the voice indicated by the stem direction shown beside the caret.

By default, dynamics apply to all voices on a staff if input without using the **Alt** key. If you want each voice to have their own dynamic in playback as well as in the score, use the **Alt** key when inputting dynamics for every voice on a staff.

Inputting voice-specific dynamics with the keyboard

You can input dynamics that are voice-specific with the keyboard.

PROCEDURE

1. In Write mode, select the note to which you want to add a voice-specific dynamic.

2. Open the dynamics popover in any of the following ways:

   - Press **Shift**-**D**.

   - Choose **Write** > **Create Dynamic**.

3. Enter the dynamics you want, with any dynamic modifiers if desired, into the popover.

4. Hold down **Alt** while pressing the **Return** key to close the popover.
   The dynamics appear below the staff by default.

5. Place the dynamic for the upper voice above the staff by selecting it and activating the **Placement** property in the **Dynamics** group of the Properties panel.

6. Choose one of the following options:

   - **Above**

   - **Below**

RESULT

The dynamics specified are input into the selected voice only. They are placed below the staff by default, even if they are input into an up-stem voice.

You can change the placement of individual dynamics relative to the staff.

RELATED LINKS
Changing the placement of dynamics relative to the staff on page 340

Inputting voice-specific dynamics with the mouse

You can input dynamics that are voice-specific with the mouse.

NOTE

If you have set your preference for mouse input to **Load cursor with item**, complete the tasks in this order: 2, 3, 1.

PROCEDURE

1. In Write mode, select the note to which you want to add a voice-specific dynamic.

2. Hold down **Alt**.

3. Click the dynamics you want in the **Dynamics** panel on the right of the window.

   Once you have input the dynamic level, such as f, you can release **Alt**.

4. Optional: click any dynamic modifiers you want in the **Dynamics** panel. You do not have to hold down **Alt** to add dynamic modifiers.

RESULT

The dynamics specified are input into the selected voice only. They are placed below the staff by default, even if they are input into an up-stem voice.

You can change the placement of individual dynamics relative to the staff later.

RELATED LINKS
Changing the placement of dynamics relative to the staff on page 340

Spacing for gradual dynamics

To ensure that hairpins can always be clearly distinguished, Dorico by default gives hairpins a minimum length of 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 rhythmic spacing of the note is changed to ensure the hairpin meets this minimum length.

You can change the project-wide settings for the minimum length of hairpins in **Engrave** > **Engraving Options**, by disclosing **Advanced Options** under the **Hairpins** heading of the **Gradual Dynamics** section of the **Dynamics** page.

Adjusting the spacing of gradual dynamics not attached to a notehead

If the start or end of a hairpin is not attached to a note, such as in the example, a *messa di voce* pair of hairpins is created with two separate hairpins, rather than the combined option. Neither of the open ends of the hairpins is attached to a specific notehead.

For example, if you wanted the dynamics peak of this example earlier in the middle bar, but not at the notehead, you can change the rhythmic position of the open end of each hairpin. You can use the following key commands to move the hairpin according to the rhythmic grid in the bottom left of the window:

- **Ctrl/Cmd**-**Alt**-**Left Arrow**

- **Ctrl/Cmd**-**Alt**-**Right Arrow**

NOTE

These key commands move the whole hairpin, not just one end.

You can adjust how hairpins appear distributed in a bar by activating **Note Spacing** on the left of the window in Engrave mode. This causes dashed lines representing spacing columns, and handles for each spacing-significant item, to appear.

NOTE

Adjusting note spacing affects the spacing in that bar for all staves.

RELATED LINKS
Changes to note spacing in Engrave mode on page 461
Note spacing on page 171

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 either to its end, or up to the next immediate dynamic with 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 line shows the link between the hairpin and the rhythmic position to which its end is attached.

RELATED LINKS
Lengthening and shortening gradual dynamics and groups of dynamics on page 339

Positions of dynamics

You can change the positions of dynamics by moving individual dynamics to different rhythmic positions in Write mode, moving them to different graphical positions in Engrave mode, and by changing the default positions of all dynamics project-wide.

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 project-wide settings for how far below the staff dynamics appear, and their horizontal positions relative to beats, barlines, and system ends on the **Dynamics** page in **Engrave** > **Engraving Options**.
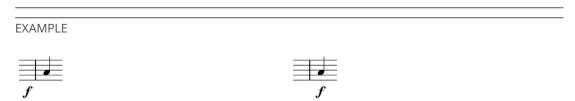
RELATED LINKS
Project-wide Engraving Options for dynamics on page 356

Changing the horizontal position of dynamics relative to the beat individually

You can individually select whether individual dynamics appear 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. Activate the **Beat-relative position** property in the **Dynamics** group of the Properties panel.

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 individually

Immediate dynamics, such as *ff* and *mp*, are usually horizontally aligned with the optical center of noteheads. However, you can change the horizontal alignment of immediate dynamics individually.

PROCEDURE

1. Select the dynamics whose alignment relative to noteheads you want to change. You can do this in Write mode and Engrave mode.

2. Activate the **Text alignment** property in the **Dynamics** group of the Properties panel.

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.

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NOTE

You can change the horizontal alignment of all immediate dynamics 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

Dynamics can only be moved to existing noteheads and attach to those rhythmic positions.

PROCEDURE

1. In Write mode, select the dynamics you want to move.
2. Move the dynamics to the next or previous notehead on the staff in any of the following ways:
   - Press **Alt-Right Arrow** to move them to the next notehead.
   - **Alt-Left Arrow** to move them to the previous notehead.
   - Click and drag the dynamic to the right or to the left to move it to different noteheads.

     NOTE

     Only one dynamic can be moved rhythmically at a time when using the mouse.

RESULT

The selected dynamics are moved to next or previous noteheads.

Moving dynamics graphically

You can move dynamics graphically, without changing the rhythmic positions to which they apply.

PROCEDURE

1. In Engrave mode, select the dynamics you want to move.
2. Move the dynamics 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 downwards.
   - Press **Alt-Down Arrow** to move them upwards.

     TIP

     If you want to move dynamics 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 dynamics in any direction to the positions you want.

Moving dynamics graphically using the Properties panel

You can move dynamics graphically using the Properties panel in Engrave mode.

PROCEDURE

1. In Engrave mode, select the dynamics you want to move.

2. Activate the following properties, individually or together, in the **Dynamics** group of the Properties panel:

   - **Start offset**

   - **End offset**

3. Each property has **X** and **Y** value fields. 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.

4. The properties move dynamics in the following ways:

   - **Start offset X** moves immediate dynamics and the start of gradual dynamics horizontally: increasing the value moves them to the right, decreasing the value moves them to the left.

   - **Start offset Y** moves immediate dynamics and the start of gradual dynamics vertically: increasing the value moves them upwards, decreasing the value moves them downwards.

   - **End offset X** moves the end of gradual dynamics horizontally: increasing the value moves them to the right, decreasing the value moves them to the left.

   - **End offset Y** moves the end of gradual dynamics vertically: increasing the value moves them upwards, decreasing the value moves them downwards.

Copying dynamics

Dynamics can be copied and pasted. 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.

Alternatively, if you want to copy dynamics immediately after where they were originally input, you can select them and press **R**.

Copying dynamics with the keyboard

You can copy dynamics to other rhythmic positions with the keyboard.

PROCEDURE

1. In Write mode, select the dynamics you want to copy in one of the following ways:

   - Hold down the **Ctrl/Cmd** key and select each dynamic.

   - Select the passage that contains the dynamics and choose **Edit** > **Filter** > **All Dynamics**.

- • Select the passage that contains the dynamics and choose **Edit** > **Filter** > **Gradual Dynamics**.

- • Select the passage that contains the dynamics 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 selected multiple dynamics at different rhythmic positions, their new positions reflect their original rhythmic spacing.

Copying dynamics with the mouse

PROCEDURE

1. Select the dynamics you want to copy in one of the following ways:

- • Hold down the **Ctrl/Cmd** key and select each dynamic.

- • Select the passage that contains the dynamics and choose **Edit** > **Filter** > **All Dynamics**.

- • Select the passage that contains the dynamics and choose **Edit** > **Filter** > **Gradual Dynamics**.

- • Select the passage that contains the dynamics and choose **Edit** > **Filter** > **Immediate Dynamics**.

2. Hold down **Alt**.

3. Click the notehead to which you want to copy the selected dynamics.

TIP

You can repeat this multiple times as long as you keep the dynamics highlighted. Using this method does not add the dynamics to the clipboard.

RESULT

The selected dynamics are copied to the selected note. You can select dynamics across multiple staves, as their relative rhythmic positions are maintained.

Deleting dynamics

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**.

Dynamics groups

Two or more dynamics are automatically grouped together if they immediately follow each other horizontally on the staff, were input in sequence, and have gradual dynamics between the immediate dynamics.

This means that they are aligned in a row, at the same vertical position, below or above the staff, and can be moved and edited as a group. For example, the f in the middle of the example on the left can be moved within the group, and the hairpins either side automatically adjust to compensate.

A group of dynamics.

The same group of dynamics adjusts to compensate when the # moves position.

All of the dynamics in a group are highlighted when any of the dynamics in the group are selected.

RELATED LINKS
Dynamics linked between multiple staves on page 349

Grouping dynamics together

PROCEDURE

1. In Write mode, select the dynamics you want to group together.
2. Group the dynamics together in any of the following ways:
   - Choose **Edit** > **Dynamics** > **Group Dynamics**.
   - Right-click and choose **Dynamics** > **Group Dynamics** from the context menu.

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 any remaining dynamics that were not selected in the group.

PROCEDURE

1. In Write mode, select the dynamics you want to remove from groups.
2. Ungroup the dynamics in one of the following ways:
   - Choose **Edit** > **Dynamics** > **Ungroup Dynamics**.

- Right-click and choose **Dynamics** > **Ungroup Dynamics** from the context menu.
- Choose **Edit** > **Dynamics** > **Remove from Group**.
- Right-click and choose **Dynamics** > **Remove from Group** 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 between multiple staves

Identical dynamics at the same rhythmic position on multiple staves are linked together automatically. This typically happens only when you copy and paste dynamics between staves.

Like grouped dynamics, 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.

Three linked dynamics, with only the top dynamic selected.

Moving just the top dynamic of the linked group automatically moves all three to match its new position.

If one linked dynamic is changed, for example, from *p* to *mf*, all dynamics linked to the changed dynamic are also changed.

Three linked dynamics, with only the top dynamic selected.

Changing just the top dynamic of the linked group to a different dynamic automatically changes the other two so that they are all the same.

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. Deleting one of these hairpins deletes all of them.

As shown in the examples, the hairpin is truncated by an existing dynamic in the first bar in the third staff. If you delete such a dynamic, the hairpin extends to match the length of the one originally input.

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.

Linking dynamics together

You can link dynamics that are not automatically linked together to allow simultaneous editing.

NOTE

Identical dynamics at the same rhythmic position on multiple staves are linked together automatically. This typically happens only when you copy and paste dynamics between staves.

PROCEDURE

1. In Write mode, select the dynamics you want to link together.

2. Link the dynamics in any of the following ways:

   - Choose **Edit** > **Dynamics** > **Link**.

   - Right-click and choose **Dynamics** > **Link** from the context menu.

RELATED LINKS
Dynamics linked between multiple staves on page 349

Unlinking dynamics

You can unlink dynamics, including dynamics that were linked automatically.

PROCEDURE

1. Select a dynamic from the linked group of dynamics you want to unlink.

2. Unlink the whole linked group in any of the following ways:

   - Choose **Edit** > **Dynamics** > **Unlink**.

   - Right-click and choose **Dynamics** > **Unlink** from the context menu.

RELATED LINKS
Dynamics linked between multiple staves on page 349

Individual changes to the appearance of dynamics

You can make changes to the appearance of dynamics individually, independently of your project-wide settings for the appearance of dynamics.

Changing the appearance of gradual dynamics individually

You can change the appearance of gradual dynamics individually, independently of your project-wide settings. By default, gradual dynamics appear either as hairpins, or as text instructions such as *cresc.* or *dim.*.

In Engrave mode, hairpins can be selected individually. Selected hairpins are highlighted and three adjustment handles appear at each end.

Gradual dynamics can be edited individually using handles in Engrave mode, and using properties in the Properties panel at the bottom of the window.

You can adjust the length of hairpins and the width of the aperture at each end by selecting these handles and moving them in 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 upwards.
- Press **Alt-Down Arrow** to move handles downwards.
- Click and drag them to the positions you want.

Alternatively, you can change the appearance of gradual dynamics individually using the Properties panel. Selecting hairpins in Engrave mode shows the following options in the **Dynamics** group:

Start offset

   Start offset X value moves immediate dynamics, and the start of gradual dynamics, horizontally.
   Start offset Y value moves immediate dynamics, and the start of gradual dynamics, vertically.

End offset

   End offset X value moves the end of gradual dynamics horizontally.
   End offset Y value moves the end of gradual dynamics vertically.

Type

   Choose how selected hairpins appear:

   - *Cresc.* or *dim.*: hairpin in one direction
   - *Messa di voce*: a pair of hairpins, crescendo and diminuendo

Gradual style

   Choose how selected gradual dynamics should appear:

   - **Hairpin**
   - *cresc./dim.* without a continuation line
   - *cresc...* with a continuation line
   - *cre-scen-do*: text spread across the duration of the gradual dynamic

Hairpin line style

   Choose the style of selected hairpin lines:

   - **Solid**

- **Dashed**
- **Dotted**

Niente

Activate to show a *niente* mark at the closed end of gradual dynamics.

Niente style

Choose the style of *niente* marks on selected hairpins:

- **Circle on hairpin**
- **Text**

Poco a poco

Activate or deactivate *poco a poco* text.

Hairpin shown as continuation

Choose whether a series of three immediate dynamics has two hairpins, or one hairpin that continues through the middle dynamic.

Separate hairpins.   Hairpins shown as continuation.

Hairpin thickness

Change the thickness of selected hairpin lines.

Hairpin open aperture/Hairpin closed aperture

Change the width of the open end of the hairpin, and the width of the closed end of the hairpin. If the hairpin crosses a system break or multiple system breaks, you can use these properties to widen or narrow each part of the hairpin separately. The two properties, **Hairpin open aperture** and **Hairpin closed aperture**, apply to each end of each segment, following the direction of the hairpin.

For example, if a diminuendo crosses a barline, the aperture at the left end of the part of the hairpin on the new system is open and the aperture at the right end is closed. This continues the volume change from loud to quiet, as shown in the below example.

A diminuendo that goes across a system break: aperture at the left end is open, aperture at the right end is closed.

The diminuendo continues onto a new system: aperture at the left end is open, aperture at the right end is closed.

Deactivating any of these properties returns the selected hairpins to your project-wide settings.

RELATED LINKS
[Project-wide Engraving Options for dynamics](#) on page 356

Changing the angle of hairpins

By default, hairpins are straight 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.

Each end of hairpins has three square handles in Engrave mode:

- The middle handle changes the offset position of the corresponding end of the hairpin.
- The two outer handles adjust the aperture width of the corresponding end of the hairpin.

A hairpin with the middle handle selected in Engrave mode.

PROCEDURE

1. In Engrave mode, select the middle handles of the hairpins whose angle you want to change.

   Hairpins do not have to be the same direction, or in the same staff.

2. Move handles up or down in any of the following ways:

   - Press **Alt**-**Up Arrow** and **Alt**-**Down Arrow**

     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 handles in any direction to the positions you want.

   - For handles at the start of hairpins: activate the **Start offset** property in the **Dynamics** group of the Properties panel, and change the **Y** value. Increasing the value moves handles upwards, decreasing the value moves handles downwards.

   - For handles at the end of hairpins: activate the **End offset** property in the **Dynamics** group of the Properties panel, and change the **Y** value. Increasing the value moves handles upwards, decreasing the value moves handles downwards.

RESULT

The angle of the selected hairpins is changed. Each end can be moved independently of the other.

NOTE

Changing only the start offset position with the keyboard or by activating the **Start offset** property only changes the position of the hairpin relative to the staff, not its angle. You must change the end offset position or activate the **End offset** property as well to change the angle of hairpins.

Dragging handles with the mouse changes the angle straight away.

Changing the aperture width of hairpins individually

The change in volume indicated by individual hairpins is shown in the distance between the two lines that make up hairpins at their apertures.

Hairpins typically have a closed end and an open end, although if the hairpin crosses a system or frame break, the closed end can appear with a small gap.

In Dorico, both of the two outer handles at each end of hairpins in Engrave mode can be used to change the aperture width. 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 middle handle selected in Engrave mode. Each end has three square handles: the two outer handles at each end change the aperture width of the hairpin.

To change the aperture width of hairpins individually:

PROCEDURE

1. In Engrave mode, select one of the outer handles of the hairpins whose aperture width you want to change.

   Hairpins do not have to be the same direction, or in the same staff.

2. Move the handles further apart or closer together in any of the following ways:

   - Press **Alt**-**Up Arrow** to move them further apart.

   - Press **Alt**-**Down Arrow** to move them closer together.

     NOTE

     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 upwards or downwards to your desired width.

   - For the open end of hairpins: activate the **Hairpin open aperture** property in the **Dynamics** group of the Properties panel, and change the value. Increasing the value makes apertures wider, decreasing the value makes apertures narrower.

   - For the closed end of hairpins: activate the **Hairpin closed aperture** property in the **Dynamics** group of the Properties panel, and change the value. Increasing the value makes apertures wider, decreasing the value makes apertures narrower.

RESULT

The apertures of the selected hairpins are changed.

NOTE

You can set minimum and maximum values for the width of hairpin apertures project-wide, including for hairpins across system and page breaks, by disclosing **Advanced Options** under the **Hairpins** heading of the **Gradual Dynamics** section of the **Dynamics** page.

Changing the appearance of niente hairpins

Niente hairpins 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 show *niente* hairpins in both ways in Dorico, and you can change how they appear individually, independently of your project-wide setting for the appearance of *niente* hairpins.

PROCEDURE

1. Select the hairpins whose *niente* style you want to change. You can do this in Write mode and Engrave mode.

2. Activate **Niente style** in the **Dynamics** group of the Properties panel.

3. Choose one of the following options:

- **Circle on hairpin**

- **Text**

RESULT

The *niente* style of the selected hairpins is changed.

NOTE

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
Project-wide Engraving Options for dynamics on page 356

Showing dynamics in parentheses

PROCEDURE

1. Select the dynamics you want to appear parenthesized. This can be done in Write mode and Engrave mode.

2. Activate **Parenthesized** in the **Dynamics** group of the Properties panel.

RESULT

The dynamics selected are shown in parentheses. Each dynamic is parenthesized individually.

Hiding immediate dynamics

You can hide immediate dynamics such as ♯ and ♯, for example, if you only want to show an expressive text and not the immediate dynamic that accompanies it.

PROCEDURE

1. Select the dynamics whose intensity markings you want to hide. This can be done in Write mode and Engrave mode.

2. Activate **Hide intensity marking** in the **Dynamics** group of the Properties panel.

RESULT

The selected immediate dynamics are hidden. Their positions are indicated by signposts.

NOTE

You can show immediate dynamics again at any time by deactivating the **Hide intensity marking** property.

Project-wide Engraving Options for dynamics

Options for the appearance and position of dynamics project-wide can be found 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.

You can open **Engraving Options** in the following ways:

- Press **Ctrl/Cmd-Shift-E** in any mode.
- Choose **Engrave** > **Engraving Options** in Engrave mode.

Changes to the font styles used for dynamics

You can change different aspects of the fonts used for dynamics in the **Edit Font Styles** dialog in Engrave mode.

The following fonts affect the appearance of dynamics:

- **Default Text Font**: changes all font styles in the project, including dynamic modifiers.
- **Dynamic Text Font**: changes the font for dynamic modifiers, including expressive text.
- **Dynamic Music Text Font**: changes the font used for dynamic glyphs, such as *pf* and *mp*.

Changes made to each font style apply to the entire project, including parts.

The different aspects of the font styles used for dynamics that you can change are:

Font family

This sets the overall font style.

Size

This sets the size of dynamics. Dynamic size can be:

- **Absolute**: always the set size, regardless of the staff size.
- **Staff-relative**: the size of dynamics is proportional to the staff size, which means dynamics appear smaller than the set value on smaller staves, and larger than the set value on larger staves.

Style

This sets the dynamic font appearance. The dynamic font can be:

- **Regular** (default for **Dynamic Music Text Font**)
- **Italic** (default for **Dynamic Text Font**)
- **Bold**
- **Bold Italic**

Underlined

The dynamic font appears underlined if the box beside the **Underlined** activation switch is checked.

Changing the fonts used for dynamic modifiers

There are two fonts that you can change that affect dynamic modifiers.

- 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 affects all dynamic modifiers, including expressive text, but does not affect any other font style.

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Font Styles** to open the **Font Styles** dialog.

2. Select one of the following fonts from the **Font style** menu:

    - **Default Text Font**

    - **Dynamic Text Font**

3. Activate the switch beside the following options to change the corresponding aspects of the selected font:

    - **Font family**

    - **Size**

    - **Style**

    - **Underlined**

4. 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 project-wide.

Changing the font used for dynamic glyphs

You can change the font used for dynamic glyphs. However, only specific fonts can be used.

The font used for dynamic glyphs, such as *mf* or *ff*, have 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 is unlikely to be able to find the correct one.

SMuFL-compliant fonts include Bravura and November.

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Font Styles** to open the **Edit Font Styles** dialog.

2. Choose **Dynamic Music Text Font** from the **Font style** menu.

3. Activate the switch beside the following options to change the corresponding aspects 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
Changes to the font styles used for dynamics on page 356

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** dialog.

You can open the Playback Options dialog 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

At the top of the **Dynamics** page in **Playback Options**, there is a graph that maps a continuous curve. This determines how dynamic volume increases across the range $ppppp$ to $ffffff$.

A dynamic curve power of 1 creates a straight line, producing a steady dynamic increase. The difference between $pppp$ and pp is the same as between p and 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 $pppp$ and pp is much smaller than the difference between p and mf.

The higher the dynamic curve power, the greater the contrast between dynamics in the middle of the range, and the smaller the contrast between dynamics at the ends of the range.

If your project uses a wide range of dynamics, including dynamics such as $pppp$ and $ffff$, 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 pp to a maximum of ff, you might prefer a higher curve power, so the differences between the dynamics in the middle of the range are more discernible.

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 in **Playback Options**, you can set how much the volume of notes in playback is affected by stresses and articulation marks.

Humanize

The **Humanize** option allows the dynamics of notes 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.

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 Setup** 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 tend to use note velocity for dynamics, because this is set at the start of the note.

You can control settings for each software instrument by choosing **Play** > **Expression Maps Setup** and selecting software instruments from the list on the left.

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

Fingering

Fingerings can be added to music to give recommendations as to which fingers players should use for notes. This can be useful for difficult or physically awkward passages of music where certain fingering patterns make the notes much easier to play.

Fingerings are commonly added to music designed for players who are learning the instrument, such as in educational music and exam syllabus editions of pieces.

They are most often used in keyboard music, as players can use all ten fingers to play notes. However, fingerings can 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 particular 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
The fingerings popover on page 361
Changing the fingering font used for fingerings project-wide on page 365

General placement conventions for fingering

Fingerings are placed as close as possible to the notes to which they apply, so they can be read easily and clearly by the performer.

In music for keyboards and other instruments that use two staves, it is accepted to place fingerings for the right hand above the top staff, and the fingerings for the left hand below bottom staff.

However, in dense contrapuntal music for instruments that use two staves, fingerings can be placed between the staves to follow the direction of the voices to which they apply.

Adding fingerings to notes

Fingerings are associated with individual noteheads and so can only be added 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 added to the selected notes.

RELATED LINKS
Changing the rhythmic positions of substitution fingerings on page 363
Fingerings for valved brass instruments on page 372

The fingerings popover

Here are some examples of what to enter into the fingerings popover and the fingerings that are input as a result.

For example, enter:	For fingerings:
`1` or `2` or `3` and so on	Single fingerings for individual notes, including for brass valve numbers and trombone slide positions
`12`	Valved brass instruments
`1,3,5`	Single fingerings for each note in chords
	NOTE
	For keyboards, Dorico automatically orders numbers appropriately according to the hand playing the notes. The default is:
	• Right hand for the upper staff

For example, enter:	For fingerings:
	● Left hand for the lower staff
`L2` or `G2` or `S5` or `I2` or `H2`	Left hand fingerings
`R5` or `D5` or `M5`	Right hand fingerings
`2343`	Multiple fingerings for individual notes. For example, for ornaments such as mordents or turns
`1,1`	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.
`2(3)`	Alternative fingerings **NOTE** You must use parentheses in the popover, even if you choose to show alternative fingerings in square brackets.
`[4]`	Editorial fingerings **NOTE** You must use square brackets in the popover, even if you choose to show alternative fingerings in parentheses.
`1-3`	Finger substitutions
`T`	Thumb indicator for string instruments.

This list is not comprehensive: it is intended to illustrate how you can structure your entries to input different types of fingerings.

You can change the appearance and positions of each type of fingering on the **Fingering** page in **Engrave** > **Engraving Options**.

NOTE

Finger substitutions are shown as immediate by default, but you can change the rhythmic position of the substitution by changing the deferral duration.

RELATED LINKS

Changing the rhythmic positions of substitution fingerings

Substitution fingerings are shown as immediate by default, meaning that the substitution takes place on the same note. You can change the rhythmic position at which individual substitutions take place to indicate where players should change the finger used for the note.

PROCEDURE

1. Select the substitution fingering whose deferred rhythmic position you want to change.
2. Change the rhythmic position of the substitution in any of the following ways:
   - In Write mode, click and drag the circular handle to the right or to the left to the position you want.
   - In Write mode and Engrave mode, activate the **Substitution offset** property in the Fingering group of the Properties panel.

     Change the rhythmic position of substitutions as fractions of a quarter note by entering a value into the first value field, or by clicking the arrows beside the value field. Increasing the value moves them to later positions, decreasing the value moves them to earlier positions.

     NOTE

     The second value is for the grace note position at which substitutions occur. Normally you do not need to set this value.

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 when using the **Substitution offset** property 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
The fingerings popover on page 361
Project-wide Engraving Options for fingerings on page 365

Changing existing fingerings

You can change the fingering numbers of existing fingerings using the Properties panel. Alternatively, you can add replacement 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. Enter the new fingering you want in the **Finger or position** value field in the **Fingering and Positions** group of the Properties panel.

RESULT

The number shown in the selected fingerings is changed.

RELATED LINKS

Deleting fingerings

Because fingerings are intrinsically linked to noteheads, you cannot select fingerings separately from noteheads and delete them. You must deactivate the **Finger or position** property for selected notes.

PROCEDURE

1. Select the fingerings you want to delete in the following ways:

    - Hold **Ctrl/Cmd** and click the corresponding notes individually in Write mode.

    - Hold **Ctrl/Cmd** and click the fingerings individually in Engrave mode.

    - Hold **Shift** and select multiple adjacent notes in Write mode.

    - Make a marquee selection and choose **Edit** > **Filter** > **Notes and Chords**.

2. Deactivate the **Finger or position** property in the **Fingering and Positions** group of the Properties panel.

RESULT

All fingerings are deleted from the selected notes or fingerings.

Project-wide changes to the appearance and placement of fingerings

You can change the appearance and placement of all fingerings project-wide on the **Fingering** page in **Engraving Options**. You can also change the font styles of the fonts used for fingerings in the **Font Styles** dialog.

Font Styles dialog

In the **Engrave** > **Font Styles** dialog, you can change different aspects of the fonts used for fingerings:

- **Fingering Font**: used for bold fingerings

- **Fingering Text Font**: used for plain fingerings

NOTE

Changes made to font styles apply to the entire project, including parts.

The different aspects of the fingering font styles that you can change are:

Font family

Sets the overall font style.

Size

Sets the size of fingerings for all layouts in the project, meaning the size is the same in the score and parts. Fingering size can be:

- **Absolute**: always the set size, regardless of the staff size.

- **Staff-relative**: the size of fingerings is proportional to the staff size, which means fingerings appear smaller than the set value on smaller staves, and larger than the set value on larger staves.

Style

This sets the font appearance. Fonts can be:

- **Regular** (default for **Fingering Text Font**)
- **Italic**
- **Bold** (default for **Fingering Font**)
- **Bold Italic**

Underlined

The fingering fonts appear underlined if the box beside the **Underlined** activation switch is checked.

RELATED LINKS
[Project-wide Engraving Options for fingerings](#) on page 365

Project-wide Engraving Options for fingerings

Options for the appearance and positions of fingerings project-wide can be found on the **Fingering** page in **Engraving Options**.

The options on this 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.

Many options are accompanied by musical examples to demonstrate how each option affects the appearance of your music.

You can open **Engraving Options** in 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 fingering font used for fingerings project-wide

By default, fingerings are drawn in a bold, roman font that is similar in appearance to the digits in time signatures. You can change the fingering 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 thumb indicator, substitution lines and slurs, and brass valve separators are not changed.

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Engraving Options**.
2. Click **Fingering** in the page list.
3. Choose one of the following options for **Fingering appearance** in the **Design** section:
   - **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 **Engrave** > **Font Styles** dialog.

Bold fingerings use the **Fingering Font**.

Plain fingerings use the **Fingering Text Font**.

RELATED LINKS
Changing the fingering font styles on page 366

Changing the fingering font styles

You can change the font styles used for fingerings.

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Font Styles** to open the **Font Styles** dialog.

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 switches beside the following options to change the corresponding aspects of the font:

- **Font family**
- **Size**
- **Style**
- **Underlined**

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

RESULT

The selected fingering font style is changed project-wide.

RELATED LINKS
Project-wide changes to the appearance and placement of fingerings on page 364
Project-wide Engraving Options for fingerings on page 365

Changing the appearance of cautionary fingerings project-wide

Cautionary fingerings remind players fingerings specified at previous rhythmic positions still apply notes that are still sounding. Dorico automatically shows cautionary fingerings when you

add other fingerings at rhythmic positions where notes previously given fingerings are still sounding

By default, cautionary fingerings are shown enclosed in parentheses. You can choose to show cautionary fingerings without parentheses or not 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**.

2. Click **Fingering** in the page list.

3. Choose one of the following options for **Cautionary fingering appearance** in the **Alternative, Editorial and Cautionary** section:

    *   **Do not show**

    *   **Show fingering only**

    *   **Show fingering in parentheses**

4. Click **Apply**, then **Close**.

RESULT

The appearance of cautionary accidentals is changed project-wide.

Changing the appearance of slide positions for brass instruments

You can choose to 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**.

2. Click **Fingering** in the page list.

3. Choose one of the following options for **Trombone slide position appearance** in the **Brass** section:

    *   **Arabic numerals**

    *   **Roman numerals**

4. Click **Apply**, then **Close**.

RESULT

The numerals used for slide positions on slide brass instruments is changed project-wide.

Individual changes to the appearance and placement of fingerings

You can change the appearance and placement of fingerings individually, independently of you project-wide settings on the **Fingering** page in **Engraving Options**.

You can select individual fingerings in Write mode and Engrave mode and activate properties in the Fingering group of the Properties panel, however there are more properties available in Engrave mode than Write mode.

NOTE

In Write mode, you cannot select fingerings independently of the noteheads to which they apply, but in Engrave mode you can select fingerings without selecting their noteheads as well.

Showing individual fingerings in italics

Fingerings are normally shown in a bold, non-italic font, however you can show individual fingerings in italics.

PROCEDURE

1. In Engrave mode, select the fingerings you want to show in italics.
2. Activate the **Italic** property in the **Fingering** group of the Properties panel.

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 may be confusing.

Changing the placement of fingerings relative to the staff individually

Dorico automatically follows conventions for fingering placement, however you can change the placement of fingerings relative to the staff individually, independently of your project-wide setting for fingering placement relative to the staff.

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. Activate the **Staff-relative position** property in the **Fingering and Positions** group of the Properties panel.
3. Choose one of the following options:

   - **Above**

- **Below**

RESULT

The position of the selected fingerings relative to the staff is changed.

NOTE

You can change the placement of all fingerings project-wide to follow stem 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 365

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 starts or ends 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. Activate the **Slur-relative position** property in the **Fingering and Positions** group of the Properties panel.

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.

You can change the position of all fingerings relative to slurs project-wide on the **Fingering** page in **Engrave** > **Engraving Options**.

RELATED LINKS
Project-wide Engraving Options for fingerings on page 365

Showing horn branch indicators

You can indicate the branch notes should be played on 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.

PROCEDURE

1. Select the horn fingerings to which you want to add branch indicators. You can do this in Write mode and Engrave mode.

   NOTE

   You can only add branch indicators to notes belonging to horns in F.

2. Activate the **Horn branch** property in the **Fingering and Positions** group of the Properties panel.

3. Select the horn branch you want from the menu:

   - **F**
   - **B flat**
   - **F alto**
   - **E flat alto**
   - **Thumb trigger**

RESULT

Branch indicators are added to the selected fingerings.

You can change the appearance of branch indicators in the **Horn Branch Indicators** section of the **Fingering** page in **Engrave** > **Engraving Options**.

NOTE

Dorico does not ascertain the validity of branch indicators.

RELATED LINKS
Adding fingerings to notes on page 360
Project-wide Engraving Options for fingerings on page 365

Moving fingerings graphically

You can move fingerings graphically, and independently of the noteheads to which they apply, with the keyboard and mouse in Engrave mode.

NOTE

Fingerings cannot be moved to different rhythmic positions as they are intrinsic parts of notes. If you want to move fingerings to other noteheads, delete the existing fingerings and input them again 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 them in any of the following ways:

   - **Alt**-**Right Arrow**
   - **Alt**-**Left Arrow**

- **Alt**-**Up Arrow**
- **Alt**-**Down Arrow**

NOTE

If you want to move fingerings 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 fingerings in any direction to the positions you want.

RELATED LINKS

Moving fingerings graphically using the Properties panel

You can move fingerings graphically, and independently of the noteheads to which they apply, using the Properties panel in Engrave mode.

PROCEDURE

1. In Engrave mode, select the fingerings you want to move graphically.
2. Activate the **Offset** property in the **Fingering and Positions** group of the Properties panel.
3. The **Offset** property has **X** and **Y** value fields. 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.

4. The **Offset** property moves fingerings in the following ways:

   - **Offset X** moves fingerings horizontally: increasing the value moves them to the right, decreasing the value moves them to the left.
   - **Offset Y** moves fingerings vertically: increasing the value moves them upwards, decreasing the value moves them downwards.

RELATED LINKS

Resetting the positions of fingerings individually

You can reset the positions of 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**
   - Deactivate the **Offset** property in the **Fingering and Positions** group of the Properties panel

Fingerings for valved brass instruments

For instruments like trumpet and horn, fingering is used to show which valves need to be depressed to produce a specific note. For example, to play C♯ on a trumpet, the first two valves must be depressed.

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.

By default, Dorico automatically stacks fingerings added to notes on brass instrument staves vertically, and inserts a dot between the numbers.

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 a separator or show no separator.

RELATED LINKS
The fingerings popover on page 361
Adding fingerings to notes on page 360

Showing fingering shifts for string instruments

An angled line can be used to indicate the direction of movement when string players have to shift position on the fingerboard to play a higher note or a lower note with the same finger as the previous note.

PREREQUISITE

Specify that the notes between which you want to show shift indicators are both played on the same string.

NOTE

Shift indicators are shown whether the notes at each end have explicit fingerings or not.

PROCEDURE

1. Select the notes or fingerings in string instrument staves from which you want to indicate a fingering shift. You can do this in Write mode and Engrave mode.

2. Activate the **Indicate shift to next note** property in the **Fingering and Positions** group of the Properties panel.

RESULT

Shift indicators are shown positioned between the selected notes and the notes that immediately follow them.

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 (string instruments only) on page 459

Changing the direction of string fingering shift indicators individually

You can change the direction of individual string fingering shift indicators, if they are shown pointing in the opposite direction to the one you expected.

PROCEDURE

1. Select the shift indicators whose direction you want to change. You can do this in Write mode and Engrave mode.

2. Activate the **Shift direction** property in the **Fingering and Positions** group of the Properties panel.

3. Choose one of the following options:

    - **Up**
    - **Down**

RESULT

The direction of the selected shift indicators is changed.

Importing fingerings from MusicXML files

Fingerings that are specified using the fingering element in MusicXML files, that is are imported by Dorico.

For example, MusicXML files exported from Finale typically represent fingerings in the correct way, however Sibelius does not.

Therefore 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, such as:

- Dedications
- Titles
- Subtitles
- Composers

As all information in your project that is not the music must be added within frames, which are input and edited in Engrave mode, lots of relevant information for front matter is included in Engrave mode topics.

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 completely 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.

RELATED LINKS

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, which are also known as "wildcards", are codes that insert text from elsewhere, and that text is updated automatically if its source is changed.

The default master pages include tokens, so that any information you include for each flow in the **File** > **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

Dedications are usually shown above titles in scores. They generally use a smaller font size than titles, and are shown in italics.

In Dorico, dedications are not shown in scores and parts by default, even if you enter a dedication in the **Dedication** field in the **Project Info** dialog.

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

If you want to show dedications in your scores and parts, you must input them manually.

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 the titles in scores, select **Default Full Score**.

2. Double-click on the master page to which you want to add a dedication. For example, if you are using the default master pages, double-click **First**.

3. In the master page editor, activate **Frames** in the Formatting panel.

4. Select the title text frame.

5. Open the text editor in one of the following ways:

   - Press **Return**.

   - Double-click within the text frame.

6. Position the caret at the left end of the title token.

7. Press **Return** to input a new line above the title token.

8. 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.

9. Change the text style of the dedication in any of the following ways:

   - Create a new paragraph style for dedications, and select it from the **Paragraph Style** menu in the text editor.

   - Change the font size in the text editor.

   - Change the character style in the text editor.

10. Close the text editor in any of the following ways:

    - Press **Esc** or **Ctrl/Cmd-Enter**.

    - Click anywhere outside 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 fields in the **Project Info** dialog.

RELATED LINKS

Creating paragraph styles on page 154
Text Editor on page 151

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 Parts**.

2. Double-click on the master page whose running header text you want to change. For example, if you are using the default master pages, double-click **Default**.

3. In the master page editor, activate **Frames** in the Formatting panel.

4. Select the header text frame at the top of the page.

5. Open the text editor in one of the following ways:

   - Press **Return**.

- Double-click within the text frame.

6. Change the header text and add extra text, or delete the header text, as you want.

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.

7. Close the text editor in any of the following ways:

- Press **Esc**.

- Press **Ctrl/Cmd**-**Enter**.

- Click anywhere outside the text editor.

RESULT

The running header text is changed for all layouts that use the selected master page format.

EXAMPLE

{@layoutName@} - {@flowTitle@}

Text added to the text frame in the master page editor.

Violin I - Allegro con moto

An example of how the added text appears in individual part layouts.

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 may want to include project information on the first page of the first flow in the project, but not on subsequent flows.

RELATED LINKS
Frames on page 145
Inserting frames into pages on page 145
Moving frames individually on page 146
Changing the size and shape of frames individually on page 146

Changing the default horizontal alignment of different text styles project-wide

You can change the default alignment of each text style available in the **Paragraph Styles** dialog. This changes the alignment of that text style wherever it is used in the project, but the alignment can also be manually overridden in individual text frames.

PROCEDURE

1. In Engrave mode, open the **Paragraph Styles** dialog by choosing **Engrave** > **Paragraph Styles**.

2. Select the text style whose default alignment you want to change from the list on the left of the dialog.

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.

NOTE

You can change other aspects of text styles in the **Paragraph Styles** dialog.

RELATED LINKS
Paragraph styles on page 152
Changing the horizontal alignment of text in text frames on page 149

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.

NOTE

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. Select one of the following options from the **Vertical alignment** menu in the **Text** group of the Properties panel:

   - **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 137

Grace notes

Grace notes are small notes that are intended to be played quickly. They are scaled-down versions of normal noteheads, 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 squeezed 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 and sixteenth notes, they can be beamed together.

In Dorico, grace notes are scaled to 3/5 the size of a normal notehead by default.

General placement conventions for 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 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.

Grace notes 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.

Articulation and accidentals can be added to grace notes. Adding accidentals causes their spacing to readjust so that the accidentals are clearly legible, similar to normal notes. Articulation can be added to grace notes wherever it is most clearly legible, which is most likely outside the staff. Dorico automatically places articulation on the stem-side of grace notes, and outside the staff if the stem or beam is within the staff.

Grace note stem slashes should always 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.

Grace note placement in staves with multiple voices

According to accepted notation convention, grace notes appear stem up by default when there is only one voice in a staff, even if the notehead to which they are attached is stem down.

However, when there are multiple voices in 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.

Positioning grace notes before barlines

Grace notes by default are positioned directly before the notehead to which they apply, including for the first note in a bar.

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.

PROCEDURE

1. Select the grace notes that you want to reposition before barlines. You can do this in Write mode and Engrave mode.

2. Activate the **Grace note before barline** property in the **Grace Notes** group of the Properties panel.

RESULT

The selected grace notes are repositioned before the barline.

NOTE

This property can only be activated for grace notes that immediately follow a barline.

Inputting grace notes with the keyboard

Grace notes are input like normal notes, and can have any rhythmic note value. Like normal notes, they can only be input during note input.

PROCEDURE

1. In Write mode, start note input.

2. Position the caret at the rhythmic position where you want to input grace notes.

3. Press **/**, and the number for the rhythmic duration you want. For example, press **5** to input eighth notes.

> TIP
>
> These can be selected in any order.

4. Enter or play in the pitches you want.

5. Press **/** again to stop inputting grace notes, and return to inputting normal notes.

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.

RELATED LINKS
Inputting notes on page 94

Inputting grace notes with the mouse

Grace notes are input like normal notes, and can have any rhythmic note value. Like normal notes, they can only be input during note input.

PROCEDURE

1. In Write mode, start note input.

2. Position the caret at the rhythmic position where you want to input grace notes.

3. Click **Grace Notes** in the Notes toolbox:

You can also select the rhythmic duration you want in the Notes panel.

> TIP
>
> These can be selected in any order.

4. Click in or play in the pitches you want.

5. Click on the grace notes button again to stop inputting grace notes, and return to inputting normal notes.

RESULT

The pitches you click in 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.

RELATED LINKS
Inputting notes on page 94

Changing the pitch of grace notes

The pitch of grace notes can be changed after they have been input in the same ways as for normal notes.

PROCEDURE

1. In Write mode, select the grace notes whose pitch you want to change.

2. Change the pitch of the grace notes in any of the following ways:

- Press **Alt-Up Arrow** to transpose grace notes up one pitch.

- Press **Ctrl/Cmd-Alt-Up Arrow** to transpose grace notes up one octave.

- Press **Alt-Down Arrow** to transpose grace notes down one pitch.

- Press **Ctrl/Cmd-Alt-Down Arrow** to transpose grace notes down one octave.

Adding accidentals and articulation to grace notes

Accidentals and articulation can be added to grace notes in the same ways as they can be added to normal notes.

You can input grace notes instead of normal notes during note input in the following ways:

- Press **/**.

- Click the grace notes button in the Notes panel:

RELATED LINKS

Slurs on grace notes

Slurs can be used on grace notes in the same ways as they can be used on normal notes.

You can adjust the position and shape of slurs on grace notes individually 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

Moving grace notes rhythmically

You can move grace notes to different rhythmic positions on the staff after they have been input.

PROCEDURE

1. In Write mode, select the grace notes you want to move.
2. Move the selected grace notes 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 grace notes are moved to the right or to the left along the staff, according to the rhythmic grid currently set.

RELATED LINKS
Changes to note spacing in Engrave mode on page 461

Deleting grace notes

PROCEDURE

1. In Write mode, select the grace notes you want to delete.
2. Delete the grace notes in any of the following ways:
   - Press **Backspace** or **Delete**.
   - Choose **Edit** > **Delete**.

RESULT

The selected grace notes are deleted. If other grace notes remain at the rhythmic position, their positions are automatically adjusted.

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 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.
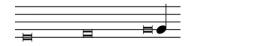
A grace note with the default minimum value of half a space between it and the notehead to its right.

A grace note with an increased value of 1.5 spaces between it and the notehead to its right.
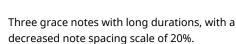
You can also adjust the position of grace notes for each layout project-wide by changing the note spacing scale factor for grace notes. This setting can be found on the **Note Spacing** page in **Layout Options.** You can open **Layout Options** in the following ways:

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

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

The position of slurs relative to grace notes can be set 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 566

Project-wide changes to the position of grace note beams

You can make project-wide changes to the position of grace note beams in the staff.

Position of grace note beams in the staff

Like all beams, grace note beams should 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 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 noteheads, 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 or 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.

These can be set 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 thickness of grace note stem slashes.
- Change the default length of grace note stem slashes.
- Change the 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.

You can change the appearance of grace notes using properties in the **Grace Notes** group of the Properties panel at the bottom of the window. 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.

RELATED LINKS

Changing the type of grace notes individually

There are two types of grace note: one has a stem slash, the other does not have a stem slash.
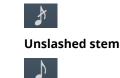
Grace notes with slashed stems, known as acciaccaturas, are often played with a shorter duration than grace notes without slashed stems, known as *appoggiaturas*.

In Dorico, grace notes appear with slashed stems by default.

You can change the type of grace notes individually.

PROCEDURE

1. Select the grace notes whose type you want to change. You can do this in Write mode and Engrave mode.

2. Choose one of the following options for the **Grace note type** property in the **Grace Notes** group of the Properties panel:

   - **Slashed stem**

   - **Unslashed stem**

RESULT

The type of grace note for the selected grace notes is changed.

This process can be repeated at any time if you want to change grace notes back to their original type.

Changing the stem direction of grace notes individually

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 in a staff.

You can also change the stem direction of individual grace notes manually.

PROCEDURE

1. Select the grace notes whose stem directions you want to change. You can do this in Write mode and Engrave mode.

2. Change the stem direction of the selected grace notes in any of the following ways:

   - Choose **Edit** > **Stem** > **Force Stem Down**.
   - Right-click and choose **Stem** > **Force Stem Down** from the context menu.
   - Choose **Edit** > **Stem** > **Force Stem Up**.
   - Right-click and choose **Stem** > **Force Stem Up** from the context menu.

Removing grace note stem direction changes

You can remove changes to the stem direction of grace notes.

PROCEDURE

1. Select the grace notes whose stem direction changes you want to remove.

2. Remove the stem direction change in any of the following ways:

   - Choose **Edit** > **Stem** > **Remove Forced Stem**.
   - Right-click and choose **Stem** > **Remove Forced Stem** from the context menu.

RESULT

The grace note stems revert to their default directions.

Alternatively, you can remove a stem direction change individually by forcing its stem in the opposite direction.

Changing the stem length of grace notes individually

You can make individual changes to the length of grace note stems.

PROCEDURE

1. In Engrave mode, select the stems of the grace notes whose the stem lengths you want to change.

2. Change the grace note stem length in any of the following ways:

    - Press **Alt-Up Arrow** to move the ends of stems upwards.

    - Press **Alt-Down Arrow** to move the ends of stems downwards.

    - Click and drag the ends of stems upwards or downwards to the lengths you want.

RESULT

Moving the end of an up-stem grace note upwards lengthens the grace note stem, and moving the end of an up-stem grace note downwards shortens the grace note stem.

Moving the end of a down-stem grace note upwards shortens the grace note stem, and moving the end of a down-stem grace note downwards lengthens the grace note stem.

Changing the position of slashes on grace note stems individually

You can change the positions of grace note slashes individually, independently of your project-wide settings for the positions of grace note slashes.

PROCEDURE

1. In Engrave mode, select the grace notes whose slash positions you want to change.

2. Activate the following properties, individually or together, in the **Grace Notes** group of the Properties panel:

    - **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.

4. The properties change the position of grace note slashes in the following ways:

    - **Slash inset from stem tip** moves grace note slashes vertically: increasing the value moves them further from the tips of stems, decreasing the value moves them closer to the tips of stems.

    - **Slash offset to right** moves grace note slashes horizontally: increasing the value moves them to the right, decreasing the value moves them to the left.

Changing the length of grace note slashes individually

You can change the length of slashes on grace note stems individually, independently of your project-wide setting for the length of grace note slashes.

PROCEDURE

1. In Engrave mode, select the grace notes whose slash length you want to change.

2. Activate the following properties, individually or together, in the **Grace Notes** group of the Properties panel.

   - **Slash length**

   - **Slash protrusion from beam** (beamed grace notes only)

   NOTE

   Grace note slashes seem to disappear when you activate the `Slash length` property. 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.

4. The properties change the length of grace note slashes in the following ways:

   - Increasing the value for **Slash length** lengthens grace note slashes.

   - Decreasing the value for **Slash length** shortens grace note slashes.

   - Increasing the value for **Slash protrusion from beam** increases how far slashes extend beyond grace note beams.

   - Decreasing the value for **Slash protrusion from beam** decreases how far slashes extend beyond grace note beams.

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 or hold does not need to be specified, and so significant room for interpretation is left, even though the different styles of holds and pauses normally indicate larger or smaller breaks.

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 should be 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

These show where a player should breathe, or suggest how the music should be phrased to create a similar effect.

Caesuras

These indicate that a note should be sustained for its full value, then be followed by a break in sound before continuing.

Types of fermata

There are eight types of fermata available in Dorico.

Fermata	Description
Very short fermata (⸶)	A pause, indicating a note should be held only a fraction longer than the rhythm indicates.
Short fermata (ᶺ)	A pause, indicating a note should be held a little bit longer than the rhythm indicates.
Short fermata (Henze) (◠̂)	A pause, indicating a note should be held a little bit longer than the rhythm indicates, as used by Hans Werner Henze.
Fermata (◠̂)	A pause, indicating a note should be held for longer than the rhythm indicates.

Fermata	Description
Long fermata (ᵔ)	A pause, indicating a note should be held quite a lot longer than the rhythm indicates.
Long fermata (Henze) (ᵔ)	A pause, indicating a note should be held quite a lot longer than the rhythm indicates, as used by Hans Werner Henze.
Very long fermata (ᵔ)	A pause, indicating a note should be held for much longer than the rhythm indicates.
Curlew (Britten) (ᵔ)	A pause, indicating a note or rest should be held until the next synchronization point in asynchronous music, as used by Benjamin Britten.

The fermatas can be divided into two styles, which should not both be used in the same score because they overlap:

Style:	Very short fermata	Short fermata	Fermata	Long fermata	Very long fermata
Normal:	⩕	⋀	⌢	⊓	⊓
Henze:	N/A	⌢	⌢	⌢	N/A

RELATED LINKS
The holds and pauses popover on page 392
Changing the appearance or duration of existing holds and pauses on page 396

Types of breath marks

There are four types of breath marks available in Dorico.

- Comma-like (ʼ)
- Tick-like (✓)
- Upbow-like (ᵥ)
- Salzedo (ˀ)

All indicate the same idea: showing where a player should take a breath, or create a musical effect like a breath.

RELATED LINKS
The holds and pauses popover on page 392
Changing the appearance or duration of existing holds and pauses on page 396

Types of caesura

There are four types of caesura available in Dorico, each of which indicate a break in sound.

Caesura	Description
Caesura (⸜)	Two diagonal slashes.
Thick caesura (**″**)	Two thick diagonal slashes.
Short caesura (ǂ)	Two straight, vertical slashes.
Curved caesura (⸝)	Two curved diagonal slashes.

All four caesuras indicate the same effect, but different types are often needed for different styles of musical scores.

If you intend to communicate a specific length of hold or gap with each type of caesura, consider adding a legend, as different players may interpret these symbols differently.

RELATED LINKS
The holds and pauses popover on page 392
Changing the appearance or duration of existing holds and pauses on page 396

General placement conventions for holds and pauses

Holds and pauses are always placed above the staff. For staves with multiple voices, fermatas can be placed inverted below the staff.

Fermatas

Fermatas are positioned centered on noteheads, regardless of the note's stem direction.

Because fermatas affect the overall tempo of the piece, all players must be able to see where this happens. As such, fermatas are added to 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 ideal 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 good place to break their line in order to breathe.

You can change the ideal distance between breath marks and the staff, and between breath marks and the next note or rest, on the **Holds and Pauses** page in **Engrave** > **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 **Engrave** > **Engraving Options**.

Inputting holds and pauses with the keyboard

You can input holds and pauses with the keyboard by using the holds and pauses popover in Write mode.

You can open the holds and pauses popover in Write mode in 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.

The holds and pauses popover with an example entry for a hold or pause

The holds and pauses button in the Notations toolbox

The 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 the following ways:

- Press **Shift-H**.
- Choose **Write** > **Create Hold or Pause**.

Enter:	For hold or pause:
fermata	Fermata (⌢)
fermataverylong	Very long fermata (⊓)
fermatalong	Long fermata (⊓)
fermatashort	Short fermata (⌃)
fermataveryshort	Very short fermata (⌃)
fermatashorthenze	Short fermata (Henze) (⌃)
fermatalonghenze	Long fermata (Henze) (⌃)
curlew	Curlew (Britten) (⌢)
caesura or //	Caesura (⫽)

Enter:	For hold or pause:
`caesurathick`	Thick caesura (𝄌)
`caesuracurved`	Curved caesura (𝄍)
`caesurashort`	Short caesura (𝄎)
`breathmarkcomma` or `comma` or `,`	Breath mark (Comma-like) (')
`breathmarktick`	Breath mark (Tick-like) (✓)
`breathmarkupbow`	Breath mark (Upbow-like) (ᵥ)
`breathmarksalzedo`	Breath mark (Salzedo) (˜)

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 during step input with the keyboard

You can input holds and pauses with the keyboard during step input.

PROCEDURE

1. In Write mode, start note input.

2. Open the holds and pauses popover in any of the following ways:

   - Press **Shift**-**H**.

   - Choose **Write** > **Create Hold or Pause**.

3. Enter your preferred hold or pause into the popover. For example, `fermata` or `caesura`.

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

RESULT

The specified hold or pause is added at the caret position. Note input continues if you only press **Return** once.

NOTE

Pressing **Return** twice to close the popover stops note input.

Adding holds and pauses to existing notes with the keyboard

You can add holds and pauses to existing notes with the keyboard.

PROCEDURE

1. In Write mode, select the 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, `fermata` for a standard curved pause mark.

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

RESULT

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. The fermata may then be a note or rest earlier in the bar.

Breath marks only appear to the right of the selected note or notes.

Caesuras appear to the left of the selected note, and on all staves at that same rhythmic position.

Inputting holds and pauses with the mouse

Holds and pauses can be input with the mouse using the **Holds and Pauses** panel on the right of the window.

The **Holds and Pauses** panel is opened by clicking **Holds and Pauses** in the Notations toolbox on the right of the window in Write mode:

There are three sections in the **Holds and Pauses** panel:

1 **Fermatas**
2 **Breath Marks**
3 **Caesuras**

Inputting caesuras at the correct position with the mouse

Caesuras are commonly placed at the end of a bar, before a barline. In Dorico, caesuras should 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 dashed 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 dashed guidelines link the caesura to the notehead immediately after the barline.

If your dashed 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.

Inputting holds and pauses during step input with the mouse

You can input holds and pauses with the mouse during step input.

PROCEDURE

1. In Write mode, start note input.

2. Click the hold or pause you want in the **Holds and Pauses** panel on the right of the window.

RESULT

The hold or pause is input at the caret position.

Adding holds and pauses to existing notes with the mouse

You can add holds and pauses to existing notes with the mouse:

PROCEDURE

1. In Write mode, select the 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. Click on your preferred hold or pause in the **Holds and Pauses** panel on the right of the window.

RESULT

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. The fermata may then be a note or rest earlier in the bar.

Breath marks only appear to the right of the selected note or notes.

Caesuras appear to the left of the selected note, and on all staves at that same rhythmic position.

Changing the appearance or duration of existing holds and pauses

You can change the appearance or duration of existing holds and pauses, for example, you can change a short fermata into a long fermata. You cannot change the type of an existing hold or pause, for example, you cannot change a fermata into a caesura.

PROCEDURE

1. In Write mode, select the holds or pauses whose appearance or duration you want to change.

    NOTE

    Only select multiple holds and pauses of the same type. For example, select only fermatas or only caesuras.

2. Change the appearance or duration of the holds or pauses in one of the following ways:

    - Open the holds and pauses popover by pressing **Shift-H** and enter your preferred appearance or duration into the popover.

    - Click your preferred appearance or duration in the **Holds and Pauses** panel on the right of the window.

    - Select your preferred appearance or duration 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 holds or pauses 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 or duration of the selected holds or pauses is changed.

NOTE

If you want to change the type of a hold or pause, you should delete the existing hold or pause and input a new one of your preferred type.

RELATED LINKS

Positions of holds and pauses

You can change the positions of holds and pauses by moving individual holds and pauses to different rhythmic positions in Write mode, moving them to different graphical positions in Engrave mode, and by changing the default positions of all holds and pauses project-wide.

You can move holds and pauses to different rhythmic positions in Write mode. They are positioned by default according to your preferences 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.

Project-wide settings for the default positions of holds and pauses, and values for the minimum gaps around holds and pauses, can be set on the **Holds and Pauses** page in **Engrave** > **Engraving Options**.

RELATED LINKS

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.
2. Move the holds or pauses according to the rhythmic grid currently set 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 or to the left.

        NOTE

        Only one hold or pause can be moved rhythmically at a time when using the mouse.

RESULT

The selected holds and pauses are moved to new rhythmic positions, as well as all other hold or pause markings of the same type at the same rhythmic position 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 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.

If you moved holds and pauses using the keyboard, you can undo the move to restore any holds and pauses deleted in the process.

However, if you moved holds and pauses using the mouse, undoing the move does not restore any holds and pauses deleted in the process.

Moving holds and pauses back to their previous positions later does not restore any holds and pauses deleted when they were moved previously. The deleted holds and pauses must be re-input if necessary.

Moving holds and pauses graphically

You can move holds and pauses graphically without changing the rhythmic positions to which they apply.

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:

- **Alt**-**Right Arrow**
- **Alt**-**Left Arrow**
- **Alt**-**Up Arrow**
- **Alt**-**Down Arrow**

> TIP
>
> If you want to move holds and pauses 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 holds and pauses in any direction to the positions you want.

RELATED LINKS
Moving fermatas graphically using the Properties panel on page 398

Moving fermatas graphically using the Properties panel

You can move fermatas graphically using the Properties panel. You cannot move any other type of hold or pause using the Properties panel.

PROCEDURE

1. In Engrave mode, select the fermatas you want to move.
2. Activate the **Start offset** property in the **Holds and Pauses** group of the Properties panel.
3. The **Start offset** property has **X** and **Y** value fields. 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.
4. The **Start offset** property moves fermatas in the following ways:
   - **Start offset X** moves fermatas horizontally: increasing the value moves them to the right, decreasing the value moves them to the left.
   - **Start offset Y** moves fermatas vertically: increasing the value moves them upwards, decreasing the value moves them downwards.

Deleting holds and pauses

PROCEDURE

1. In Write mode, select the holds and pauses you want to delete.

> NOTE
>
> All fermatas or caesuras at the same rhythmic position are also selected when at least one fermata or caesura is selected.

2. Delete the holds and pauses in any of the following ways:
   - Press **Backspace** or **Delete**.
   - Choose **Edit** > **Delete**.

RESULT
The selected holds and pauses are deleted.

All fermatas or caesuras at the same rhythmic position are deleted, but only the selected breath marks are deleted.

Changing the placement of fermatas relative to the staff

Fermatas are normally placed above the staff; however, you can change the placement of fermatas relative to the staff individually.

PROCEDURE

1. In Engrave mode, select the fermatas whose placement relative to the staff you want to change.
2. Activate the **Placement** property in the **Holds and Pauses** group of the Properties panel.
3. Choose one of the following options:
   - **Above**
   - **Below**

Changing the number of fermatas per staff

You can change the maximum number of fermatas that appear in each staff when there are multiple voices in a staff.

PROCEDURE

1. Select a fermata or multiple fermatas. You can do this in Write mode and Engrave mode.
2. Activate the **Max. fermatas per staff** property in the **Holds and Pauses** group of the Properties panel.
3. Select one of the following options from the menu:
   - **One per voice**
   - **One per each side of staff**: one above and one below
   - **One per staff**

RESULT

The number of fermatas shown at the selected positions is changed.

NOTE

You can also set the maximum number of fermatas that can appear in a single staff project-wide.

RELATED LINKS
Project-wide Engraving Options for holds and pauses on page 401

Positioning fermatas on barlines

Fermatas can be individually positioned over a barline instead of over a note, to indicate a gap before the start of the following bar.

PROCEDURE

1. Select the fermata you want to position over the barline.
2. Activate the **Attach to barline** property in the **Holds and Pauses** group of the Properties panel.

NOTE

This property can be deactivated, returning the fermata to its default position above the notehead closest to the rhythmic position to which it is attached on every staff.

RESULT

The fermata is positioned above the barline, appearing only above staves that are not joined by the barline. Depending on the instrumentation, this may mean it only appears at the top of the system.

Copying holds and pauses

Holds and pauses can be selected and copied independently of noteheads.

PROCEDURE

1. In Write mode, select the hold or pause you want to copy.
2. Copy the hold or pause in any of the following ways:

    - Press **Ctrl/Cmd-C**.
    - Choose **Edit** > **Copy**.

3. Select the notes or rests where you want to paste it.
4. Paste the hold or pause in any of the following ways:

    - Press **Ctrl/Cmd-V**.
    - Choose **Edit** > **Paste**.

    Alternatively, you can select the fermata, breath mark, or caesura you want to copy, hold down the **Alt** key, and click on a note or rest at the rhythmic position where you want to copy it. This copies the selected fermata, breath mark, or caesura without adding it to your clipboard.

    NOTE

    You can only copy the number of holds or pauses originally selected. For example, if you copy a single hold or pause, only a single hold or pause is pasted, even if pasted to a selection of notes.

    Breath marks can only be copied to notes currently selected. Fermatas and caesuras can be copied to notes or rests on all staves at the same rhythmic position as the selected note.

Multiple holds and pauses at the same rhythmic position

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.

However, 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.

Project-wide Engraving Options for holds and pauses

Options for the positions of holds and pauses project-wide can be found on the **Holds and Pauses** page in **Engraving Options**.

The options on this page allow you to change the default positions and placement of holds and pauses, including the placement of fermatas in multi-voice contexts.

You can open **Engraving Options** in 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.

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 moment 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 fermata on another staff does not change that overridden staff. Deleting the overridden fermata reverts that staff to match the other staves.

In these examples, 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 was overridden to show a breath mark instead of a fermata.

The fermata was 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.

Holds and pauses in playback

Holds and pauses do not currently have an effect in playback, but this is planned for future versions.

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.

This 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.

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 then create custom key signatures and custom accidentals within that tonality system.

RELATED LINKS
General placement conventions for key signatures on page 402
Tonality systems on page 404
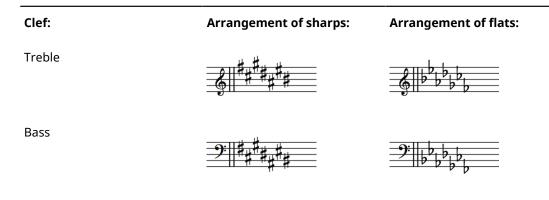
General placement conventions for key signatures
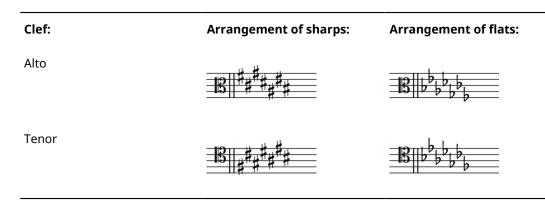
Over time, the placement and appearance of key signatures has come to follow conventions to ensure they are always understood. Dorico follows these conventions automatically.

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.

Clef:	Arrangement of sharps:	Arrangement of flats:
Treble		
Bass		

Clef:	Arrangement of sharps:	Arrangement of flats:
Alto		
Tenor		

For custom, non-standard key signatures, the order in which accidentals appear in the key signature can be determined in the **Edit Custom Key Signature** dialog.

A key signature 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, but before time signatures.

The correct placement of key signatures: between a clef and time signature.

Unlike time signatures, key signatures appear on every system in both the full score and parts, even if the key signature has not changed.

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, and this is the default setting in Dorico for all keys.

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

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)

403
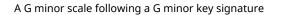
Major key signatures and minor key signatures

The key signature for a major key appears the same as the key signature for its relative minor, and vice versa. For example, B♭ major has two flats in its key signature. This is the same number of flats in the key signature for G minor, which is the relative minor key to B♭ major. The difference between the two is that music in G minor has sharpened Fs, as the seventh degree of the scale is raised in 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 an open, or "atonal", key signature appears the same as a C major key signature or an A minor key signature, as none of these three show any accidentals, an open key signature behaves 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 are preferred, whether the music is going up or going down. Similarly, in A minor, G♯ 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 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.

Any pitch can be input into these instruments, and they show accidentals if needed.

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.

EDO stands for Equal Division of the Octave, that is, how many equal pieces an octave is divided into. With EDO, you can map non-conventional Western pitches on to the seven note names A-G, and create a coherent notation to express that. With Dorico you can create any number of

divisions of an octave, spread across the seven notes of the scale in any way. You can also 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 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 you like, to be able to show a standard Western key signature, the number of equal divisions in the octave must be divisible by 12.

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: 9-4-9-9-4-9.

RELATED LINKS

Custom tonality systems

You can use a tonality system other than 12-EDO or 24-EDO, or edit either of those two tonality systems.

You can create custom tonality systems and edit existing tonality systems in the **Edit Tonality System** dialog.

The **Edit Tonality System** dialog can be found in the **Key Signatures, Tonality Systems, and Accidentals** panel on the right of the window in Write mode. You can open this panel by clicking **Key Signatures, Tonality Systems, and Accidentals** in the Notations toolbox:

The **Tonality System** section shows the tonality systems already available in your project. Dorico offers two systems by default: **Equal temperament (12-EDO)** and **Equal temperament (24-EDO)**.

There are two buttons at the bottom of this section:

- **New Tonality System**: create a new tonality system

- **Edit Tonality System**: edit an existing tonality system

Clicking either of these buttons opens the **Edit Tonality System** dialog.

Edit Tonality System dialog

You can create custom tonality systems and edit existing tonality systems in the **Edit Tonality System** dialog.

There are four sections in the **Edit Tonality System** dialog:

- **Name**: create a name for a new tonality system, or edit the name if you are editing an existing tonality system.

- **Divisions**: specify how many divisions of the octave you want assigned to each interval.

- **Accidentals**: see 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.

- **Key Signatures**: see 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.

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 custom accidentals for each raising or lowering delta you want to notate in the **Accidentals** section of the dialog.

You can then arrange these accidentals into a key signature in the **Key Signatures** section of the dialog.

When you have finished editing your new tonality system, click **OK** or press **Return** to save the changes you have made to your tonality system and close the **Edit Tonality System** dialog.

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 **Division** section of the **Edit Tonality System** dialog, you can change the number of divisions assigned to each interval by changing the values in each value field in any of the following ways:

●   Enter values into the value fields.

●   Click the arrows beside the value fields.

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, 2 between C and D, 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.

When you have finished changing the equal divisions per octave for your tonality system, you can create custom accidentals and custom key signatures.

Click **OK** or press **Return** to save the changes you have made to your tonality system, and close the **Edit Tonality System** dialog.

RELATED LINKS

Custom accidentals

You can create custom accidentals for both existing tonality systems and new tonality systems.

You can edit and create custom accidentals in the **Accidentals** section of the **Edit Tonality System** dialog.
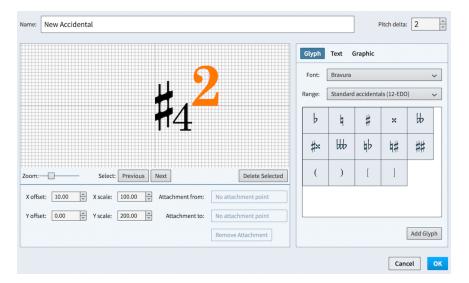
The **Accidentals** section of the **Edit Tonality System** dialog, as it appears when editing the existing 12-EDO tonality system.

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.

Clicking on either the **New Accidental** button or the **Edit Accidental** button opens the **Edit Accidental** dialog:

There are four sections in the **Edit Accidental** dialog:

1   **Name**: enter a name for your accidental.

2   **Pitch delta**: 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: choose components to add to your accidental. You can add different types of component by clicking on the respective tab titles. In the above example, **Glyph** is selected.

- **Glyphs**: such as ♮ 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 accidental.

    NOTE
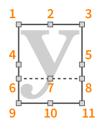
    A full list of the different ranges of glyphs is available on the SMuFL website.

- **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 accidental.

- **Graphic**: 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 accidental.

4 Editor: arrange and edit the component or components that make up your accidental. Components can be arranged and edited using the following options:

- **X offset**: increasing the value moves components to the right, decreasing the value moves components to the left.

- **Y offset**: increasing the value moves components up, decreasing the value moves components down.

- **X scale**: increasing the value increases the width of graphics only.

- **Y scale**: increasing the value increases the size of the component. For graphics only, increasing the value increases the height of the graphic.

- **Attachment from**: select an attachment point for the component on the left, to which the component to its right attaches. To ensure good legibility, it is recommended that you select an attachment point on the right edge of the component on the left.

- **Attachment to**: select an attachment point for the component on the right, which it uses to attach to the component to its left. To ensure good legibility, it is recommended that you select an attachment point on the left edge of the component on the right.

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, as labeled in the above example, are named in the **Edit Accidental** dialog as follows:

1 **Top Left**

2 **Top Middle**

3 **Top Right**

4 **Middle Left**

5 **Middle Right**

6 **Baseline Left** (text only)

7 **Baseline Middle** (text only)

8 **Baseline Right** (text only)

9 **Bottom Left**

10 **Bottom Middle**

11 **Bottom Right**

When you have finished editing your new accidental, click **OK** or press **Return** to close the **Edit Accidental** dialog. This saves the changes you have made to your accidental, and returns you to the **Edit Tonality System** dialog, where you can create more new accidentals.

Custom key signatures

You can create new custom key signatures for both existing tonality systems and new tonality systems, and edit the key signatures of new tonality systems.

You can edit and create custom key signatures in the **Key Signatures** section of the **Edit Tonality System** dialog.

The **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.

Clicking on either the **New Key Signature** button or the **Edit Key Signature** button opens the **Edit Custom Key Signature** dialog:

There are five sections in the **Edit Custom Key Signature** dialog:

1 **Name**: enter a name for your key signature.

2 **Clef**: see 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**: choose the base note of your key signature.

4   **Accidentals**: select accidentals that you have added or created in your tonality system to add to the key signature. Click **Add Accidental to Key Signature** to add the selected accidental to the key signature.

5   Editor: arrange accidentals in your preferred order using the **Order** arrow buttons, and change their position in the staff using the **Note** arrow buttons and **Octave** arrow buttons.

When you have finished editing your new key signature, click **OK** or press **Return** to close the **Edit Custom Key Signature** dialog. This saves the changes you have made to your key signature, and returns you to the **Edit Tonality System** dialog, where you can create more new key signatures.

RELATED LINKS
Edit Tonality System dialog on page 406

Inputting key signatures with the keyboard

You can input key signatures with the keyboard by using the key signatures popover in Write mode.

You can open the key signatures popover in Write mode in 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.

The key signatures popover with an example entry for a key signature

The key signatures button in the Notations toolbox

The key signatures popover

The table shows some examples of what to enter into the key signatures popover and what is input in the music as a result.

You can open the key signatures popover in Write mode in the following ways:

● Press **Shift-K**.

● Choose **Write** > **Create Key Signature**.

For example, enter:	For key signature:
`open` or `atonal`	Open or atonal key signature
`C` or `D` or `Eb` or `Ab` and so on	Major keys (capital letters)
`g` or `d` or `f#` or `bb` and so on	Minor keys (lowercase letters)
`3s` or `2#` and so on	Number of sharps (assumes the major key for that many sharps)

For example, enter:	For key signature:
`4f` or `5b` and so on	Number of flats (assumes the major key for that many flats)

This list is not comprehensive: it is intended to illustrate how you can structure your entry to input different types of key signature.

Inputting key signatures during step input with the keyboard

You can input key signatures during step input with the keyboard.

PROCEDURE

1. In Write mode, start note input.

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, such as `g` for G minor or `3s` for 3 sharps.

   NOTE

   Entering `3s` creates a key signature of A major, rather than F♯ minor.

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

RESULT

The key signature is added at the caret position, even if this is in the middle of a bar. However, it is preferable to input a change of key signature at a barline, so you may want to move it to a more appropriate position 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.

RELATED LINKS
The key signatures popover on page 411
Project-wide spacing gaps for key signatures on page 419
Accidental selection during MIDI input on page 189

Adding key signatures to existing music with the keyboard

You can add key signatures to existing music with the keyboard.

PROCEDURE

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

   - The barline where you want a new key signature to start.

   - A notehead or rest immediately to the right of the position where you want a new key signature to start.

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, such as `f` for F minor or `4f` for 4 flats.

> NOTE
>
> Entering `4f` creates a key signature of A♭ major, rather than F minor.

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

RESULT

The key signature is 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. However, it is preferable to input a change of key signature at a barline.

All subsequent bars follow the input key signature, until the next existing key signature or the end of the flow, whichever comes first.

RELATED LINKS
The key signatures popover on page 411

Inputting key signatures on single staves with the keyboard

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 a key signature to only a single staff with the keyboard, both during step input and later to existing music.

PROCEDURE

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

- Start note input.
- Select an existing barline where you want an independent key signature to start, or select a notehead or rest immediately to the right of the position where you want an independent key signature to start.

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, such as `F` or `4b`.

4. Hold down the **Alt** key while pressing **Return** to close the popover.

RESULT

Holding down the **Alt** key inputs the key signature only on the selected staff.

It behaves just like any other key signature. All subsequent notes on the staff follow the input key signature, until the next existing key signature or the end of the flow, whichever comes first.

> 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.

Inputting key signatures with the mouse

Key signatures can be input with the mouse using the **Key Signatures, Tonality Systems, and Accidentals** panel.

You can open the **Key Signatures, Tonality Systems, and Accidentals** panel by clicking its button in the Notations toolbox in Write mode:

This panel can be hidden and shown in the following ways:

- Press **Ctrl/Cmd-9**.
- Click its disclosure arrow.

There are five sections in the **Key Signatures, Tonality Systems, and Accidentals** panel:

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 the following ways:

- Press **Ctrl/Cmd-,**
- Choose **Dorico** > **Preferences**

Key Signatures section

You can use the **Key Signatures** section in the **Key Signatures, Tonality Systems, and Accidentals** panel to create and input custom key signatures.

The **Key Signatures** section can be shown and hidden by clicking the section title, which has a disclosure arrow beside it.

The **Key Signatures** section has three parts:

1   Two buttons at the top, where you can select either **Major** or **Minor** for your key signature.

2   Two buttons on the right: one points up, the other points down.

- The button pointing up 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 button pointing down 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. Click this button to input 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, Tonality Systems, and Accidentals** panel.

Inputting key signatures during step input with the mouse

You can input key signatures during step input with the mouse.

PROCEDURE

1.   In Write mode, start note input.

2.   Create the key signature you want using the **Key Signatures** design editor in the **Key Signatures, Tonality Systems, and Accidentals** panel.

Alternatively, if you have already previously used the key signature you want to input in the project, you can find it in the **Used in This Flow** section.

3.   Click the key signature you want.

RESULT

The key signature is added at the caret position, even if this is in the middle of a bar. However, it is preferable to input a change of key signature at a barline, so you may want to move it to a more appropriate position 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.

RELATED LINKS
Project-wide spacing gaps for key signatures on page 419

Adding key signatures to existing music with the mouse

You can add key signatures to existing music with the mouse.

PROCEDURE

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

   - The barline where you want a new key signature to start.

   - A notehead or rest immediately to the right of the position where you want a new key signature to start.

2. Create the key signature you want using the **Key Signatures** design editor in the **Key Signatures, Tonality Systems, and Accidentals** panel, and then click on it to input the key signature.

   Alternatively, if you have already previously used the key signature you want to input in the project, you can click on it in the **Used in This Flow** section.

RESULT

The key signature is 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. However, it is preferable to input a change of key signature at a barline.

All subsequent bars follow the input key signature, until the next existing key signature or the end of the flow, whichever comes first.

Inputting key signatures on single staves with the mouse

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 a key signature to only a single staff with the mouse, both during step input and later to existing music.

PROCEDURE

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

   - Start note input.

   - Select an existing barline where you want an independent key signature to start, or select a notehead or rest immediately to the right of the position where you want an independent key signature to start.

2. Create the key signature you want using the **Key Signatures** design editor in the **Key Signatures, Tonality Systems, and Accidentals** panel.

   NOTE

   You can skip this step if the key signature you want to input is already available in the **Used in This Flow** section.

3. Hold down **Alt**.

4. Click the key signature you want.

RESULT

Holding down **Alt** inputs the key signature only on the selected staff.

It behaves just like any other key signature. All subsequent notes on the staff follow the input key signature, until the next existing key signature or the end of the flow, whichever comes first.

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.

Changing key signatures

You can change key signatures to different key signatures after they have been input.

If you want to input a key signature change where there is no existing key signature, follow the procedure for inputting a new key signature. It is customary to change the key signature if there is a change of key in the music. This should be done at a barline, as this is clearest for players.

You can change the default barline at key signature changes in the **Key Signatures** section of the **Barlines** page in **Engrave** > **Engraving Options**.

RELATED LINKS

Changing key signatures with the keyboard

You can change an existing key signature with the keyboard.

PROCEDURE

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

    -   The key signature you want to change.

    -   The barline immediately to the left of the key signature you want to change.

    -   A notehead or rest immediately to the right of the key signature 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, `g` for G minor or `3s` for 3 sharps.

    A key signature of 3 sharps is treated as A major, rather than F♯ minor.

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

RESULT

The key signature is changed according to what you entered into the popover.

Changing key signatures with the mouse

You can change an existing key signature with the mouse.

PROCEDURE

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

- • The key signature you want to change.

- • The barline immediately to the left of the key signature you want to change.

- • A notehead or rest immediately to the right of the key signature you want to change.

2.   Create the key signature you want using the **Key Signatures** design editor in the **Key Signatures, Tonality Systems, and Accidentals** panel.

If you have already previously used the key signature you want to input in the project, you can find it in the **Used in This Flow** section.

3.   Click the key signature you want.

RESULT

The key signature is changed.

Visibility of key signatures

Key signatures cannot be hidden. If you do not want to see a key signature, you can input an open key signature.

If you want to hide a key signature because one appears for an instrument that usually does not have a key signature, such as timpani or horn, you can switch that instrument to the **No key sig** version.

RELATED LINKS
Adding key signatures to existing music with the keyboard on page 412
Adding key signatures to existing music with the mouse on page 416
The key signatures popover on page 411

Deleting key signatures

You can delete key signatures completely.

PROCEDURE

1.   In Write mode, select any of the following that you want to delete:

- • Key signatures

- • The 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**.

RESULT

The selected key signatures are deleted from the score. Notes in the bars after their previous positions are not changed, but may show accidentals if the previous key signature in the score

indicates a different pitch for a note, 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 in an open key, but with accidentals shown as necessary.

Positions of key signatures

You can change the positions of key signatures by moving individual key signatures to different rhythmic positions in Write mode, moving them to different graphical positions in Engrave mode, and by changing the default positions of all key signatures 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 **Engraving Options**.

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

Key signatures in Dorico appear in the correct position by default. However, you can change their graphical positions individually should you find it necessary to do so.

RELATED LINKS

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 cancelation 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 cancelation naturals**

You can open **Engraving Options** in 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.

2. Move the selected key signatures according to the rhythmic grid currently set 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 or to the left to the position you want.

  NOTE

  Only one key signature can be moved rhythmically at a time when using the mouse.

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 an individual key signature across staves, you must first delete the individual key signature from its first position, then add a new individual key signature to the staff you wanted to move it to.

NOTE

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.

If you moved key signatures using the keyboard, you can undo the move to restore any key signatures deleted in the process.

However, if you moved key signatures using the mouse, undoing the move does not restore any key signatures deleted in the process.

Moving key signatures back to their previous positions later does not restore any key signatures deleted when they were moved previously. The deleted key signatures must be re-input if necessary.

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 panel on the left of the window.

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. Nudge the graphical position of the key signature in any of the following ways:

- Press **Alt-Right Arrow** to move it to the right.

- Press **Alt-Left Arrow** to move them to the left.

> TIP
>
> If you want to move key signatures by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

RESULT

The key signature is moved graphically.

> NOTE
>
> You cannot change the position of **Note Spacing** handles with the mouse, they can only be moved using the keyboard.

RELATED LINKS
Changes to note spacing in Engrave mode on page 461
Moving key signatures graphically using the Properties panel on page 421

Moving key signatures graphically using the Properties panel

You can move key signatures graphically using the Properties panel.

> NOTE
>
> Changing the **Spacing Offset** value also affects the positions of time signatures and whole bar rests in the bar immediately after the moved key signature.

PROCEDURE

1. In Engrave mode, select the key signatures you want to move.

2. Activate the **Spacing Offset** property in the **Key Signatures** 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.

4. The **Spacing Offset** property moves key signatures in the following ways:

- Increasing the **Spacing Offset** value moves key signatures to the right.

- Decreasing the **Spacing Offset** value moves key signatures to the left.

RESULT

The graphical positions of the selected key signatures is changed.

NOTE

Cancelation naturals, if shown in your project, are repositioned with the subsequent key signature when using the **Spacing Offset** property. They can also be moved graphically, independently of the subsequent key signature and without affect the spacing of any other item, by activating the **Cancelation naturals X offset** property.

- Increasing the **Cancelation naturals X offset** value moves cancelation naturals to the right.
- Decreasing the **Cancelation naturals X offset** value moves cancelation naturals to the left.

Project-wide Engraving Options for key signatures

Options for the appearance of key signatures project-wide can be found on the **Key Signatures** page in **Engraving Options**.

The options on this page allow you to change the key signature cancelation style, spacing gaps between accidentals in key signatures, and the type of barline at key signature changes.

You can open **Engraving Options** in 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.

Transposing key signatures with selections

You can transpose the key signature along with a selection if the key signature is selected as well as the notes.

PROCEDURE

1. Make a selection that includes both a key signature change and notes. You can do this in the following ways:
   - Hold down **Ctrl/Cmd** and select everything you want to transpose.
   - Make a marquee selection by clicking and dragging the mouse pointer over everything you want to include. A highlighted square shows you what will be included in the selection when you release the mouse.
2. Choose **Write** > **Transpose**. The **Transpose** dialog appears.
3. Set your preferred settings for your transposition, including interval and quality.
4. Make sure that the **Transpose key signatures** box is checked.
   It is checked automatically if your selection includes a key signature.
5. Click **OK** to close the dialog.

RESULT

All notes and key signatures within the selection are transposed by the degree you set in the dialog.

NOTE
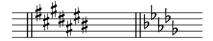
If a key signature included in the transposed selection applies to all staves, then it is transposed on all staves in the layout, even if your selection did not include all staves.

Individual key signatures (key signatures added to single staves only using the **Alt** key) are transposed if included in a selection, but this does not affect any other staff in the layout.

Enharmonic equivalent key signatures

Dorico generally transposes to a key with the same type of accidental as the previous key when transposing music. If transposing for an instrument, Dorico generally transposes to a key 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♮.

By default, Dorico selects an enharmonic equivalent key signature if it has fewer accidentals. However, you can switch off this preference by deactivating the **Prefer enharmonic equivalent key signatures with fewer accidentals** option in the **Transposition** section of the **Accidentals** page in **Notation Options**.

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

● Press **Ctrl/Cmd-Shift-N** in any mode.

● Choose **Write** > **Notation Options** in Write mode.

How transposing instruments are affected by key signatures

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.

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 can easily get 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 at the barline, the key signature at the end of a system is the key signature itself, rather than a cautionary.

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, then you might want to separate the music by creating a new flow at the point of the system break.

RELATED LINKS
Flows on page 80
Creating flows on page 80
Formatting panel on page 129

Multiple key signatures

You can have multiple key signatures simultaneously by inputting each one onto a single staff.

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 on single staves with the keyboard on page 413
Inputting key signatures on single staves with the mouse on page 416

Lyrics

In Dorico, the term lyrics is used to represent all text that is sung by singers.

To differentiate sung text from any other forms of text that often appears in musical scores, other forms of text are referred to as performance instructions, tempos, dynamics, etc.

In Dorico, lyrics have been designed so that it is simple to go back and make changes to lyrics without having to re-input new lyrics each time.

For example, if you advance the lyrics popover to the next note by pressing **Space** instead of - when inputting multisyllabic words, you can later change syllables to different syllable types individually, so that they show or don't show hyphens.

When inputting lyrics, there are a number of key commands that you can use 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.

In the **Edit** > **Filter** > **Lyrics** menu, there are a number of options that allow you to select each lyric type and lyric line separately.

Lyrics are divided into the following 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 positioned in the middle of lyric lines, for example, if there were two lyric lines, a chorus line appears between lyric Line 1 and Line 2.

Chorus lines are not assigned verse numbers.

Lyric line translations

Lyric line translations show the text in lyric lines or chorus lines in different languages. They are positioned directly below the lyric line or chorus line of which they are a translation.

Lyric line translations are not assigned verse numbers, as they are counted as part of the lyric line or chorus line of which they are a translation.

RELATED LINKS

General placement conventions for lyrics
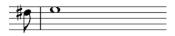
Lyrics are generally placed below the staff to which they apply, and are positioned so that they align horizontally with their corresponding notehead.

A regular 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 should be wide enough so that each word or syllable does not overlap with the words or syllables either side. However, in order to achieve legibility for lyrics, the rhythmic spacing of notes sometimes needs to be adjusted.

To avoid the rhythmic adjustment of notes to accommodate lyrics distorting the appearance of rhythms extensively, Dorico has programmed the positioning of lyrics to allow the alignment of some lyrics relative to their corresponding notes to be adjusted.

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 has been automatically adjusted for legibility.

RELATED LINKS
Positions of lyrics on page 432
Project-wide changes to the appearance of lyrics on page 449

Inputting lyrics

Lyrics are input by entering text into the lyrics popover.

You can open the lyrics popover in Write mode in the following ways:

- Press **Shift**-**L**.
- Choose **Write** > **Create Lyrics**.
- Click **Lyrics** in the Notations toolbox:

The number shown on the left hand side of the lyrics popover indicates the lyric line into which the lyric is input, and what type of lyric is being input. For example, a **c** is shown when you are inputting chorus lines.

The lyrics popover can be advanced to the next note in the staff, so you do not need to open the popover for every note.

To input lyrics:

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:

  v1.

3. Enter the word or syllable you want to add to the selected note into the popover.

4. 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 **-** if you entered one syllable of a multi-syllabic word.

5. Continue entering words and syllables into the popover for the rest of the notes to which you want to add lyrics.

6. Press **Return** or **Esc** to close the popover.

NOTE

The popover closes automatically when you reach the last note in the staff.

RESULT

The text you enter into the popover is input as lyrics.

If you advance the popover to the next note by pressing **-**, a hyphen appears after the lyric last input. This is used to input multi-syllabic words across multiple notes.

If you advance the popover by pressing **Space**, a gap appears after the lyric last input. 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

Inputting multiple lyric lines

You can input multiple lyric lines at the same rhythmic position by giving each lyric line a different lyric line number.

TIP

You do not have to input the first lyric line to input lyrics in subsequent lines. For example, you can input lyrics as **Line 2** before inputting lyrics in **Line 1**.

To input multiple lyric lines at the same position:

PROCEDURE

1. In Write mode, select the first note to which you want to input multiple lyric lines.

2. Open the lyrics popover in one of the ways described in **Inputting lyrics**.

3. Press **Down Arrow** until the number shown on the left hand side of the popover matches the lyric line number that you want to input. For example, this is how the lyrics popover appears when inputting a second lyric line:

    2   now|

    TIP

    You can press **Up Arrow** and **Down Arrow** to switch between different line numbers at any point, and as many times as you need.

4. Type the word or syllable you want to add to the selected note into the popover.

5. Advance the popover to the next note in one of the following ways:

    - Press **Space** if you typed in a complete word, or the final syllable in a multi-syllabic word.

    - Press **-** if you typed in one syllable of a multi-syllabic word.

6. Continue typing 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 in the staff.

RESULT

The text you enter into the popover is input as lyrics in the lyric line number corresponding to the number shown on the left hand side of the popover.

RELATED LINKS

Inputting chorus lines

Chorus lines use an italic font and are automatically positioned below the staff. If multiple lyric lines exist at the same position as a chorus line, it is positioned in the middle of the other lyric lines.

To input chorus lines:

PROCEDURE

1. In Write mode, select the first note to which you want to input a chorus line.

2. Open the lyrics popover in one of the ways described in **Inputting lyrics**.

3. Press **Up Arrow** so that a **c** is shown on the left hand side of the popover. This is how the lyrics popover appears when inputting chorus lines:

    c   Ooh,|

4. Type the word or syllable you want to add to the selected note into the popover.

5. Advance the popover to the next note in one of the following ways:

- Press **Space** if you typed in a complete word, or the final syllable in a multi-syllabic word.

- Press **-** if you typed in one syllable of a multi-syllabic word.

6. Continue typing words and syllables into the popover for the rest of the notes to which you want to add chorus lyrics.

7. Press **Return** or **Esc** to close the popover.

NOTE

The popover closes automatically when you reach the last note in the staff.

RESULT

The text you enter into the popover is input as a chorus line.

NOTE

The position of chorus lines changes, depending on the number of lyric lines that exist at the same rhythmic position.

You can also show lyrics in italic font in normal lyric lines instead of inputting lyrics as chorus lines.

RELATED LINKS

Inputting lyric line translations

Each lyric line can have its own lyric line translation. Lyric line translations are not given their own verse numbers, as they are included in the verse number of the line of which they are a translation.

To input lyric line translations:

PROCEDURE

1. In Write mode, select the first note to which you want to input a lyric line translation.

2. Open the lyrics popover in one of the ways described in **Inputting lyrics**.

3. Press **Alt-Down Arrow** so that a ***** 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. This is how the lyrics popover appears when inputting a lyric line translation to lyric Line 1:

> 1* sais|

4. Type the word or syllable you want to add to the selected note into the popover.

5. Advance the popover to the next note in one of the following ways:

- Press **Space** if you typed in a complete word, or the final syllable in a multi-syllabic word.

- Press **-** if you typed in one syllable of a multi-syllabic word.

6. Continue typing words and syllables into the popover for the rest of the notes to which you want to add translation lyrics.

7. Press **Return** or **Esc** to close the popover.

NOTE

The popover closes automatically when you reach the last note in the staff.

RESULT

The text you enter into the popover is input as translation lyrics for the lyric line number corresponding to the number shown on the left hand side of the popover.

RELATED LINKS

Inputting lyric lines above the staff

In some cases, it is necessary to place lyrics above the staff. For example, if a vocal line that is usually in unison is divided for a few bars, with a different rhythm in each line.

Lyric lines above the staff can be input in addition to lyric lines below the staff.

To input lyric lines above the staff:

PROCEDURE

1. In Write mode, select the first note to which you want to input a lyric line above the staff.
2. Open the lyrics popover in one of the ways described in **Inputting lyrics**.
3. Press **Shift-Up Arrow** to input lyrics above the staff.

   TIP

   You can press **Shift-Up Arrow** and **Shift-Down Arrow** to switch between lyric lines above the staff and below the staff at any point, and as many times as you need.

4. Type the word or syllable you want to add to the selected note into the popover.
5. Advance the popover to the next note in one of the following ways:

   - Press **Space** if you typed in a complete word, or the final syllable in a multi-syllabic word.
   - Press **-** if you typed in one syllable of a multi-syllabic word.

6. Continue typing words and syllables into the popover for the rest of the notes to which you want to add lyrics above the staff.
7. Press **Return** or **Esc** to close the popover.

   NOTE

   The popover closes automatically when you reach the last note in the staff.

RESULT

The text you enter into the popover is input as lyrics above the staff for the lyric line number corresponding to the number shown on the left hand side of the popover.

RELATED LINKS

Inputting multiple lyric lines above the staff

You can input multiple lyric lines at the same rhythmic position above the staff by first selecting a lyric line number, and then inputting it above the staff. Lyric lines above the staff can be input in addition to lyric lines below the staff.

TIP

You do not have to input the first lyric line above the staff to input lyrics in subsequent lines above the staff. For example, you can input lyrics as **Line 2** before inputting lyrics in **Line 1**.

To input multiple lyric lines at the same position above the staff:

PROCEDURE

1.   In Write mode, select the first note to which you want to input a lyric line above the staff.

2.   Open the lyrics popover in one of the ways described in **Inputting lyrics**.

3.   Press Down Arrow until the number shown on the left hand side of the popover matches the lyric line number that you want to input. For example, this is how the lyrics popover appears when inputting a second lyric line:

> 2   now

4.   Press **Shift**-**Up Arrow** to input lyrics above the staff.

5.   Type the word or syllable you want to add to the selected note into the popover.

6.   Advance the popover to the next note in one of the following ways:

    •   Press Space if you typed in a complete word, or the final syllable in a multi-syllabic word.

    •   Press - if you typed in one syllable of a multi-syllabic word.

7.   Continue typing words and syllables into the popover for the rest of the notes to which you want to add lyrics above the staff.

8.   Press Return or Esc to close the popover.

    NOTE

    The popover closes automatically when you reach the last note in the staff.

RESULT

The text you enter into the popover is input as lyrics above the staff for the lyric line number corresponding to the number shown on the left hand side of the popover.

RELATED LINKS

Changing the text of existing lyrics

To 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 **Return**

- Double click on the note you want to change.

- Press **Shift-L**

- Click **Lyrics** in the Notations toolbox:

  v1.

- Choose **Write** > **Create Lyrics**

3. Replace the existing text in the lyrics popover with your preferred text for the selected lyric.

4. If you want to change following lyrics as well, advance the popover to the next note in one of the following ways:

- Press **Space** if you typed in a complete word, or the final syllable in a multi-syllabic word.

- Press **-** if you typed in one syllable of a multi-syllabic word.

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 in the staff.

RELATED LINKS

Positions of lyrics

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 **Engraving Options**.

Dorico has programmed the positioning of lyrics to avoid you needing to make further adjustments. If you find you need to move lyrics, they can be moved graphically in Engrave mode, however, 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 rhythmic spacing of notes. 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 re-adjusted, the rhythmic spacing at that rhythmic position might change.

Project-wide settings for the default position of lyrics can be set on the **Lyrics** page in **Engraving Options**.

The default settings for lyrics 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, you

should try changing the settings on the **Lyrics** page in **Engraving Options** 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:

- Making minimum gaps smaller, such as the minimum gap between lyrics and hyphens, in the **Hyphens** section of the **Lyrics** page in **Engraving Options**.

- Increasing the amount that lyrics can be adjusted by in the **Spacing** section of the **Lyrics** page in **Engraving Options**.

Rules for syllables

The number of notes that are sung with syllables or words determines how the lyrics are positioned:

- Single syllables, that is, whole words or parts of longer words that are sung on only one note, are centered on that 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.

Rules for lines of lyrics

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

If you have three lines of lyrics, but on one system, there is no second line of lyrics, the third line of lyrics is moved upwards, closer to the first line of lyrics. If on a subsequent system, there is no first line, but the second and third lines of lyrics are shown, 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 after they have been input.

PROCEDURE

1. In Write mode, select the lyrics you want to move.

2. Use the following key commands to move lyrics left or right, according to the rhythmic grid currently set:

   - **Alt**-**Right Arrow**

   - **Alt**-**Left Arrow**

   - NOTE

     Lyrics cannot be moved rhythmically with the mouse.

RESULT

The selected lyrics are moved to the left or right by the duration of the rhythmic grid.

Moving lyrics graphically

You can move 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 re-adjusted, the rhythmic 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 lyrics 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 lyrics to the right or to the left.

RESULT

The selected lyrics are moved to the right or the left.

NOTE

Lyrics cannot be moved upwards or downwards, as their vertical position is determined by their lyric line number and your project-wide settings in **Engrave** > **Engraving Options**.

You can change the line number of lyric lines, and the placement of lyric lines relative to the staff, using options in the **Edit** > **Lyrics** menu. 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

Positions of 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 multiple times after an entry.

Moving lyric extender lines

You can move lyric extender lines horizontally.

PROCEDURE

1. In Engrave mode, select the lyric extender lines that you want to move.

2.   Move the lyric extender 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.

> TIP
>
> If you want to move lyric extender lines 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 or to the left to the positions you want.

RESULT

The selected lyric extender lines are moved to the left or the right.

> NOTE
>
> The start handles of lyric extender lines are attached to the lyric from which they extend. If you move that lyric, the position of the lyric extender line start handles moves correspondingly.
>
> Lyric extender lines cannot be moved upwards or downwards, as their vertical position is determined by their lyric line number and your project-wide settings in **Engrave** > **Engraving Options**.
>
> You can change the position of lyric extender lines relative to lyrics and to the ends of systems for all lyric extender lines project-wide in the **Extender Lines** section of the **Lyrics** page in **Engraving Options**.

RELATED LINKS
Lengthening and shortening lyric extender lines on page 435
Positions of lyric hyphens and lyric extender lines on page 434

Lengthening and shortening lyric extender lines

Lyric extender lines can be lengthened and shortened by moving the handles at each end in Engrave mode.

Moving the handle on the left end of lyric extender lines moves the start of the line, and moving the handle on the right end of lyric extender lines moves the end of the line.

Lyric extender line handles can be moved independently of each other, allowing you to lengthen and shorten lyric extender lines. For example, moving the end handle of a lyric extender line to the right without changing the position of the start lyric extender line handle makes the line longer.

> NOTE
>
> The start handles of lyric extender lines are attached to the lyric from which they extend. If you move that lyric, the position of the lyric extender line start handles moves correspondingly.

PROCEDURE

1.   In Engrave mode, select the square handles at one of the following positions on the lyric extender lines you want to lengthen or shorten:

- The start of lyric extender lines.

- The end of lyric extender lines.

2. Move the selected handles left or right in 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**.

- Click and drag the handles to the right or to the left.

RELATED LINKS
Positions of lyric hyphens and lyric extender lines on page 434
Lengthening and shortening lyric extender lines using the Properties panel on page 436

Lengthening and shortening lyric extender lines using the Properties panel

Lyric extender lines can be lengthened and shortened by moving the handles at each end independently of each other using the Properties panel in Engrave mode.

PROCEDURE

1. In Engrave mode, select one of the following for the lyric extender lines that you want to lengthen or shorten:

- The lyric extender lines.

- The lyrics from which the lines extend.

2. Activate the following properties, individually or together, in the **Lyrics** group of the Properties panel:

- **Line Start X**

- **Line End X**

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.

4. The properties move lyric extender lines in the following ways:

- **Line Start X**: increasing the value moves the starts of lyric extender lines to the right, decreasing the value moves the starts of lyric extender lines to the left.

- **Line End X**: increasing the value moves the ends of lyric extender lines to the right, decreasing the value moves the ends of lyric extender lines to the left.

RELATED LINKS
Positions of lyric hyphens and lyric extender lines on page 434
Lengthening and shortening lyric extender lines on page 435

Moving lyric hyphens

You can move lyric hyphens horizontally.

PROCEDURE

1. In Engrave mode, select the lyric hyphens that you want to move.

2. Move the lyric 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 lyric hyphens 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 or to the left to the positions you want.

RESULT

The selected lyric hyphens are moved to the left or the right.

NOTE

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 positions of the lyric hyphen handles move correspondingly.

Lyric hyphens cannot be moved upwards or downwards, as their vertical position is determined by their lyric line number and your project-wide settings in **Engrave** > **Engraving Options**.

You can change the position of lyric hyphens relative to lyrics and to other hyphens for all lyric hyphens project-wide in the **Hyphens** section of the **Lyrics** page in **Engraving Options**.

RELATED LINKS
Lengthening and shortening lyric hyphens on page 437
Positions of lyric hyphens and lyric extender lines on page 434

Lengthening and shortening lyric hyphens

Lyric hyphens can be lengthened and shortened by moving the handles at each end in Engrave mode.

Lengthening and shortening lyric hyphens does not change the size or shape of the hyphen itself, instead you can increase or decrease the distance between the handles in which hyphens can appear.

Depending on your settings for the minimum gap between hyphens in the **Handles** section of the **Lyrics** page in **Engrave** > **Engraving Options**, lengthening or shortening lyric hyphens can cause more or fewer hyphens to appear in the space.

Moving the handle on the left end of lyric hyphens moves the start of the line, and moving the handle on the right end of lyric hyphens moves the end of the line.

$$a_\square \ \text{-} \ _\square \text{way}$$

Lyric hyphen handles can be moved independently of each other, allowing you to lengthen and shorten lyric hyphens. For example, moving the end handle of a lyric hyphen to the right without changing the position of the start lyric hyphen handle makes the space that can be occupied by hyphens longer.

NOTE

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 positions of the lyric hyphen handles move correspondingly.

To lengthen and shorten lyric hyphens with the mouse or keyboard:

PROCEDURE

1.	In Engrave mode, select the square handles at one of the following positions on the lyric hyphens you want to lengthen or shorten:

•	The start of lyric hyphens.

•	The end of lyric hyphens.

2.	Move the selected 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**.

•	Click and drag the handles to the right or to the left.

RELATED LINKS

Positions of lyric hyphens and lyric extender lines on page 434
Lengthening and shortening lyric hyphens using the Properties panel on page 438

Lengthening and shortening lyric hyphens using the Properties panel

Lyric hyphens can be lengthened and shortened by moving the handles at each end independently of each other using the Properties panel in Engrave mode.

PROCEDURE

1.	In Engrave mode, select one of the following for the lyric hyphens that you want to lengthen or shorten:

•	The lyric hyphens.

•	The lyrics from which the hyphens extend.

2.	Activate the following properties, individually or together, in the **Lyrics** group of the Properties panel:

•	**Line Start X**

•	**Line End X**

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.

4.	The properties move lyric hyphens in the following ways:

•	**Line Start X**: increasing the value moves the start handles of lyric hyphens to the right, decreasing the value moves the start handles of lyric hyphens to the left.

•	**Line End X**: increasing the value moves the end handles of lyric hyphens to the right, decreasing the value moves the end handles of lyric hyphens to the left.

RESULT

The space between lyrics that can be filled with lyric hyphens is increased or decreased. Lyric hyphens are centered in the space between their start handles and end handles.

NOTE

If the distance between the handles is increased enough to show two hyphens in the space, the position of the original hyphen is changed to accommodate more hyphens.

RELATED LINKS
Positions of lyric hyphens and lyric extender lines on page 434
Lengthening and shortening lyric hyphens on page 437

Deleting lyric lines

You can delete whole lines of lyrics.

PROCEDURE

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

   - The whole project by pressing -**A**, or by choosing **Edit** > **Select All**.

   - The whole staff containing the lyric line you want to delete by selecting the first note in the staff, holding down **Shift**, and selecting the last note in the staff.

   - The whole staff containing the lyric line you want to delete by selecting the first note in the staff and choosing **Edit** > **Select To End Of System** or **Edit** > **Select To End Of Flow**.

   - Multiple staves containing the lyric line you want to delete by selecting one whole staff at the top of the range of staves from which you want to delete the lyric line, holding down **Shift**, and selecting the staff at the bottom of the range of staves from which you want to delete the lyric lines.

     NOTE

     You can also select the bottom staff in the range, hold down **Shift**, and select the top staff in the range.

2. Choose **Edit** > **Filter** > **Lyrics** and select the type of lyric line you want to delete from the following options:

   - **All lyrics**
   - **Line 1**
   - **Line 2**
   - **Line 3**
   - **Line 4**
   - **Line 5**
   - **Above staff**
   - **Below staff**
   - **Chorus**
   - **Translation**

3. Press **Backspace** or **Delete**, or choose **Edit** > **Delete**.

RESULT

The selected lyrics are deleted.

Deleting lyrics individually

You can delete individually selected lyrics.

PROCEDURE

1. In Write mode, select the lyrics you want to delete.

2. Press **Backspace** or **Delete**, or choose **Edit** > **Delete**.

RESULT

The selected lyrics are deleted.

Changes to the type and placement of lyric lines

You can change the type and placement of whole lyric lines and individually selected lyrics after they have been input. You can use the lyric filters to selected lyrics across your project quickly.

For example, if you input lyrics in Line 3 but later want to change those lyrics to Line 4, and 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.

Filtering lyrics

The following filters are available in the **Edit** > **Filter** > **Lyrics** menu:

All lyrics

Selects all types of lyrics in the current selection, with any lyric line number and placed both above and below the staff.

Line 1

Selects only Line 1 lyrics in the current selection, including Line 1 below the staff and Line 1 above the staff.

Line 2

Selects only Line 2 lyrics in the current selection, including Line 2 below the staff and Line 2 above the staff.

Line 3

Selects only Line 3 lyrics in the current selection, including Line 3 below the staff and Line 3 above the staff.

Line 4

Selects only Line 4 lyrics in the current selection, including Line 4 below the staff and Line 4 above the staff.

Line 5

Selects only Line 5 lyrics 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.

Making different types of selection

You can filter lyrics from any selection you can make in the project, for example, you can select three bars and filter the lyric just in those three bars.

Some larger selections you can make include the following:

Select the whole project

To select everything in the project, press -**A**, or choose **Edit** > **Select All**.

Select everything in a single staff

You can select everything in a single staff in the following ways:

- Select the first note in the staff, hold down **Shift**, and select the last note in the staff.

- Select the first note in the staff and choose **Edit** > **Select To End Of System** or **Edit** > **Select To End Of Flow**.

Select everything in multiple adjacent staves

To select multiple staves, select one whole staff at the top of the range of staves you want to select, hold down **Shift**, and select the staff at the bottom of the range of staves you want to select.

NOTE

You can also select the bottom staff in the range, hold down **Shift**, and select the top staff in the range.

Changing the line number of lyric lines

You can change the lyric line number of whole lyric lines after they have been input.

PROCEDURE

1. In Write mode, select a lyric in the line whose lyric line number you want to change. It 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. Select the line number to which you want to change the selected lyric line in any of the following ways:

- Choose **Edit** > **Lyrics** > **Line** > **Line 1**.
- Right-click and choose **Lyrics** > **Line** > **Line 1** from the context menu.
- Choose **Edit** > **Lyrics** > **Line** > **Line 2**.
- Right-click and choose **Lyrics** > **Line** > **Line 2** from the context menu.
- Choose **Edit** > **Lyrics** > **Line** > **Line 3**.
- Right-click and choose **Lyrics** > **Line** > **Line 3** from the context menu.
- Choose **Edit** > **Lyrics** > **Line** > **Line 4**.
- Right-click and choose **Lyrics** > **Line** > **Line 4** from the context menu.

- Choose **Edit** > **Lyrics** > **Line** > **Line 5**.
- Right-click and choose **Lyrics** > **Line** > **Line 5** from the context menu.

RESULT

The whole lyric line of the selected lyric is changed.

NOTE

If other lyric lines exist at the same position, the position of the selected lyric line may be changed. For example, if there were two lyric lines and you changed lyric Line 1 to lyric Line 3, it now appears below lyric 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 lyric line 1 at the rhythmic position where you want to change lyric Line 2 to lyric Line 1, then the existing lyric Line 1 becomes lyric Line 2 to accommodate your most recent preference.

RELATED LINKS
Changes to the type and placement of lyric lines on page 440

Changing the line number of individual lyrics

You can change the line number 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. Change the value for the **Lyric number** property in the **Lyrics** group of the Properties panel to correspond with the line number you want in any of the following ways:

   - Enter values into the value fields.
   - Click the arrows beside the value fields.

RESULT

The line number of the selected lyrics is changed.

NOTE

If other lyric lines exist at the same position, the position of the selected lyrics may be changed. For example, if there were two lyric lines and you changed lyrics in lyric Line 1 to Line 3, they now appear below lyric Line 2.

RELATED LINKS
Changes to the type and placement of lyric lines on page 440

Changing the placement of lyric lines relative to the staff

You can change the placement of lyric lines relative to the staff after they have been input. The placement of lyric lines can be changed for whole lyric lines, and for individually selected lyrics.

PROCEDURE

1. In Write mode, select a lyric in the lines 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 any of the following ways:

- Choose **Edit** > **Lyrics** > **Placement** > **Above Staff**.
- Right-click and choose **Lyrics** > **Placement** > **Above Staff** from the context menu.
- Choose **Edit** > **Lyrics** > **Placement** > **Below Staff**.
- Right-click and choose **Lyrics** > **Placement** > **Below Staff** from the context menu.

RESULT

The placement relative to the staff of the whole lyric lines of the 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 lyric Line 2 above the staff at the position you want to change the placement of lyric Line 2 below the staff, then the existing lyrics above the staff are placed below the staff to accommodate your most recent preference.

RELATED LINKS
Changes to the type and placement of lyric lines on page 440
Changing the line number of lyric lines on page 441

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.   Choose one of the following options for the **Line placement** property in the **Lyrics** group of the Properties panel:

- **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, you may want to change the lyric line number of one of the lyric lines, or change their placement relative to the staff using the **Edit** > **Lyrics** > **Placement** menu, as described above, which avoids collisions.

RELATED LINKS
Changes to the type and placement of lyric lines on page 440
Changing the line number of lyric lines on page 441

Changing lyric lines to chorus lines

You can change whole lyric lines into chorus lines after they have been input.

PROCEDURE

1. In Write mode, select a lyric in the line that you want to change to a chorus line. It 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 lyric line number and lyric type.

2. Change the selected lyric lines to chorus lines in any of the following ways:

- Choose **Edit** > **Lyrics** > **Line** > **Chorus**.
- Right-click and choose **Lyrics** > **Line** > **Chorus** from the context menu.

RESULT

The whole lyric line of the selected lyric is changed to a chorus line.

NOTE

If other chorus lines already exist at the same position on the same side of the staff, the two lines switch. For example, if there is already a chorus line below the staff at the position you want to change lyric Line 1 below the staff into a chorus line below the staff, then the existing chorus line becomes lyric Line 1 to accommodate your most recent preference.

RELATED LINKS
Changes to the type and placement of lyric lines on page 440
Showing lyrics in italic font on page 447
Changing the line number of lyric lines on page 441

Changing individual lyrics into chorus lyrics

You can change individual lyrics into chorus lyrics after they have been input.

PROCEDURE

1. Select the lyrics you want to change into chorus lyrics. You can do this in Write mode and Engrave mode.

2. Check the box beside the **Chorus** property in the **Lyrics** group of the Properties panel.

RESULT

The selected individual lyrics are changed to chorus lyrics.

NOTE

If other chorus lines exist at the same position on the side of the staff to which you want to change your current selection to chorus lines, the two lines collide. To avoid this, you may want to change the lyrics into chorus lyrics using the **Edit** > **Lyrics** > **Placement** menu, which avoids collisions.

NOTE

Turning lyric lines into chorus lyric lines changes both their placement and appearance as chorus lines are shown in an italic font, and placed in the middle of other lyric lines.

You can show lyrics in an italic font without changing their lyric type or placement.

RELATED LINKS
Changes to the type and placement of lyric lines on page 440
Showing lyrics in italic font on page 447
Changing the line number of lyric lines on page 441

Changing lyric lines to lyric line translations

You can change whole lyric lines can be changed to lyric line translations after they have been input.

PROCEDURE

1. In Write mode, select a lyric in the line that you want to change to a lyric line translation. It 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 lyric line number and lyric type.

2. Select the line number of which you want the selected lyric line to become in any of the following ways:

   - Choose **Edit** > **Lyrics** > **Translations** > **Line 1 Translation**.
   - Right-click and choose **Lyrics** > **Translations** > **Line 1 Translation** from the context menu.
   - Choose **Edit** > **Lyrics** > **Translations** > **Line 2 Translation**.
   - Right-click and choose **Lyrics** > **Translations** > **Line 2 Translation** from the context menu.
   - Choose **Edit** > **Lyrics** > **Translations** > **Line 3 Translation**.
   - Right-click and choose **Lyrics** > **Translations** > **Line 3 Translation** from the context menu.
   - Choose **Edit** > **Lyrics** > **Translations** > **Line 4 Translation**.
   - Right-click and choose **Lyrics** > **Translations** > **Line 4 Translation** from the context menu.
   - Choose **Edit** > **Lyrics** > **Translations** > **Line 5 Translation**.
   - Right-click and choose **Lyrics** > **Translations** > **Line 5 Translation** from the context menu.
   - Choose **Edit** > **Lyrics** > **Translations** > **Chorus Translation**.
   - Right-click and choose **Lyrics** > **Translations** > **Chorus Translation** from the context menu.

RESULT

The selected lyric lines become lyric translation lines of the lyric line number specified.

NOTE

If a lyric line translation already exists for the same line number at the same position on the same side of the staff, the two lines switch. For example, if there is already a lyric Line 1

translation at the same rhythmic position where you want to change lyric Line 2 into lyric Line 1 translation, then the existing lyric line translation becomes lyric Line 2 to accommodate your most recent preference.

RELATED LINKS

Changing individual lyrics to translation lyrics

You can change individual lyrics into translation lyrics after they have been input.

PROCEDURE

1. Select the lyrics you want to change into translation lyrics. You can do this in Write mode and Engrave mode.

2. Check the box beside the **Is translation** property in the **Lyrics** group of the Properties panel.

RESULT

The selected lyrics become translation lyrics of the same lyric line number that they were previously. For example, selecting lyrics in Line 2 and activating the **Is translation** property turns them into translation lyrics for lyric Line 2.

NOTE

If other chorus lines exist at the same position on the side of the staff to which you want to change your current selection to chorus lines, the two lines collide. To avoid this, you may want to change the lyrics into chorus lyrics using the **Edit** > **Lyrics** > **Placement** menu, as described above, which avoids collisions.

NOTE

Turning lyric lines into lyric line translations changes both their placement and appearance: lyric line translations are placed below the lyric line of which they are a translation, are shown in an italic font, and are not given their own verse number if verse numbers are shown as they are counted as part of the lyric line of which they are a translation.

You can also show lyrics in an italic font without changing their lyric type or placement.

RELATED LINKS

Individual changes to the appearance and placement of lyrics

The appearance and placement of lyrics can be changed individually using properties in the **Lyrics** group of the Properties panel.

Most properties in the **Lyrics** group of the Properties panel are available in Write mode and Engrave mode, however there are more properties available in Engrave mode.

You can change the appearance and position of lyrics project-wide by changing the font used for lyrics, and by selecting and changing options on the **Lyrics** page in **Engrave** > **Engraving Options**.

Changing the syllable type of existing lyrics

You can indicate the syllable type for each lyric as you input them by which key you press to advance the popover: press **Space** if you typed in a complete word, or the final syllable in a multi-syllabic word, and press - if you typed in one syllable of a multi-syllabic word.

These two keys tell Dorico what type of syllable that lyric is:

- A whole word if it comes after a gap, and is followed by a gap.
- The first syllable in a multi-syllabic word if it comes after a gap, but is followed by a hyphen.
- A middle syllable in a multi-syllabic word if it comes after a hyphen, and is followed by a hyphen.
- The last syllable in a multi-syllabic word if it comes after a hyphen, but is followed by a gap.

To change the syllable type of lyrics after they have been input:

PROCEDURE

1. Select the lyrics whose syllable type you want to change. You can do this in Write mode and Engrave mode.
2. Select one of the following options from the **Syllable type** menu in the **Lyrics** group of the Properties panel:
   - **Whole Word**: no hyphens are shown either side of lyrics. Extender lines can be shown after lyrics.
   - **Start**: shows hyphens after lyrics, which can be continuation hyphens depending on the distance before the next lyric in the same lyric line.
   - **Middle**: shows hyphens after lyrics, which can be continuation hyphens depending on the distance before the next lyric in the same lyric line.
   - **End**: Extender lines can be shown after lyrics.

     NOTE

     Changing the syllable type to **Middle** or **End** does not automatically show hyphens before the syllable. To show a hyphen before a lyric, you should change the syllable type of the lyric immediately preceding it to either **Start** or **Middle**.

Showing lyrics in italic font

To show lyrics in an italic font without changing their lyric type or position:

PROCEDURE

1. Select the lyrics you want to show in an italic font. You can do this in Write mode and Engrave mode.
2. Activate the **Italic** property in the **Lyrics** group of the Properties panel.

RESULT

The selected lyrics are shown in an italic font.

NOTE

If you want to show lyrics in an italic font because they are intended to be either chorus lyrics or translation lyrics, you should change their lyric type.

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**.

RELATED LINKS

Changing the alignment of lyrics relative to notes

By default, the center of lyrics are aligned horizontally with noteheads. You cannot change this project-wide, as the horizontal position of lyrics is automatically adjusted in Dorico to minimize changes to the rhythmic spacing of notes.

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 re-adjusted, the rhythmic spacing at that rhythmic position might change.

If you find that you need to override the alignment of lyrics:

PROCEDURE

1. Select the lyrics whose alignment you want to change. You can do this in Write mode and Engrave mode.

2. Activate the **Lyric text alignment** property in the **Lyrics** group of the Properties panel.

3. Select one of the following options from the menu:
   - **Left**
   - **Center**
   - **Right**

RESULT

The alignment of the selected lyrics is changed according to your selection.

Showing East Asian elision slurs individually

You can show and not show East Asian elision slurs for individually selected lyrics, independently of your project-wide setting in **Engraving Options**.

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. Activate the **Show East Asian elision slur** property in the **Lyrics** group of the Properties panel.

3. Check the box beside the activation switch to show East Asian elision slurs on the selected lyrics.

> **NOTE**
>
> Only activating the **Show East Asian elision slur** property means East Asian elision slurs are not shown. The box beside the activation switch must be checked as well in order to show East Asian elision slurs.

RESULT

East Asian elision slurs are shown on the selected lyrics when the box beside the **Show East Asian elision slur** is checked.

> **NOTE**
>
> You can choose to show East Asian elision slurs project-wide on the Lyrics page in **Engrave** > **Engraving Options**.

RELATED LINKS

Project-wide changes to the appearance of lyrics

Different aspects of the appearance, position, and spacing of lyrics can be changed on the **Lyrics** page in **Engrave** > **Engraving Options**, and in the **Engrave** > **Font Styles** dialog.

Changing the lyrics font style

In the **Engrave** > **Font Styles** dialog, you can select the **Lyrics Font** from the menu and change different aspects of the font.

Changes made to the font style apply to the entire project, including parts.

The different aspects of the lyrics font style that you can change are:

Font family

This sets the overall font style.

Size

This sets the size of lyrics. Lyric size can be:

- **Absolute**: always the set size, regardless of the staff size.
- **Staff-relative**: the size of lyrics is proportional to the staff size, which means lyrics appear smaller than the set value on smaller staves, and larger than the set value on larger staves.

Style

This sets the lyrics font appearance. The lyrics font can be:

- **Regular** (default)
- **Italic**
- **Bold**
- **Bold Italic**

Underlined

The lyrics font appears underlined if the box beside the **Underlined** activation switch is checked.

Project-wide Engraving Options for lyrics

Options for the appearance and placement of lyrics project-wide can be found on the **Lyrics** page in **Engraving Options**.

The options on this page allow you to change the default appearance and positions of lyrics, and the appearance and positions of lyric hyphens and lyric extender lines.

Many options are accompanied by musical examples to demonstrate how each option affects the appearance of your music.

You can open **Engraving Options** in 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.

Showing and hiding verse numbers

You can choose to show verse numbers or not show verse numbers project-wide in the **Verse Numbers** section of the **Lyrics** page in **Engraving Options**.

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Engraving Options**.

2. Click **Lyrics** in the page list.

3. Choose one of the following options for the **Verse numbers for each line of lyrics** option in the **Verse Numbers** section:

    - **Show verse numbers**

    - **Do not show verse numbers**

4. Click **Apply**, then **Close**.

RESULT

Verse numbers are either shown or not shown project-wide, according to your selection.

Changing the appearance of verse numbers

You can change how verse numbers appear in the **Verse Numbers** section of the **Lyrics** page in **Engraving Options**.

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Engraving Options**.

2. Click **Lyrics** in the page list.

3. Choose one of the following options for the **Punctuation for verse numbers** option in the **Verse Numbers** section:

    - **Append period (full stop)**

    - **Do not append period (full stop)**

4. Click **Apply**, then **Close**.

RESULT

Verse numbers are either shown with a period or not shown with a period project-wide, according to your selection.

Showing East Asian elision slurs project-wide

East Asian elision slurs are used to show that two or more characters in East Asian languages are part of the same lyric.

To show East Asian elision slurs project-wide:

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Engraving Options**.
2. Click **Lyrics** in the page list.
3. Choose one of the following options in the **East Asian Lyrics** section:
   - **Show**
   - **Do not show**

RESULT

East Asian elision slurs are either shown or not shown project-wide, according to your selection.

RELATED LINKS
Project-wide Engraving Options for lyrics on page 450

Changing the lyrics font style

To change the font style used for lyrics:

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Font Styles** to open the **Font Styles** dialog.
2. Choose **Lyrics Font** from the **Font style** menu.
3. Activate the switch beside the following options to change the corresponding aspects of the font:
   - **Font family**
   - **Size**
   - **Style**
   - **Underlined**
4. Click **OK** to save your changes and close the dialog.

RESULT

The lyrics font style is changed project-wide.

RELATED LINKS
Project-wide changes to the appearance of lyrics on page 449

Changing the lyric line translation font style

To change the font style used for lyric line translations:

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Font Styles** to open the **Font Styles** dialog.
2. Choose **Lyrics translation Font** from the **Font style** menu.
3. Activate the switch beside the following options to change the corresponding aspects of the font:
    - **Font family**
    - **Size**
    - **Style**
    - **Underlined**
4. Click **OK** to save your changes and close the dialog.

RESULT

The lyric line translation font style is changed project-wide.

RELATED LINKS

Notes

Notes are shapes that are positioned on staves to indicate musical pitches. Notes are most commonly shown with oval-shaped, round noteheads, however there are many different designs of noteheads that can be used.

Project-wide changes to the appearance of noteheads

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 positions of noteheads, ledger lines, stem flags, and rhythm dots. You can also change the size of grace notes relative to normal notes.

Many options are accompanied by musical examples to demonstrate how each option affects the appearance of your music.

You can open **Engraving Options** in 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 notehead design project-wide

You can make project-wide changes to the notehead design.

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Engraving Options**.
2. Click **Notes** in the page list.
3. Select one of the following options for the **Notehead design** option in the **Noteheads** section:

   - **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 456

Showing different shaped noteheads for each degree of the scale

To show each degree of the scale with a different notehead design project-wide:

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Engraving Options**.
2. Click **Notes** in the page list.
3. Select one of the following options for the **Shaped noteheads based on scale degree** option in the **Noteheads** section:
   - **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
Changing the notehead design of individual noteheads on page 456

Showing note names in noteheads

To show the note name as a letter in all noteheads project-wide:

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Engraving Options**.
2. Click **Notes** in the page list.

3. Select **Note names** for the **Notehead design** option in the **Noteheads** section.

> 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 be able to read the letter name inside noteheads, you may need to increase the staff size of your project.

RELATED LINKS

Individual changes to the appearance of noteheads

The appearance and position of noteheads can be changed individually, and independently of your settings in **Engrave** > **Engraving Options**.

RELATED LINKS

Available notehead designs

The following different notehead designs are currently available in the **Edit** > **Notehead** menu.

Notehead design appearance	Notehead design name
	Aikin 7-shape noteheads
	Circle X noteheads
	Circled noteheads
	Default noteheads
	Default noteheads (large)
	Diamond noteheads
	Funk 7-shape noteheads
	Large arrow down noteheads
	Large arrow up noteheads
	Large circled noteheads

Notehead design appearance	Notehead design name
	Muted slash noteheads
	Old-style diamond noteheads
	Pitch name noteheads
	Plus noteheads
	Slash noteheads
	Slashed noteheads (bottom left to top right)
	Slashed noteheads (top left to bottom right)
	Triangle down noteheads
	Triangle up noteheads
	Walker 4-shape noteheads
	Walker 7-shape noteheads
	White diamond noteheads
	Wide diamond noteheads
	With X noteheads
	X noteheads

Changing the notehead design of individual noteheads

To change the notehead design of individually selected noteheads:

PROCEDURE

1. Select the noteheads whose notehead design you want to change. You can do this in Write mode and Engrave mode.
2. Choose **Edit** > **Notehead**, or right-click and choose **Notehead** from the context menu, then select the notehead design you want from the options available.

    For example, you can change the notehead design of the selected notes to X noteheads in the following ways:

    - Choose **Edit** > **Notehead** > **X Notehead**.
    - Right-click and choose **Notehead** > **X Notehead** from the context menu.

RESULT

The notehead design of the selected notes is change according to your selection.

NOTE

You can also change the notehead design for all noteheads project-wide.

RELATED LINKS
Changing notehead design project-wide on page 453

Changing the size of notes individually

You can change the size of notes individually.

NOTE

You can change the size of all notes project-wide by changing the notehead design on the **Notes** page in **Engrave** > **Engraving Options**.

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 should input them as either grace notes or cues.

PROCEDURE

1. Select the notes whose size you want to change. You can do this in Write mode and Engrave mode.
2. Activate the **Scale** property in the **Common** group of the Properties panel.
3. Select one of the following options from the menu:
   - **Normal**
   - **Grace**
   - **Cue**
   - **Cue grace**

RELATED LINKS
Inputting grace notes with the keyboard on page 380
Inputting grace notes with the mouse on page 381
Inputting cues on page 305

Changing the custom scale size of individual 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 the options available in the **Scale** property 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 should input them as either grace notes or cues.

PROCEDURE

1. Select the notes whose custom scale size you want to change. You can do this in Write mode and Engrave mode.
2. Activate the **Custom Scale** property in the **Common** group of the Properties panel.

NOTE

The **Custom Scale** property changes the size of notes according to a percentage change. If you have also activated the **Scale** property, the percentage change is based on the selected size option for the **Scale** property.

3. Change the size of the selected notes by changing the scale percentage value of the **Custom Scale** property in any of the following ways:

    - Enter values into the value fields.

    - Click the arrows beside the value fields.

RELATED LINKS

Changing the width of ledger lines individually

You can change the width of ledger lines for individually selected ledger lines in Engrave mode. You can also change the width of all ledger lines project-wide on the **Notes** page in **Engrave** > **Engraving Options**.

To change the width of individually selected ledger lines:

PROCEDURE

1. In Engrave mode, select the notes whose ledger line width you want to change.

2. Activate the **Ledger line** property in the **Notes and Rests** group of the Properties panel.

3. Change the width of the selected ledger lines by changing the values of the following properties:

    - **Ledger line L**: increasing the value makes the left side of ledger lines longer, decreasing the value makes the left side of ledger lines shorter.

    - **Ledger line R**: increasing the value makes the right side of ledger lines longer, decreasing the value makes the right side of ledger lines shorter.

RESULT

The width of ledger lines of the selected notes is changed according to the values set.

RELATED LINKS

Changing the consolidation of rhythm dots individually

You can change how rhythm dots in multiple voices are consolidated for individually selected notes in Engrave mode. You can also change how rhythm dots in multiple voices are consolidated for all notes project-wide on the **Notes** page in **Engrave** > **Engraving Options**.

To change how rhythm dots in multiple voices are consolidated for individually selected notes:

PROCEDURE

1. In Engrave mode, select the notes whose rhythm dot consolidation you want to change.

2. Activate the **Rhythm dot consolidation** property in the **Notes and Rests** group of the Properties panel.

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 according to your selection.

RELATED LINKS

Specifying on which string individual notes are played (string instruments only)

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.

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, it is best to select notes only in staves of the same instrument type. For example, selecting multiple Cs in the Violin 1 and Violin 2 staves.

2. Activate the **String** property in the **Notes and Rests** group of the Properties panel.

3. Select your preferred string from the available options in the menu. The string number for the instrument is shown, followed by the fundamental pitch and its 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 depends on the selected pitches and the instrument.

RESULT

The string on which the selected notes are played is changed.

NOTE

If you subsequently change the pitches of notes, the **String** property is automatically unset for all notes that no longer be played on their specified string.

Inputting notes

Notes can be input 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 in from a MIDI keyboard.

Notes can also be input as chords during step input.

Inputting notes with **Insert** mode activated allows you to input notes without overriding any existing notes that come after the current rhythmic position of the caret.

How the duration of notes is notated is automatically determined by Dorico automatically adjusts the notation of notes based on the time signature and position in the bar. You can force the duration of notes if you want to specify how notes are notated.

RELATED LINKS

Changing the pitch of existing notes

You can change the pitch of notes after they have been input.

PROCEDURE

1. In Write mode, select the notes whose pitches you want to change.

2. Raise or lower the pitches of the selected notes in the following ways:

   - Press **Alt-Up Arrow** to move notes up one staff position.

   - Press **Alt-Down Arrow** to move notes down one staff position.

   - Press **Shift-Alt-Up Arrow** to transpose notes up a semitone.

   - Press **Shift-Alt-Down Arrow** to transpose notes down a semitone.

RESULT

The pitches of the selected notes are 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.

RELATED LINKS

Deleting notes

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**.

RESULT

The selected notes are deleted from your project.

Dynamics at the rhythmic positions of deleted notes are not deleted.

If a slur began or ended on a deleted note, the slur is automatically repositioned to the next or previous notehead. If only one note is left under a slur, the slur is automatically deleted.

Octave lines are not deleted or repositioned.

Holds and pauses are not deleted, but may be repositioned to be over whole bar rests if you delete all notes in a bar.

Positions of notes

You can move notes to different rhythmic positions after they have been input in Write mode, and you can adjust the graphical positions of notes by editing note spacing.

You can also cross notes to other staves for grand staff instruments, such as piano and harp.

RELATED LINKS
Note spacing on page 171
Moving grace notes rhythmically on page 383
The add intervals popover on page 105
Adding notes above and below existing notes on page 105

Moving notes rhythmically

You can move notes to different rhythmic positions along staves.

PROCEDURE

1. In Write mode, select the notes you want to move.

2. Move the selected notes to the right or to the left in the following ways, according to the rhythmic grid currently set:

- Press **Alt-Right Arrow**
- Press **Alt-Left Arrow**

RESULT

The selected notes are moved to new rhythmic positions. If you selected multiple adjacent notes, they are moved together as a block.

NOTE

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.

However, moving notes back to their previous positions later does not restore any notes deleted when they were moved previously. The deleted notes must be re-input if necessary.

Changes to note spacing in Engrave mode

Notes are automatically positioned rhythmically when they are input, according to their rhythmic duration and position relative to other notes.

Moving notes graphically away from their rhythmic position can be misleading for players reading the music. However, you can make graphical adjustments to the positions of notes according to their rhythmic positions in Engrave mode.

Crossing notes to other staves

You can cross notes so that they appear on other staves to the staff into which they were input for grand staff instruments, without changing the staff to which they are attached.

For example, in phrases that cover a wide pitch range there can be some notes in a beam that fit best in a staff with a treble clef, but other notes in the beam fit better in a staff with a bass clef.

Notes all in the upper staff of a grand staff instrument

You can cross some notes to the staff above or to the staff below to create cross-staff beams. This can also reduce the number of notes with ledger lines in phrases.

Notes spanning both staves of a grand staff instrument

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 the following ways:

    - Press **N** to cross notes to the staff above

    - Press **M** to cross notes to the staff below

    - Choose **Edit** > **Cross Staff** > **Cross to Staff Above**

    - Choose **Edit** > **Cross Staff** > **Cross to Staff Below**

RESULT

The notes are shown in a different staff.

NOTE

When crossing notes to a staff that already contains notes, the stem direction of the existing notes in the staff may change. This is due to how multiple voices at the same rhythmic position are handled.

Therefore, you may need to change the stem direction of notes manually.

Transposing notes

Arpeggio signs

Arpeggio signs are vertical lines that indicate chords should be played "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

In Dorico, there are three types of arpeggio signs:

- Up arpeggio: a vertical wavy line that indicates chords should be arpeggiated from the bottom note upwards
- Down arpeggio: a vertical wavy line that indicates chords should be arpeggiated from the top note downwards
- *Non arpeggio*: a bracket with straight lines that indicates all notes in the chord should be played together, with no arpeggiation

Default up arpeggio   Default down arpeggio   Default non arpeggio

You can show arpeggio signs with different ends in Dorico. By default, up arpeggios are shown with nothing at the top end, because chords are most commonly arpeggiated upwards. Down arpeggios are shown with an arrow at the bottom by default.

Both up arpeggios and down arpeggios can be shown with one of three ends:

- 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

It is accepted practice to show up arpeggios with an arrow at the top if down arpeggios are also used in the same piece of music.

General placement conventions for arpeggio signs

Arpeggio signs are positioned to the left of the notes to which they apply, but should not be positioned between notes and accidentals. They should also always 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 473

Inputting arpeggio signs with the keyboard

You can input arpeggio signs with the keyboard using the ornaments popover. You can input arpeggio signs during step input and later on by adding arpeggio signs to existing notes.

Inputting arpeggio signs during step input with the keyboard

PROCEDURE

1. In Write mode, start note input.

2. If required, activate **Chords** in one of the following ways:

   - Press **Q**.

   - Click **Chords** in the Notes panel on the left of the window:

3. Open the ornaments popover in any of the following ways:

   - Press **Shift-O**

   - Choose **Write** > **Create Ornament**

4. Enter the arpeggio sign you want into the popover, such as `arpup` for an up arpeggio or `arpdown` for a down arpeggio.

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

RESULT

The arpeggio sign specified is input at the caret position. Its length is adjusted automatically so that it spans the range of all notes in the staff at that rhythmic position.

RELATED LINKS
The ornaments popover on page 486
Inputting notes on page 94
Inputting chords on page 96

Adding arpeggio signs to existing notes with the keyboard

PROCEDURE

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

    - A note to which you want to add an arpeggio sign

    - A note in a chord or multiple notes in a chord to which you want to add an arpeggio sign

        NOTE

        You can only add one arpeggio sign to one note or chord at a time.

2. Open the ornaments popover in any of the following ways:

    - Press **Shift**-**O**

    - Choose **Write** > **Create Ornament**

3. Enter the arpeggio sign you want into the popover. For example, `arp` for an up arpeggio sign or `nonarp` for a *non arpeggio* sign.

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

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 in the staff at that rhythmic position.

Inputting cross-staff and cross-voice arpeggio signs with the keyboard

You can input arpeggio signs between notes in different voices, and between notes in different staves that belong to the same instrument, such as piano or harp.

PROCEDURE

1. In Write mode, select one of the following in one of the voices or staves to which you want to add an arpeggio sign:

    - A single note

    - Multiple notes in a chord

2. Hold down the **Ctrl/Cmd** key.

3. Select one of the following in the other voice or staff at the same rhythmic position as your selection in step 1:

    - A single note

    - Multiple notes in a chord

4. Open the ornaments popover in any of the following ways:

    - Press **Shift**-**O**

    - Choose **Write** > **Create Ornament**

5. Enter the arpeggio sign you want into the popover. For example, `arp` for an up arpeggio sign or `nonarp` for a *non arpeggio* sign.

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

RESULT

The arpeggio sign specified is input across the selected notes. Its length is adjusted automatically so that it spans the range of all notes in the staff at that rhythmic position.

You cannot create cross-staff arpeggio signs between different instruments.

Inputting arpeggio signs with the mouse

You can input arpeggio signs with the mouse by clicking on the arpeggio signs you want in the **Ornaments** panel during step input and later on by adding ornaments to existing notes.

You can open the **Ornaments** panel by clicking **Ornaments** in the Notations toolbox on the right of the window in Write mode:

The different sections in the **Ornaments** panel are:

- **Baroque and Classical**
- **Arpeggiation**
- **Glissandi**

Adding arpeggio signs to existing notes with the mouse

PROCEDURE

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

- A note to which you want to add an arpeggio sign
- A note in a chord or multiple notes in a chord to which you want to add an arpeggio sign

You can only add one arpeggio sign to one note or chord at a time.

2. Click on the arpeggio sign you want in the **Arpeggiation** section of the **Ornaments** panel on the right of the window.

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 in the staff at that rhythmic position.

If your preference is set to **Load cursor with item**, complete these steps in the reverse order.

Inputting cross-staff and cross-voice arpeggio signs with the mouse

You can input arpeggio signs between notes in different voices, and between notes in different staves that belong to the same instrument, such as piano or harp.

PROCEDURE

1. In Write mode, select one of the following in one of the voices or staves to which you want to add an arpeggio sign:

- A single note
- Multiple notes in a chord

2. Hold down the **Ctrl/Cmd** key.

3. Select one of the following in the other voice or staff at the same rhythmic position as your selection in step 1:

- A single note

- Multiple notes in a chord

4. Click on the arpeggio sign you want in the **Arpeggiation** section of the **Ornaments** panel on the right of the window.

RESULT

The arpeggio sign specified is input across the selected notes. Its length is adjusted automatically so that it spans the range of all notes in the staff at that rhythmic position.

NOTE

You cannot create cross-staff arpeggio signs between different instruments.

You cannot create cross-staff and cross-voice arpeggio signs if your preference is set to **Load cursor with item**.

Changing the type of arpeggio signs

You can change the type of existing arpeggio signs.

PROCEDURE

1. Select the arpeggio signs whose type you want to change. You can do this in Write mode and Engrave mode.

2. Select one of the following options from the menu beside the **Arpeggio type** property in the **Arpeggios** group of the Properties panel:

- **Non arpeggio**

- **Up arpeggio**

- **Down arpeggio**

RESULT

The type of the selected arpeggios is changed, according to your selection.

RELATED LINKS
Arpeggio signs on page 464

Deleting arpeggio signs

PROCEDURE

1. In Write mode, select the arpeggio signs you want to delete.

2. Delete the arpeggio signs in any of the following ways:

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

- Choose **Edit** > **Delete**.

RESULT

The selected arpeggio signs are deleted.

Lengths 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.

RELATED LINKS
Project-wide Engraving Options for arpeggio signs on page 473

Lengthening and shortening arpeggio signs graphically

You can lengthen and shorten individual arpeggio signs graphically.

PROCEDURE

1. In Engrave mode, select the square handles at one end of the arpeggio signs you want to lengthen or shorten.

2. Lengthen and shorten the arpeggio signs by moving the handles in the following ways:

    - Press **Alt-Up Arrow** to move them upwards.

    - Press **Alt-Down Arrow** to move them downwards.

        NOTE

        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 or downwards to the positions you want.

RESULT

The selected arpeggio signs are lengthened or shortened graphically.

NOTE

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**.

RELATED LINKS
Lengthening and shortening arpeggio signs graphically using the Properties panel on page 469
Project-wide Engraving Options for arpeggio signs on page 473

Lengthening and shortening arpeggio signs graphically using the Properties panel

You can lengthen and shorten arpeggio signs graphically using the Properties panel in Engrave mode.

PROCEDURE

1. In Engrave mode, select the arpeggio signs you want to lengthen or shorten.

2. Activate the following properties, individually or together, in the **Arpeggios** group of the Properties panel:

- **Top Y offset**

- **Bottom Y offset**

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.

4. The properties lengthen and shorten arpeggio signs in the following ways:

   - **Top Y offset** moves the handles at the top of arpeggio signs: increasing the value moves them upwards, decreasing the value moves them downwards.

   - **Bottom Y offset** moves the handles at the bottom of arpeggio signs: increasing the value moves them upwards, decreasing the value moves them downwards.

RESULT

Moving the top handles of arpeggio signs upwards and the bottom handles of arpeggio signs downwards makes arpeggio signs longer.

Moving the top handles of arpeggio signs downwards and the bottom handles of arpeggio signs upwards makes arpeggio signs shorter.

Positions of arpeggio signs

You can change the positions of arpeggio signs by moving individual arpeggio signs to different rhythmic positions in Write mode, moving them to different graphical positions in Engrave mode, and by changing the default positions of all arpeggio signs project-wide.

You can move arpeggio signs to different rhythmic positions in Write mode. They are positioned by default according to your preferences 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.

Project-wide settings for the default positions of arpeggio signs can be set on the **Arpeggio Signs** page in **Engrave** > **Engraving Options**.

RELATED LINKS
Project-wide Engraving Options for arpeggio signs on page 473

Moving arpeggio signs rhythmically

You can move arpeggio signs to new rhythmic positions after they have been input.

NOTE

You cannot move arpeggio signs rhythmically with the mouse.

PROCEDURE

1. In Write mode, select the arpeggio signs you want to move.

2. Move the arpeggio signs left or right in the following ways:

   - Press **Alt-Right Arrow**

   - Press **Alt-Left Arrow**

470

RESULT

Arpeggio signs are moved left or right, according to the rhythmic grid currently set. 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 right or left, it is shown again beside the next note at a rhythmic position that can be reached according to the rhythmic grid currently set.

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.

You can undo moving arpeggio signs immediately afterward. However, simply moving arpeggio signs back to their previous positions later does not restore any arpeggio signs deleted when they were moved previously. The deleted arpeggio signs must be re-input if necessary.

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.

    NOTE

    If you want to move arpeggio signs 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 arpeggio signs in any direction to the positions you want.

RELATED LINKS
Lengthening and shortening arpeggio signs graphically on page 469
Moving arpeggio signs graphically using the Properties panel on page 471

Moving arpeggio signs graphically using the Properties panel

You can move arpeggio signs graphically using the Properties panel in Engrave mode, without changing the rhythmic positions to which they apply.

PROCEDURE

1. In Engrave mode, select the arpeggio signs you want to move.

2. Activate the **X offset** property in the **Arpeggios** 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.

4. The **X offset** property moves arpeggio signs in the following ways:

- Increasing the value moves arpeggio signs to the right.
- Decreasing the value moves arpeggio signs to the left.

RESULT

The selected arpeggio signs are moved to the right or to the left, according to your changes.

RELATED LINKS

Individual changes to the appearance and position of arpeggio signs

You can make changes to the appearance and position of individual arpeggio signs, independently of your project-wide settings in **Engraving Options**.

RELATED LINKS

Showing arpeggio signs before grace notes

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. Activate the **Arpeggio before grace notes** property in the **Arpeggios** group of the Properties panel.

RESULT

The selected arpeggio signs are now shown before grace notes.

Changing the appearance of the ends of arpeggio signs individually

Downwards arpeggio signs have an arrowhead at the bottom of the line by default, but upwards arpeggio signs have no arrowhead by default. You can change the appearance of the ends of arpeggio signs individually.

PROCEDURE

1. Select the arpeggio signs whose ends you want to change. They do not have to be in the same direction. You can do this in Write mode and Engrave mode.

   NOTE

   You cannot change the ends of *non arpeggio* signs.

2. Activate the **Sign end** property in the **Arpeggios** group of the Properties panel.
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.

NOTE

You can change the appearance of the ends of all arpeggio signs project-wide on the **Arpeggio Signs** page in **Engrave** > **Engraving Options**.

EXAMPLE

| Up arpeggio with nothing at the end | Up arpeggio with an arrow at the end | Up arpeggio with a swash at the end |

Project-wide Engraving Options for arpeggio signs

Options for the appearance and positions of arpeggio signs project-wide can be found on the **Arpeggio Signs** page in **Engraving Options**.

The options on this page allow you to change the design, appearance, and precise positions of arpeggio signs.

Many options are accompanied by musical examples to demonstrate how each option affects the appearance of your music.

You can open **Engraving Options** in 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.

Arpeggio signs in playback

You can find options to control the playback of all arpeggio signs 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 at 120bpm. It can be helpful to set arpeggio lengths using this measurement instead of defining arpeggios as a fraction of their notated rhythm, as arpeggios in very slow music would play back much slower than most people would 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 within arpeggios can be heard within their notated duration.

You can open **Playback Options** in the following ways:

- Choose **Play** > **Playback Options** in Play mode

- Press **Ctrl/Cmd-Shift-P** in any 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 the playback of arpeggio signs relative to the beat individually

You change whether individual arpeggio signs are played before their notated position or after their notated position, independently of your project-wide settings for the playback of arpeggio signs relative to the beat.

PROCEDURE

1. Select the arpeggios who playback relative to the beat you want to change. You can do this in Write mode and Engrave mode.

2. Activate the **Playback position** property in the **Arpeggios Playback** group of the Properties panel.

3. Choose one of the following options:

   - **Start on beat**

   - **Ends on beat**

RESULT

The playback of the selected arpeggios relative to the beat is changed.

NOTE
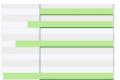
You can change the playback of all arpeggios relative to the beat project-wide on the **Timing** page in **Play** > **Playback Options**.

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 arpeggios, independently of your project-wide settings for the playback of arpeggios on the **Timing** page in **Playback Options**.

The duration of arpeggios is expressed as a fraction of the notated rhythm of chords. For example, an arpeggio on a quarter note chord with a note offset value of 1/2 lasts an eighth note, 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. Activate the **Note offset** property in the **Arpeggios Playback** group of the Properties panel.

3. Change the value in the following ways:

   - Enter a value into the value field.

   - Click the arrows beside the value field.

4. Save your new value in the following ways:

   - Press **Return**.

   - Click anywhere outside the value field.

RESULT
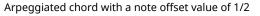
The playback duration of the selected arpeggios is changed. This overrides your project-wide settings for the duration of arpeggios for the selected arpeggios.

EXAMPLE

Arpeggiated chord with a note offset value of 1/8

Arpeggiated chord with a note offset value of 1/2

RELATED LINKS
Arpeggio signs in playback on page 473

Glissando lines

Glissando lines indicate a continuous transition between two notes. 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*. Glissando lines may indicate that a chromatic scale should be played between the two notes, either rising or falling in a series of semitones, whereas *portamento* lines indicate a smooth, continuous glide between the two notes.

Some people understand glissando lines to indicate a chromatic scale should be played 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* may be used interchangeably in other cases.

Both glissando lines and *portamento* lines can be input in Dorico, and you can easily change their style after they have been input.

An example of the different glissando line styles and glissando text available in Dorico

General placement conventions for glissando lines

Glissando lines are positioned between noteheads and must accurately match the interval between the pitches. The endpoints of glissando lines must be directly beside noteheads but not directly touching them.

Glissando lines must not collide with accidentals, but should instead stop short so the accidental can be clearly read. Dorico automatically positions glissandi 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 cannot edit glissando lines individually in Engrave mode. However, you can make detailed adjustments to the positions of glissando lines on the **Glissando Lines** page in **Engrave** > **Engraving Options**.

RELATED LINKS

Inputting glissando lines with the keyboard

PROCEDURE

1. In Write mode, select the note from which you want a glissando line to start.

   NOTE

   You cannot input glissando lines during step input.

2. Open the ornaments popover in any of the following ways:

   - Press **Shift-O**.

   - Choose **Write** > **Create Ornament**.

3. Enter the style of glissando line you want into the popover:

   - `gliss` for a straight glissando line.

   - `glisswavy` for a wavy glissando line.

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

RESULT

The glissando line specified is input. It starts from the selected note and ends at the next note in the staff, even if this crosses rests.

NOTE

You cannot input a glissando line on the last note in a staff.

RELATED LINKS
The ornaments popover on page 486

Inputting glissando lines with the mouse

NOTE

If your mouse input preference is set to **Load cursor with item**, complete these steps in the reverse order.

PROCEDURE

1. In Write mode, select the note from which you want a glissando line to start.

   NOTE

   You cannot input glissando lines during step input.

2. Click the style of glissando line you want in the **Ornaments** panel:

   - **Glissando (Straight)**

   - **Glissando (Wavy)**

RESULT

The glissando line specified is input. It starts from the selected note and ends at the next note in the staff, even if this crosses rests.

NOTE

You cannot input a glissando line on the last note in a staff.

RELATED LINKS
Inputting ornaments with the mouse on page 487

Inputting glissando lines between non-adjacent notes

PREREQUISITE

If using the mouse, your preference must be set to **Create item at selection**. If your preference is set to **Load cursor with item** in **Preferences**, the glissando line is only input between the note you click on and the note immediately following it.

PROCEDURE

1. In Write mode, select the two notes you want to join with a glissando line.

    TIP

    The two notes can be in different voices.

2. Input a glissando line in any of the following ways:
    - Open the ornaments popover and enter the style of glissando you want, such as `gliss.`
    - Click on the style of glissando you want in the **Ornaments** panel.

RESULT

The style of glissando specified is input between the selected notes.

NOTE

The glissando does not automatically adjust around any notes or rests between the selected notes. If glissando text is shown, it may collide with notes or rests, so you may need to make further adjustments, such as not showing glissando text for this glissando line.

RELATED LINKS
Inputting glissando lines with the keyboard on page 477
Inputting glissando lines with the mouse on page 477
Changing the glissando text of individual glissando lines on page 483
Preferences on page 51

Inputting glissando lines across empty bars

For very long glissandi that extend across multiple bars, you may not want to show pitches at the start of each bar to indicate that performers should not emphasize pitches during the course of the glissando, or that performers should play the glissando at their own speed.

PROCEDURE

1. In Write mode, select the two notes you want to join with a glissando line.

> **NOTE**
>
> There should only be implicit rests between the two notes.

2. Input a glissando line in any of the following ways:
   - Open the ornaments popover and enter the style of glissando you want, such as `gliss`.
   - Click the style of glissando you want in the **Ornaments** panel.
3. Select the note at the start of the glissando line.
4. Activate the **Ends voice** property in the **Notes and Rests** group of the Properties panel to hide rests between the note and the end of the bar.
5. Optional: If the note at the end of the glissando line is not at the start of the bar, select it.
6. Optional: Activate the **Starts voice** property in the **Notes and Rests** group of the Properties panel to hide rests between the start of the bar and the note.

RESULT

A glissando line is input between the selected notes, and implicit rests between them are hidden.

EXAMPLE

A glissando line across multiple bars with no rests shown between the two notes

RELATED LINKS

Inputting glissando lines with the keyboard on page 477
Inputting glissando lines with the mouse on page 477
Showing rest colors on page 560
Turning explicit rests into implicit rests on page 562

Deleting glissando lines

PROCEDURE

1. In Write mode, select the glissando lines you want to delete.
2. Delete the glissando lines in any of the following ways:
   - Press **Backspace** or **Delete**.
   - Choose **Edit** > **Delete**.

RESULT

The selected glissando lines are deleted.

Positions of glissando lines

Glissando lines are positioned between notes according to your settings on the **Glissando Lines** page in **Engraving Options**. You can adjust the graphical positions and the angles of individual glissando lines in Engrave mode.

NOTE

You cannot move glissando lines rhythmically. If you want to change the rhythmic positions of glissando lines, you must delete them from their original positions and input new glissando lines at the new positions you want.

RELATED LINKS

Moving glissando lines graphically

You can move individual glissando lines, and segments of glissando lines that cross system and frame breaks, graphically without changing the rhythmic positions to which they apply.

PROCEDURE

1. In Engrave mode, select the one of the following that you want to move:
   - Whole glissando lines.
   - Segments of glissando lines that cross system or frame breaks.
2. Move the glissando 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.
   - Press **Alt-Up Arrow** to move them upwards.
   - Press **Alt-Down Arrow** to move them downwards.

     NOTE

     If you want to move glissando lines 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 glissando lines in any direction to the positions you want.

RELATED LINKS

Moving glissando lines graphically using the Properties panel

You can move individual glissando lines, and segments of glissando lines that cross system and frame breaks, graphically using properties in the **Glissando Lines** group of the Properties panel in Engrave mode.

Because you can move each end of glissando lines independently of the other end using the Properties panel, you can use these properties to adjust the angles and graphical lengths of individual glissando lines.

NOTE

Moving glissando lines graphically does not change the rhythmic positions to which they apply.

PROCEDURE

1. In Engrave mode, select the one of the following that you want to move:

    - Whole glissando lines.

    - Segments of glissando lines that cross system or frame breaks.

2. Activate the following properties, individually or together, in the **Glissando Lines** group of the Properties panel:

    - **Start offset**

    - **End offset**

3. Each property has **X** and **Y** value fields. 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.

4. The properties move glissando lines in the following ways:

    - **Start offset X** moves the start of glissando lines horizontally: increasing the value moves them to the right, decreasing the value moves them to the left.

    - **Start offset Y** moves the start of glissando lines vertically: increasing the value moves them upwards, decreasing the value moves them downwards.

    - **End offset X** moves the end of glissando lines horizontally: increasing the value moves them to the right, decreasing the value moves them to the left.

    - **End offset Y** moves the end of glissando lines vertically: increasing the value moves them upwards, decreasing the value moves them downwards.

RELATED LINKS
Changing the angles of glissando lines individually on page 482

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**.

2. Click **Glissando Lines** in the page list.

3. Change the values for the positions of glissando lines in the contexts relevant to your project in the **Vertical Position** section.

    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.

NOTE

You can make graphical adjustments to the positions of individual glissando lines in Engrave mode.

RELATED LINKS
Positions of glissando lines on page 480

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.

You can move the handles at the ends of glissando lines in Engrave mode in any direction, which changes their graphical lengths.

PROCEDURE

1. In Engrave mode, select the square handles at one end of the glissando lines whose angles you want to change.
2. Move the handles in any of the following ways:
   - Press **Alt**-**Right Arrow** to move them to the right.
   - **Alt**-**Left Arrow** to move them to the left.
   - **Alt**-**Up Arrow** to move them upwards.
   - **Alt**-**Down Arrow** to move them downwards.

     NOTE

     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 handles in any direction to the positions you want.
3. Optional: Repeat steps 1 and 2 for the handles at the other end of the glissando lines.

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.

RELATED LINKS
Moving glissando lines graphically using the Properties panel on page 480

Individual changes to the appearance of glissando lines

You can make changes to the appearance of individual glissando lines, independently of your project-wide settings in **Engraving Options**.

RELATED LINKS
Project-wide Engraving Options for glissando lines on page 484
Positions of glissando lines on page 480

Changing the style of glissando lines individually

Glissandi can be shown as straight lines or wavy lines. You can change the glissando line style of glissando lines individually.

PROCEDURE

1. Select the glissando lines whose style you want to change. You can do this in Write mode and Engrave mode.

2. Activate the **Glissando style** property in the **Glissando Lines** group of the Properties panel.

3. Choose the style you want from the following options:

    *   **Straight line**

    *   **Wavy line**

RESULT

The glissando line style is changed for the selected glissando lines. You can deactivate the **Glissando style** property at any time to return the glissando line style to your project-wide settings.

NOTE

You can choose which style you want to use for all glissando lines project-wide on the **Glissando Lines** page in **Engrave** > **Engraving Options**.

RELATED LINKS

Changing the glissando text of individual glissando lines

Glissandi can be shown with text or without text. You can change the glissando line text of glissando lines individually.

PROCEDURE

1. Select the glissando lines whose text you want to change. You can do this in Write mode and Engrave mode.

2. Activate the **Glissando text** property in the **Glissando Lines** group of the Properties panel.

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 according to your selection.

NOTE

You can choose the text you want shown on all glissando lines project-wide on the **Glissando Lines** page in **Engrave** > **Engraving Options**.

RELATED LINKS

Changing when glissando text is shown individually

Glissando text is not shown automatically 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. Activate the **Glissando text shown** property in the **Glissando Lines** group of the Properties panel.

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.

Project-wide Engraving Options for glissando lines

Options for the appearance and positions of glissando lines project-wide can be found on the **Glissando Lines** page in **Engraving Options**.

The options on this 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.

Many options are accompanied by musical examples to demonstrate how each option affects the appearance of your music.

You can open **Engraving Options** in 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.

Ornaments

Ornaments are markings that indicate multiple notes should be played in addition to the notated pitch. They are used to decorate music, particularly Baroque and Classical styles.

The style of Baroque music in particular is highly decorated with trills and other ornaments.

Over time, specific ways of notating how notes should be decorated by a performer 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 which are shown in this example.

Some of the ornaments available in Dorico

RELATED LINKS

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 in the staff.

Ornaments and trills are positioned outside of slurs by default. Similarly, they are positioned further from noteheads than all articulations.

The center of ornaments should be aligned with the center of the notehead to which they apply.

Trills are aligned differently: the left of the start 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**.

Inputting ornaments with the keyboard

You can input ornaments with the keyboard using the ornaments popover. You can input ornaments during step input and later on by adding ornaments to existing notes.

The ornaments popover

Enter the following commands into the ornaments popover to create the different ornaments, glissando lines, and arpeggio signs available.

You can open the ornaments popover in Write mode in the following ways:

- Press **Shift-O**.
- Choose **Write** > **Create Ornament**.

Enter:	For ornament, glissando line, or arpeggio sign:
`tr` or `trill`	Trill (*tr*)
`shorttr`	Short trill (ᰍ)
`turn`	Turn (∞)
`mor` or `mordent`	Mordent (ᰍ)
`invturn` or `invertedturn`	Inverted turn (∾)
`gliss`	Straight glissando line
`glisswavy`	Wavy glissando line
`arp` or `arpup` or `arpeggioup`	Up arpeggio sign
`arpdown` or `arpeggiodown`	Down arpeggio sign
`nonarp` or `nonarpeggio`	*Non arpeggio* sign

Other ornaments are available in the **Ornaments** panel.

Inputting ornaments during step input with the keyboard

PROCEDURE

1. In Write mode, start note input.

2. Open the ornaments popover in any of the following ways:

   - Press **Shift-O**

   - Choose **Write** > **Create Ornament**

3. Enter the ornament you want into the popover, such as `trill` for a trill or `mor` for a mordent.

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

RESULT

The ornament specified is input at the caret position. Trills last the duration of the rhythmic value of the note input at the caret position.

RELATED LINKS
Inputting notes on page 94

Adding ornaments to existing notes with the keyboard

PROCEDURE

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

   - The note to which you want to add an ornament

   - The note or 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 ornament you want into the popover, such as `trill` for a trill or `mor` for a mordent.

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

RESULT

The ornament specified is input above the selected note. Trills are input above the first selected note, with an extender line across any subsequent notes also selected.

Inputting ornaments with the mouse

You can input ornaments with the mouse by clicking on the ornaments you want in the **Ornaments** panel during step input and later on by adding ornaments to existing notes.

You can open the **Ornaments** panel by clicking **Ornaments** in the Notations toolbox on the right of the window in Write mode:

The different sections in the **Ornaments** panel are:

- **Baroque and Classical**
- **Arpeggiation**
- **Glissandi**

Inputting ornaments during step input with the mouse

PROCEDURE

1. In Write mode, start note input.
2. Click the ornament you want in the **Baroque and Classical** section of the **Ornaments** panel on the right of the window.

RESULT

The ornament is input at the caret position.

RELATED LINKS
Inputting notes on page 94

Adding ornaments to existing notes with the mouse

PROCEDURE

1. In Write mode, select the note to which you want to add an ornament.

   NOTE

   You can only add one ornament to one note at a time.

2. Click on the ornament you want in the **Baroque and Classical** section of the **Ornaments** panel on the right of the window.

RESULT

The ornament is input above the selected note.

NOTE

If your preference is set to **Load cursor with item**, complete these steps in the reverse order.

Changing the intervals of ornaments
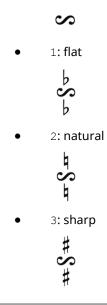
You can change the intervals of ornaments, both above and below the notated pitch, to indicate which pitches should be played in the ornament. For some ornaments you can only change the interval in one direction, for example, you can only change the interval above short trills and below mordents.

PROCEDURE

1. Select the ornaments whose intervals you want to change. You can do this in Write mode and Engrave mode.
2. Activate the appropriate property or properties for the selected ornaments in the **Ornaments** group of the Properties panel:

   - **Interval above**

- **Interval below**

  For trills, activate the **Interval** property 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.

4. The properties change the accidental shown above or below ornaments in the following ways:

   - 0 or 4 and above: no accidental

   - 1: flat

   - 2: natural

   - 3: sharp

RESULT

The interval of the selected ornaments is changed.

> **NOTE**
>
> Some ornaments do not show accidentals either above or below, depending on their type.

You can change the position of ornament accidentals relative to trills individually, or for all trills project-wide on the **Ornaments** page in **Engrave** > **Engraving Options**.
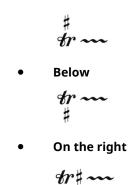
RELATED LINKS

Changing the position of ornament accidentals relative to trills individually

To change where ornament accidentals, which indicate the interval of trills, are positioned relative to trills:

PROCEDURE

1. Select the trills whose ornament accidental position you want to change. You can do this in Write mode and Engrave mode.

2. Activate the **Accidental position** property in the **Trills** group of the Properties panel.

3. Select one of the following options from the menu:

   - **Above**

- **Below**

- **On the right**

RESULT

The position of ornament accidentals relative to the selected trills is changed.

NOTE

You can change the position of ornament accidentals relative to all trills project-wide on the **Ornaments** page in **Engrave** > **Engraving Options**.

Lengthening and shortening trills rhythmically

You can lengthen and shorten trills after they have been input in Write mode with the keyboard and with the mouse. Multiple ornaments can exist at the same rhythmic position, so you can lengthen and shorten trills to noteheads that already have ornaments.

PROCEDURE

1. In Write mode, select the trills you want to lengthen or shorten.
2. Lengthen and shorten the trills in any of the following ways:
   - **Shift**-**Alt**-**Right Arrow** to lengthen trills by the current rhythmic grid value
   - **Shift**-**Alt**-**Left Arrow** to shorten trills by the current rhythmic grid value
   - **Ctrl/Cmd**-**Shift**-**Alt**-**Right Arrow** to snap the end of a trill to the next rhythmic position
   - **Ctrl/Cmd**-**Shift**-**Alt**-**Left Arrow** to snap the end of a trill to the previous rhythmic position

   NOTE

   You can only lengthen or shorten trills by the current rhythmic grid value when multiple octave lines are selected.

   - Click and drag the circular handle at the end of the trill to noteheads to the right or to the left.

   NOTE

   You can only lengthen or shorten one trill at a time with the mouse.

RESULT

The selected trills are lengthened or shortened to noteheads to the right or to the left.

NOTE

You can make graphical changes to the lengths of trill extension lines in Engrave mode.

Hiding the extension lines of individual trills

PROCEDURE

1. Select the trills whose extension lines you want to hide. You can do this in Write mode and Engrave mode.
2. Activate the **Has trill line** property in the **Trills** group of the Properties panel.

RESULT

When the box beside the property is unchecked, trill extension lines are not shown for the selected trills.

When the box beside the property is checked, trill extension lines are shown for the selected trills.

Deactivating the property returns the selected trills to your project-wide settings.

NOTE

You can choose whether trill extension lines are shown or not shown for all trills project-wide on the **Ornaments** page in **Engrave** > **Engraving Options**.

Deleting ornaments

PROCEDURE

1. In Write mode, select the ornaments you want to delete.
2. Delete the ornaments in any of the following ways:

   - Press **Backspace** or **Delete**.
   - Choose **Edit** > **Delete**.

RESULT

The selected ornaments are deleted.

Positions of ornaments

You can change the positions of ornaments by moving individual ornaments to different rhythmic positions in Write mode, moving them to different graphical positions in Engrave mode, and by changing the default positions of all ornaments project-wide.

You can move ornaments to different rhythmic positions in Write mode. They are positioned by default according to your preferences in **Engraving Options**.

You can move ornaments graphically in Engrave mode, however this does not change the rhythmic positions to which they are attached.

Project-wide settings for the default positions of ornaments can be set on the **Ornaments** page in **Engrave** > **Engraving Options**.

RELATED LINKS
Project-wide Engraving Options for ornaments on page 496

Moving ornaments rhythmically

You can move ornaments to new rhythmic positions.

PROCEDURE

1. In Write mode, select the ornaments you want to move.

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 or to the left to snap it to different rhythmic positions.

  NOTE

  Only one ornament can be moved at a time when using the mouse.

RESULT

A single ornament is moved to the next or previous notehead on that staff.

Multiple ornaments are moved according to the rhythmic grid currently set.

RELATED LINKS
Moving ornaments graphically on page 492

Moving ornaments graphically

You move ornaments graphically without changing the rhythmic positions to which they apply.

PROCEDURE

1. In Engrave mode, select the ornaments you want to move.

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.
- Press **Alt-Up Arrow** to move them upwards.
- Press **Alt-Down Arrow** to move them downwards.

  NOTE

  If you want to move ornaments 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 ornaments in any direction to the positions you want.

RELATED LINKS
Moving ornaments graphically using the Properties panel on page 493
Moving trills graphically using the Properties panel on page 493

Moving ornaments graphically using the Properties panel

You can move ornaments graphically using the Properties panel in Engrave mode.

NOTE

See **Moving trills graphically using the Properties panel** to move trills, as they are moved in a different way to other ornaments due to the extender lines.

PROCEDURE

1. In Engrave mode, select the ornaments you want to move.

2. Activate the **Offset** property in the **Common** group of the Properties panel.

3. Each property has **X** and **Y** value fields. 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.

4. The properties move ornaments in the following ways:

   - **Offset X** moves ornaments horizontally: increasing the value moves them to the right, decreasing the value moves them to the left.

   - **Offset Y** moves ornaments vertically: increasing the value moves them upwards, decreasing the value moves them downwards.

RELATED LINKS

Moving trills graphically using the Properties panel

You can move trills graphically using the Properties panel in Engrave mode.

PROCEDURE

1. In Engrave mode, select the trills you want to move.

2. Activate the following properties, individually or together, in the **Trills** group of the Properties panel:

   - **Start offset**

   - **End offset X**

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.

4. The properties move trills in the following ways:

   - **Start offset X** moves whole trills horizontally: increasing the value moves them to the right, decreasing the value moves them to the left.

   - **Start offset Y** moves whole trills vertically: increasing the value moves them upwards, decreasing the value moves them downwards.

   - **End offset X** moves the ends of trill extension lines horizontally: increasing the value moves them to the right, decreasing the value moves them to the left.

Individual changes to the appearance and position of ornaments

You can make changes to the appearance and position of individual ornaments, independently of your project-wide settings in **Engraving Options**.

RELATED LINKS

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 in 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. Activate the **Placement** property in the corresponding group of the Properties panel for the selected ornaments:

   - **Ornaments**

   - **Trills**

3. Choose one of the following options:

   - **Above**

   - **Below**

RESULT

The placement of the selected ornaments is changed according to your selection.

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. Activate the **Slur-relative position** property in the corresponding group of the Properties panel 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, according to your selection.

Changing the start position of trills individually

You can change whether the start positions of individual trills are aligned with the notehead or with its accidental.

PROCEDURE

1. Select the trills whose start position you want to change. You can do this in Write mode and Engrave mode.
2. Activate the **Start position** property in the **Trills** group of the Properties panel.
3. Choose one of the following options:
   - **Notehead**
   - **Accidental**

RESULT

The start position of the selected trills is changed, according to your selection.

NOTE

You can change the start position of trills project-wide on the **Ornaments** page in **Engrave** > **Engraving Options**.

RELATED LINKS
Project-wide Engraving Options for ornaments on page 496

Changing the speed of trills

You can indicate different speeds of trills, and indicate a different speed at the end compared to the start, 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. Activate either or both of the following properties in the **Trills** group of the Properties panel:
   - **Start speed**
   - **End speed**

     NOTE

     You can activate just **Start speed** to have the same speed throughout the extension lines of the selected trills.

3. Select one of the following options for each property:
   - **Slow**
   - **Normal**
   - **Fast**

RESULT

The speed of the selected trills is changed, according to your selections.

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

Project-wide Engraving Options for ornaments

Options for the appearance and positions of ornaments project-wide can be found on the **Ornaments** page in **Engraving Options**.

The options on this 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.

Many options are accompanied by musical examples to demonstrate how each option affects the appearance of your music.

You can open **Engraving Options** in 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.

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.

Page number changes may be necessary if projects contain multiple movements, where each movement must be saved as a separate file. To make sure the page numbers continue seamlessly from movement to movement, you would normally need to change the page number at the start of each file.

However, because you can have multiple flows in each project in Dorico, you should not need to change page numbers in most cases.

Page numbers in Dorico use token text 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 by overriding the master page.

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 change the page number of 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.

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 numbers, you can change the type of number at the same time as you change the page number.

RELATED LINKS

Page number changes

You can insert page number changes to pages in each layout independently of other layouts. You can also remove any page number changes you have inserted from individual pages or all pages in each layout.

RELATED LINKS

Moving page numbers in master pages

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 text frames 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 to the position you want.

4. Click **Close Master Page Editor** to save your changes.

Moving page numbers in master pages using the Properties panel

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. Change the values for the **Left** and **Top** properties in the **Frames** group of the Properties panel in any of the following ways:

   - Enter values into the value fields.

- Click the arrows beside the value fields.

4. The properties move the text frames in the following ways:

- **Left** moves rehearsal marks horizontally: increasing the value moves them to the right, decreasing the value moves them to the left.

- **Top** moves rehearsal marks vertically: increasing the value moves them upwards, decreasing the value moves them downwards.

5. Click **Close Master Page Editor** to save your changes.

Page number font style

You can change different aspects of the page number font style to change the appearance of page numbers project-wide.

You can open the **Font Styles** dialog by choosing **Engrave** > **Font Styles** in Engrave mode.

In the **Font Styles** dialog, select **Page Number Font** from the menu to change different aspects of the font.

Changes to the font style apply to the entire project, including parts.

Font family

Sets the overall font style.

Size

Sets the size of page numbers. The page number size can be:

- **Absolute**: always the set size, regardless of the staff size

- **Staff-relative**: proportional to the staff size. Page numbers appear smaller than the set value on smaller staves, and larger than the set value on larger staves.

NOTE

You can set different page number sizes for full score layouts and part layouts in the **Engrave** > **Paragraph Styles** dialog. However, you must make sure the text frames that contain page numbers are the correct size to display them.

Style

Sets the page number font appearance. The page number font can be:

- **Regular**

- **Italic**

- **Bold** (default)

- **Bold Italic**

Underlined

The page number font appears underlined if the box beside the **Underlined** activation switch is checked.

RELATED LINKS
Changing the size of page numbers on page 503
Paragraph styles on page 152

Changing the page number font style

You can change the font style used for page numbers project-wide.

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Font Styles** to open the **Font Styles** dialog.
2. Select **Page Number Font** from the **Font style** menu.
3. Activate the switches beside the following options to change the corresponding aspects of the font:
   - **Font family**
   - **Size**
   - **Style**
   - **Underlined**
4. Click **OK** to save your changes and close the dialog.

RESULT

The page number font style is changed project-wide.

Changes to the default horizontal alignment of page numbers

You can change the default alignment of page numbers project-wide.

You can set the default alignment of page numbers in the **Paragraph Styles** dialog.

This changes the alignment of that page numbers wherever they are used in the project, but the alignment can also be manually overridden in individual text frames.

RELATED LINKS
Changing the default horizontal alignment of different text styles project-wide on page 377

Individual changes to the horizontal alignment of page numbers

You can change the horizontal alignment of individual page numbers, independently of the page numbers paragraph style.

Because page numbers exist inside text frames, you can change their horizontal alignment in the same way as for any other text in text frames.

RELATED LINKS
Changing the horizontal alignment of text in text frames on page 149
Paragraph styles on page 152

Changing the page number numeral style project-wide

You can make project-wide changes to the numeral style of page numbers.

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.

2. Select **Page Setup** from the **Category** menu.

3. Select the layouts whose page number numeral style you want to change in the **Layouts** list on the left of the dialog in the following ways:

    - Click **Select All**.

    - Click **Select All Full Score Layouts**.

    - Click **Select All Part Layouts**.

    - Click **Select All Custom Score Layouts**.

    - **Ctrl**-click individual flows.

    - **Shift**-click adjacent flows.

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

4. Select one of the following options from the **Use** menu in the **Initial Page Number** section:

    - **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

PROCEDURE

1. Open the layout whose page number numeral style you want to change in the music area.

2. Select a page in the **Pages** section of the Pages panel.

3. Open the **Page Number Change** dialog in any of the following ways:

    - Right-click and choose **Insert Page Number Change** from the context menu

    - Click **Insert Page Number Change**:

        `#`

4. Enter the number of the page from which you want to change the page number numeral style in the **From page** field in the **Page Number Change** dialog. For example, if you want to change the page number numeral style from page 1, enter `1`.

5. Select the numeral style you want from the following options for **Sequence type**:

    - **Number**

    - **Roman numeral**

6. Click **OK**.

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 141

Showing page numbers project-wide

You can change when 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. 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. Open **Layout Options** in any of the following ways:
   - Press **Ctrl/Cmd-Shift-L** in any mode.
   - Choose **Setup** > **Layout Options** in Setup mode.
2. Select **Page Setup** from the **Category** menu.
3. Select the layouts in which you want to change when page numbers are shown in the **Layouts** list on the left of the dialog in the following ways:
   - Click **Select All**.
   - Click **Select All Full Score Layouts**.
   - Click **Select All Part Layouts**.
   - Click **Select All Custom Score Layouts**.
   - **Ctrl**-click individual flows.
   - **Shift**-click adjacent flows.

   By default, the layout currently open in the music area is selected when you open the dialog.
4. Select one of the following options from the **Visibility** menu in the **Initial Page Number** section:
   - **Always shown**
   - **Always hidden**
   - **Not on first page**
5. Click **Apply**, then **Close**.

RESULT

When page numbers are shown is changed project-wide in the selected layouts.

You can change settings for other layouts before closing the dialog.

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. 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. Open the layout in which you want to change when page numbers are shown in the music area.

2. Select a page in the **Pages** section of the Pages panel.

3. Open the **Page Number Change** dialog in any of the following ways:

   - Right-click and choose **Insert Page Number Change** from the context menu

   - Click **Insert Page Number Change**:

     #

4. Enter the number of the page from which you want to change when page numbers are shown in the **From page** field in the **Page Number Change** dialog. For example, if you want to hide page numbers from page 4, enter 4.

5. Select when page numbers are shown from the following options for **Visibility**:

   - **Always shown**

   - **Always hidden**

   - **Not on first page**

6. Click **OK**.

RESULT

When page numbers are shown is changed until the next page number change with a different visibility or the end of the project, whichever comes first.

RELATED LINKS

Changing the size of page numbers

You can set different sizes for page numbers in full score layouts and part layouts. The size of page numbers can be absolute or staff-relative.

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Paragraph Styles** to open the **Paragraph Styles** dialog.

2. Select **Page Number** from the list on the left.

3. Activate the following options as required:

   - **Size**

   - **Size in parts**

4. Change the page number size by changing the values for each option in any of the following ways:

   - Enter values into the value fields.

   - Click the arrows beside the value fields.

5. Choose one of the following options for each page number size:

   - **Staff-relative**

   - **Absolute**

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

RESULT

The sizes of page numbers in full score layouts and part layouts in your project are changed.

Staff-relative page numbers appear larger in layouts with larger staff sizes, and smaller in layouts with smaller staff sizes.

Absolute page numbers always appear with the set size, regardless of staff size.

RELATED LINKS
Page number font style on page 499

Pedal lines

Pedal lines indicate to a performer which piano pedals they should use, and can also give performance instructions, such as how far they should be depressed.

Dorico has the most comprehensive support for piano pedal lines of any scoring software.

You can easily create pedaling for the sustain, *una corda* and *sostenuto* pedals, with support for modern sustain pedaling techniques, including changing the pedal level over the course of a single pedal instruction.

General placement conventions for pedal lines

Pedal lines should be placed below the bottom staff, even if there are only notes in the upper, right hand staff. They should be positioned outside of all other notations, including octave lines, slurs, and articulation.

When one pedal is used, it should be placed as close to the bottom of the staff as possible, while remaining outside of all other notations.

When multiple pedals are used simultaneously, they should be organized below the bottom of the staff as follows:

1   Sustain pedal, or damper pedal: closest to the staff

2   *Sostenuto* pedal, or middle pedal: below the sustain pedal line

3   *Una corda* pedal, or soft pedal: furthest from the staff

The beginning of the glyph or text that indicates the start position of pedal lines should be aligned with the note to which they apply.

If using a hook to indicate the end of a pedal line, the hook should be aligned with the note or rhythmic position to which it applies.

You can choose options for how pedal lines should appear project wide on the Pedal Lines page in **Engrave** > **Engraving Rules**.

RELATED LINKS

Inputting pedal lines with the keyboard

You can input pedal lines using the same popover as for playing techniques, as both affect the sound produced by the instrument.

You can open the playing techniques popover by pressing **Shift**-**P** (P for "pedal" or "playing technique"), or by choosing **Write** > **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.

The playing techniques popover with an example entry for a pedal line

The playing techniques button in the Notations toolbox, which includes pedal lines

The playing techniques popover for pedal lines

Enter the following commands and symbols into the playing techniques popover for the different pedal lines available.

You can open the playing techniques popover in Write mode in the following ways:

● Press **Shift**-**P**.

● Choose **Write** > **Playing Technique**.

Enter:	For pedal line:
`ped`	Sustain pedal line
`1/4`	Set sustain pedal level to 1/4
`1/2`	Set sustain pedal level to 1/2
`3/4`	Set sustain pedal level to 3/4
`1`	Fully depress sustain pedal
`^` or `notch` or `retake`	Retake in sustain pedal line
`nonotch`	Remove retake in sustain pedal line
`*`	Stop sustain pedal line
`sost`	*Sostenuto* pedal line
`s*`	Stop *sostenuto* pedal line
`unacorda`	*Una corda* pedal line
`u*`	Stop *una corda* pedal line

Inputting pedal lines during step input with the keyboard

PROCEDURE

1. In Write mode, start note input.

2. Position the caret at the rhythmic position where the line should begin.

3. Open the playing techniques popover in any of the following ways:

   ● Press **Shift**-**P**

   ● Choose **Write** > **Create Playing Technique**

4. Enter the appropriate short-hand for the pedal line you want into the popover, such as `ped` for a sustain pedal line.

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

6. Press **Space** to advance the caret and extend the pedal line. The pedal line also extends automatically as you continue inputting notes.

7. To stop the pedal line, open the playing techniques popover again (key command **Shift**-**P**), and enter the appropriate short-hand to end your pedal line into the popover, such as `*` to stop a sustain pedal line. The pedal line ends at the caret position.

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

RESULT

The pedal line starts at the caret position, and ends at the caret position.

RELATED LINKS

Inputting retakes and pedal level changes during step input with the keyboard

Retakes and pedal level changes can be created during step input.

TIP

Retakes and pedal level changes can also be assigned to a rhythmic position before pedal lines or notes are input. They are shown when the pedal line passes their rhythmic position.

PROCEDURE

1. In Write mode, start note input.

2. Position the caret at the rhythmic position where the retake or pedal level change should appear.

3. Open the playing techniques popover in any of the following ways:

- Press **Shift**-**P**
- Choose **Write** > **Create Playing Technique**

4. Enter the appropriate short-hand for the retake or pedal level change you want into the popover, such as `^` or `retake` for a retake.

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

RESULT

The retake or pedal level change is input at the caret position.

EXAMPLE

From left to right by notehead: Ped. text, retake, one quarter depressed, half depressed, three quarters depressed, fully depressed, line end hook.

Adding pedal lines to existing notes with the keyboard

To create a pedal line of a particular duration for a selected passage of existing music:

PROCEDURE

1. In Write mode, select the notes to which the pedal line should 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, such as `sost` for a *sostenuto* pedal line.

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

Adding retakes and pedal level changes to existing notes with the keyboard

To create a pedal line of a particular duration for a selected passage of music:

PROCEDURE

1. In Write mode, select an item at the rhythmic position to which a retake or pedal level change should 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, such as `^` or `retake` for a retake.

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

Inputting pedal lines with the mouse

Pedal lines can be input with the mouse by clicking options in the **Keyboard** section of the **Playing Techniques** panel in Write mode.

The **Playing Techniques** panel is opened by clicking this button in the Notations toolbox:

Opening the **Keyboard** section shows these options:

The buttons on the first row create new pedal lines. They buttons are, left to right: sustain pedal, *sostenuto* pedal, and *una corda* pedal.

The buttons on the second row add retakes and changes of pedal level to an existing pedal line. The buttons are, left to right: a retake, one-quarter depressed, half-depressed, three-quarters depressed, and fully depressed.

Pedal lines can be input with the mouse to existing notes or existing staves, but not during step input.

There are two ways to add pedal lines to existing notes or existing staves with the mouse:

● Select the notes to which the pedal line should apply, then click the button of the pedal line you want to input in the **Keyboard** section of the **Playing Techniques** panel

● With nothing selected, click the pedal line you want to input 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 required duration.

Inputting retakes or pedal level changes with the mouse

A pedal retake indicates where a player should lift the pedal, to dampen the piano's strings and clear the resonance before depressing the pedal again. A pedal level change indicates a change to how far the pedal should be depressed.

To input a retake or pedal level change:

1 Create a pedal line.

2 Select an item in the staff to which the pedal line applies, at the rhythmic position where the retake or pedal level change should take effect.

3 Click the relevant retake or pedal level change button in the **Keyboard** section of the **Playing Techniques** panel.

Or, if nothing is selected in the score, you can:

1 Select the relevant retake or pedal level change button in the **Keyboard** section of the **Playing Techniques** panel.

2 Click on the pedal line at the rhythmic position where the retake or pedal level change should take effect.

Alternatively, you can right-click on an item at the rhythmic position where the retake or pedal level change should take effect, and choose from the following options:

1 **Pedal Lines** > **Add Retake**

2 **Pedal Lines** > **Add Change to One Quarter Depressed**

3 **Pedal Lines** > **Add Change to Half Depressed**

4 **Pedal Lines** > **Add Change to Three Quarters Depressed**

5 **Pedal Lines** > **Add Change to Fully Depressed**

EXAMPLE

From left to right by notehead: Ped. text, retake, one quarter depressed, half depressed, three quarters depressed, fully depressed, line end hook.

Positions of pedal lines

You can change the positions of pedal lines by moving individual pedal lines to different rhythmic positions in Write mode, moving them to different graphical positions in Engrave mode, and by changing the default positions of all pedal lines project-wide.

You can move pedal lines to different rhythmic positions in Write mode. They are positioned by default according to your preferences 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.

Project-wide settings for the default position of pedal lines, and values for the minimum distances between pedal lines and staves, pedal lines and other pedal lines, and the positioning of pedal lines relative to noteheads, can be set on the **Pedal lines** page in **Engrave** > **Engraving Options**.

Moving pedal lines rhythmically

You move pedal lines to new rhythmic positions after they have been input.

PROCEDURE

1. In Write mode, select the pedal lines you want to move.
2. Move the pedal lines to noteheads to the right and to the left in the following ways:

   - Press **Alt-Right Arrow** to move them to the notehead to the right.
   - Press **Alt-Left Arrow** to move them to the notehead to the left.
   - Click and drag the pedal line to the position you want.

     NOTE

     Only one pedal line can be moved rhythmically at a time when using the mouse.

RESULT

A single pedal line is moved to the next or previous notehead on that staff.

Multiple pedal lines are moved according to the rhythmic grid currently set.

NOTE

Pedal lines can only be moved along a staff. If you want to move a pedal line across staves, you must first delete the pedal line from its first position, then add a new pedal line to the staff you wanted to move it to.

RELATED LINKS

Lengthening and shortening pedal lines on page 513
Types and levels of retakes and pedal level changes on page 520

Moving pedal lines graphically

You can move pedal lines graphically without changing the rhythmic positions to which they apply. You can also move each end of pedal lines independently of the other end by moving their handles.

PROCEDURE

1. In Engrave mode, select one of the following:

   - The pedal lines you want to move.

   - The start or end handles of the pedal lines whose ends you want to move.

2. Move the pedal 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 right.

   - 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 pedal lines 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 the pedal lines or handles in any direction to the positions you want.

RESULT

The selected pedal lines are moved to new graphical positions.

NOTE

You can move multiple pedal lines together but only upwards or downwards.

You can move handles on multiple pedal lines together but only left or right.

RELATED LINKS

Lengthening and shortening pedal lines on page 513
Types and levels of retakes and pedal level changes on page 520

Moving pedal lines graphically using the Properties panel

You can move pedal lines graphically using the Properties panel in Engrave mode. You can also use these properties to lengthen and shorten pedal lines graphically, as the properties can be changed independently of each other.

PROCEDURE

1. In Engrave mode, select the pedal lines you want to move.

2. Activate the following properties, individually or together, in the **Pedal Lines** group of the Properties panel:

    -   **Start X offset**
    -   **End X offset**
    -   **Y offset**

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.

4. The properties move pedal lines in the following ways:

    -   **Start X offset** moves the start of pedal lines horizontally: increasing the value moves the start of pedal lines to the right, decreasing the value moves the start of pedal lines to the left.
    -   **End X offset** moves the end hooks of pedal lines horizontally: increasing the value moves the end hooks of pedal lines to the right, decreasing the value moves the end hooks of pedal lines to the left.
    -   **Y offset** moves pedal lines vertically: increasing the value moves them upwards, decreasing the value moves them downwards.

RELATED LINKS
Types and levels of retakes and pedal level changes on page 520

Moving retakes and pedal level changes graphically using the Properties panel

You can move retakes and pedal level changes graphically using the Properties panel in Engrave mode.

PROCEDURE

1. In Engrave mode, select the retakes or pedal level changes you want to move.

2. Activate the **X offset** property in the **Pedal Line Retakes** group of the Properties panel.

3. Change the value in the value field in any of the following ways:

    -   Enter values into the value fields.
    -   Click the arrows beside the value fields.

4. The **X offset** property moves retakes and pedal level changes in the following ways:

    -   Increasing the **X offset** value moves retakes and pedal level changes to the right.
    -   Decreasing the **X offset** value moves retakes and pedal level changes to the left.

RELATED LINKS
Types and levels of retakes and pedal level changes on page 520

Lengthening and shortening pedal lines

You can lengthen or shorten pedal lines after they have been input so they apply to more or fewer notes.

PROCEDURE

1. In Write mode, select the pedal lines you want to lengthen or shorten.

2. Lengthen or shorten the pedal lines in any of the following ways:

    - Press **Ctrl/Cmd-Shift-Alt-Right Arrow** to move the end of a single pedal line to the next notehead.

    - Press **Ctrl/Cmd-Shift-Alt-Left Arrow** to move the end of a single pedal line to the previous notehead.

    - 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.

    - Click and drag the circular handle at the end of the pedal line to position you want.

        NOTE

        Only one pedal line can be lengthened or shortened at a time when using the mouse.

RESULT

The selected pedal lines are lengthened or shortened.

NOTE

You can only lengthen or shorten multiple pedal lines according to the rhythmic grid currently set.

RELATED LINKS
Positions of pedal lines on page 510
Moving pedal lines rhythmically on page 510
Moving pedal lines graphically on page 511
Moving pedal lines graphically using the Properties panel on page 512

Deleting pedal lines

To delete pedal lines:

PROCEDURE

1. In Write mode, select the pedal lines you want to delete.

2. Delete the pedal lines in any of the following ways:

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

    - Choose **Edit** > **Delete**.

RESULT

The pedal line is deleted, or pedal lines are deleted.

Removing retakes or pedal level changes with the keyboard

To remove a retake or pedal level change for the sustain pedal:

PROCEDURE

1. Select the note at the rhythmic position of the retake or pedal level change.

2. Open the playing techniques popover in any of the following ways:

    - Press **Shift-P**

    - Choose **Write** > **Create Playing Technique**

3. Type **nonotch** into the popover to remove the retake or pedal level change at that position, either in step input or at the rhythmic position of the selected note.

    NOTE

    nonotch must be spelled as one word, without a space.

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

RESULT

The selected retake or pedal level change is removed, and the pedal line returns to its previous level.

RELATED LINKS
[The playing techniques popover for pedal lines](#) on page 506

Removing retakes or pedal level changes with the mouse

To remove a retake or pedal level change:

PROCEDURE

1. Select the note at the rhythmic position of the retake or pedal level change.

2. Right-click, and choose **Pedal Lines** > **Remove Retake**.

RESULT

The selected retake or pedal level change is removed, and the pedal line returns to its previous level.

Project-wide Engraving Options for pedal lines

Options for the appearance and position of pedal lines project-wide can be found on the **Pedal Lines** page in **Engraving Options**.

The options on this 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 design of retake notches. You can also set precise values for the positions between pedal lines and the staff or other objects.

Many options are accompanied by musical examples to demonstrate how each option affects the appearance of your music.

You can open **Engraving Options** in 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.

Individual changes to the appearance of pedal lines

You can move and change the appearance of individual pedal lines by using properties in the Properties panel, independently of your project-wide settings on the **Pedal Lines** page in **Engraving Options**.

To open the Properties panel, either click its disclosure arrow at the bottom of the window, or press **Ctrl/Cmd-8**.

In Engrave mode, you can select each segment of a sustain pedal independently, and set properties independently for each segment.

NOTE

If you find you need to change the appearance of lots of pedal lines, it may be more efficient to change the corresponding project-wide settings on the **Pedal Lines** page in **Engrave** > **Engraving Options**.

RELATED LINKS
Project-wide Engraving Options for pedal lines on page 514

Changing the position of pedal lines relative to grace notes individually

You can change the start position and end position of individual pedal lines relative to grace notes.

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. Activate the following properties, as appropriate for your selected pedal lines, in the **Pedal Lines** group of the Properties panel:

   - **Starts before grace notes**

   - **Ends before grace notes**

3. Check or uncheck the boxes beside the activation switches.
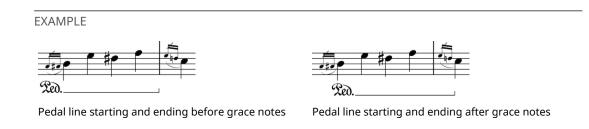
RESULT

When the boxes beside the activation switches are checked, the corresponding parts of pedal lines are positioned before grace notes.

When the boxes beside the activation switches are not checked, the corresponding parts of pedal are positioned following grace notes.

NOTE

You can adjust the precise position of pedal lines in further detail by moving them graphically in Engrave mode.

EXAMPLE

Pedal line starting and ending before grace notes   Pedal line starting and ending after grace notes

RELATED LINKS
Project-wide Engraving Options for pedal lines on page 514
Moving pedal lines graphically using the Properties panel on page 512

Changing the start sign appearance of individual pedal lines

PROCEDURE

1.   Select the pedal lines whose start sign appearance you want to change. You can do this in Write mode and Engrave mode.

2.   Activate the **Sign appearance** property.

3.   Select one of the following options from the menu:

- **Ped. Glyph**
- **Ped Glyph**
- **P Glyph**
- **Symbol**
- **Ped Text**
- **Hook**

RESULT

The start sign appearance of the selected pedal lines is changed.

NOTE

You can revert the selected pedal lines back to your project-wide setting for start sign appearance at any time by deactivating the **Sign appearance** property.

You can change the default start sign appearance for 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 514

Changing the type of hook at the start and end of pedal lines individually

You can change the type of hook shown at the start and end of pedal lines individually.

You can only change the start hook type of pedal lines that have a hook as their start sign.

PROCEDURE

1.   Select the pedal lines whose hook type you want to change. You can do this in Write mode and Engrave mode.

2. Activate the following properties, individually or together, in the **Pedal Lines** group of the Properties panel:

- **Line start hook**

- **Line end hook**

3. Select one of the following options from the menus for each property:

- **No Hook**

- **Vertical Hook**

- **Slant Hook**

- **Inverse Hook**

RESULT

The hook type at the start and end of the selected pedal lines is changed, according to your selections.

Changing the length of pedal lines hooks individually

You can change the length of hooks shown at the start and ends of pedal lines individually, independently of the other end and independently of your project-wide settings for hook length. This only applies to pedal lines that have a hook as their start sign.

PROCEDURE

1. In Engrave mode, select the pedal lines whose hook lengths you want to change.

2. Activate the following properties, individually or together, in the **Pedal Lines** group of the Properties panel:

- **Start hook length**

- **End hook 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.

4. The properties change the lengths of pedal line hooks in the following ways:

- Increasing the values makes hooks longer.

- Decreasing the values makes hooks shorter.

RESULT

The hook lengths for the selected pedal lines are changed.

NOTE

You can revert the hook lengths of the selected pedal lines back to your project-wide setting for hook length at any time by deactivating the corresponding properties.

NOTE

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 and end of pedal lines.

Changing the continuation line type of pedal lines individually

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. Activate the **Continuation type** property in the **Pedal Lines** group of the Properties panel.

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, for example, you can have a line for sustain pedal lines and just a sign at the end for *una corda* pedal lines.

Changing the lengths of dashes in dashed pedal continuation lines individually

You can change the lengths of dashes in individual pedal continuation lines, independently of your settings on the **Pedal Lines** page in **Engraving Options**. This only applies to pedal lines that have dashed continuation lines.

PROCEDURE

1. In Engrave mode, select the pedal lines with dashed continuation lines whose dash length you want to change.

2. Activate the **Dash length** property in the **Pedal Lines** 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.

4. The **Dash length** property changes the length of dashes in the following ways:

   - Increasing the value makes dashes longer.

   - Decreasing the value makes dashes shorter.

RESULT

The dash length in the dashed continuation lines of the selected pedal lines is changed.

NOTE

This overrides any changes you have made to the **Dash gap length** property.

You can change the default dash length for all dashed pedal continuation lines project-wide by disclosing **Advanced Options** in the **Design** section of the **Pedal Lines** page in **Engrave** > **Engraving Options**.

Changing the lengths of gaps in dashed pedal continuation lines individually

You can change the length of the gaps between dashes in individual pedal continuation lines, independently of your settings on the **Pedal Lines** page in **Engraving Options**. This only applies to pedal lines that have dashed continuation lines.

PROCEDURE

1. In Engrave mode, select the pedal lines with dashed continuation lines whose gap length you want to change.

2. Activate the **Dash gap length** property in the **Pedal Lines** 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.

4. The **Dash gap length** property changes the length of the gaps between dashes in the following ways:

   - Increasing the value makes gaps longer.

   - Decreasing the value makes gaps shorter.

RESULT

The gap length in the dashed continuation lines of the selected pedal lines is changed.

NOTE

This overrides any changes you have made to the **Dash length** property.

You can change the default dash length for all dashed pedal continuation lines project-wide by disclosing **Advanced Options** in the **Design** section of the **Pedal Lines** page in **Engrave** > **Engraving Options**.

Changing the line thickness of pedal lines individually

PROCEDURE

1. In Engrave mode, select the pedal lines whose continuation line thickness you want to change.

2. Activate the **Line width** property in the **Pedal Lines** 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.

4. The **Line width** property changes the width of the selected pedal lines in the following ways:

   - Increasing the value makes pedal continuation lines thicker.

   - Decreasing the value makes pedal continuation lines thinner.

RESULT

The thickness of the selected pedal continuation lines is changed.

NOTE

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**.

Showing individual pedal line continuation signs in parentheses

Pedal line continuation signs are shown by default at the start of new systems when pedal lines continue across system breaks. You can choose to show individual pedal line continuation signs in parentheses or without parentheses.

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.   Activate the **Show continuation sign in parentheses** property in the Pedal Lines group of the Properties panel.

3.   Check the box beside the activation switch.

RESULT

When the box beside the activation switch is checked, continuation signs are shown in parentheses.

When the box beside the activation switch is not checked, continuation signs are not shown in parentheses.

NOTE

You can choose the default appearance of all continuation signs project-wide on the **Pedal Lines** page in **Engrave** > **Engraving Options**.

Types and levels of retakes and pedal level changes

You can change the type of pedal line retakes and the pedal levels at each pedal line retake after they have been input.

When a pedal line is selected in Engrave mode, handles appear on the start and end of the pedal lines, and on any retakes or pedal level changes in the line. These 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.

There are two handles for the start of the pedal line, three for retakes and pedal lifts, and three for the end of the pedal line.

You can move each handle with the keyboard, with the mouse, and using the Properties panel. This is because 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 pedal lines

There are two handles at the start of pedal lines.

- The left of the two handles moves the start point of the pedal line: you can move this handle to the right and to the left.
- The right of the two handles changes the start pedal level of the pedal line: you can move this handle upwards and downwards. This changes the angle of the pedal continuation line in relation to the next pedal retake or life, 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 and downwards.
- The right handle changes the pedal level after the retake: you can move this handle upwards and downwards.
- The handle below the center of the pedal level change or retake notch corresponds to the position of the pedal level change or retake: you can move this handle to the right or to the left.

End of pedal lines

- The handle at the tip of the end hook changes the hook length: you can move this handle upwards and downwards.
- The handle to the right of the end hook changes the pedal level at the end of the pedal line: you can move this handle upwards and downward.
- The handle below the end hook moves the end point of the pedal line: you can move this handle to the right and to the left.

RELATED LINKS
Moving pedal lines graphically using the Properties panel on page 512

Changing the type of pedal line retakes

You can change existing retakes to pedal level changes, and you can change pedal level changes to retakes. 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. Activate the **Retake type** property in the **Pedal Line Retakes** group of the Properties panel.
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 may only be 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

PROCEDURE

1. In Engrave mode, select the right handle of the start sign of the pedal line whose start level you want to change.

2. Move the start level upwards and downwards in the following ways:
   - **Alt**-**Up Arrow**
   - **Alt**-**Down Arrow**
   - **-Alt**-**Up Arrow** to change the level to 0
   - **-Alt**-**Down Arrow** to change the level to 1
   - Click and drag the handle upwards or downwards to the start level you want

RESULT

The start level of the selected pedal line is changed.

RELATED LINKS
Types and levels of retakes and pedal level changes on page 520

Changing the start level of pedal lines using the Properties panel

PROCEDURE

1. In Engrave mode, select the pedal line whose start level you want to change.
2. Activate the **Start level** property in the **Pedal Lines** group of the Properties panel.
3. Change the start level by changing 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 is fully depressed and 0 is not depressed.

RESULT

The start level of the selected pedal line is changed.

RELATED LINKS
Types and levels of retakes and pedal level changes on page 520
Inputting pedal lines with the mouse on page 508

Changing pedal levels at retakes and pedal level changes

You can change both the start level and end level of pedal lines at retakes and pedal level changes.

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 following handles of the retake or pedal level change whose start level or end 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

2. Move the start level upwards and downwards in the following ways:

    *   **Alt**-**Up Arrow**

    *   **Alt**-**Down Arrow**

    *   **-Alt**-**Up Arrow** to change the level to 0

    *   **-Alt**-**Down Arrow** to change the level to 1

    *   Click and drag the handle upwards or downwards to the start level you want

3. If required, repeat steps 1 and 2 for the other handle.

RESULT

The pedal levels of the selected retake or pedal level change are changed.

RELATED LINKS
Types and levels of retakes and pedal level changes on page 520

Changing pedal levels at retakes and pedal level changes using the Properties panel

You can change both the start level and end level of pedal lines at retakes and pedal level changes.

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 the retake or pedal level change whose start level you want to change.

2. Activate the following properties, individually or together, in the **Pedal Line Retakes** group of the Properties panel:

    *   **Start level at retake**

    *   **End level at retake**

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.

    For example, `1` is fully depressed and `0` is not depressed.

RESULT

The pedal levels of the selected retake or pedal level change are changed.

RELATED LINKS
Types and levels of retakes and pedal level changes on page 520

Changing the end level of pedal lines

PROCEDURE

1. In Engrave mode, select the right handle of the end hook of the pedal line whose end level you want to change.

2. Move the end level upwards and downwards in the following ways:

   - **Alt**-**Up Arrow**
   - **Alt**-**Down Arrow**
   - **-Alt**-**Up Arrow** to change the level to 0
   - **-Alt**-**Down Arrow** to change the level to 1
   - Click and drag the handle upwards or downwards to the end level you want

RESULT

The end level of the selected pedal line is changed.

RELATED LINKS
Types and levels of retakes and pedal level changes on page 520

Changing the end level of pedal lines using the Properties panel

PROCEDURE

1. In Engrave mode, select the pedal line whose end level you want to change.

2. Activate the **End level** property in the **Pedal Lines** group of the Properties panel.

3. Change the start level by changing 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 is fully depressed and 0 is not depressed.

RESULT

The end level of the selected pedal line is changed.

RELATED LINKS
Types and levels of retakes and pedal level changes on page 520

Start and restorative text in pedal lines

All types of pedal line can be shown with 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.

Overriding the start text shown in pedal lines

You can override the default text shown at the start of 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. Activate the **Text** property in the **Pedal Lines** group of the Properties panel.

3. Enter the text you want into the value field.

4. Save your changes in any of the following ways:

   - Press **Return**.

   - Click anywhere outside the value field.

RESULT

The text shown at the start of the selected pedal lines is changed.

NOTE

You can revert the text to the default start text at any time by deactivating the **Text** property. Deactivating the property permanently deletes any custom text entered.

Overriding the continuation shown in pedal lines

You can override the default text shown at the start of new systems when pedal lines cross system breaks. 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. Activate the **Continuation text** property in the **Pedal Lines** group of the Properties panel.

3. Enter the text you want into the value field.

4. Save your changes in any of the following ways:

   - Press **Return**.

   - Click anywhere outside the value field.

RESULT

The continuation text shown at the start of new systems for the selected pedal lines is changed.

NOTE

You can revert the text to the default continuation text at any time by deactivating the **Continuation text** property. Deactivating the property permanently deletes any custom text entered.

Overriding 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 corda*. You can override the *tre corde* text shown at the end of *una corda* pedal lines.

PROCEDURE

1. Select the *una corda* pedal lines whose restoration text you want to override. You can do this in Write mode and Engrave mode.

2. Activate the **Restorative text** property in the **Pedal Lines** group of the Properties panel.

3. Enter the text you want into the value field.

4. Save your changes in any of the following ways:

- Press **Return**.

- Click anywhere outside the value field.

RESULT

The restorative text shown at the ends of the selected *una corda* pedal lines is changed.

NOTE

You can revert the text to the default restorative text at any time by deactivating the **Restorative text** property. Deactivating the property 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 specialised 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 pedaling on the **Pedal Lines** page in **Play** > **Playback Options** (key command **Ctrl/Cmd**-**Shift**-**P**).

You can control:

- The speed of the initial pedal depression.

- The speed of a retake in the middle of a pedal line.

- The speed of the final pedal release.

- Whether the initial depression and the retake should be played before or after the onset of the notes or chords at that rhythmic position.

Importing pedal lines from MusicXML files

Sustain pedal lines are 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 a player either how they should modify the sound of the note or notes they are playing, or change the way they are playing.

This can be by changing their playing technique, such as 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.

Some of the different playing techniques in Dorico.

General placement conventions for playing techniques

Playing techniques, both playing technique texts and playing technique symbols, are placed above the staff. For voices, they are placed above the staff and below dynamics.

When there are multiple voices in a single staff, 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.

An example of the placement of playing techniques when there are two voices in the same staff.

Playing technique texts use a plain font, neither bold nor italic, so they are not confused with expressive text and dynamics.
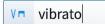
Inputting playing techniques with the keyboard

You can input playing techniques by using the playing techniques popover in Write mode.

You can open the playing techniques popover in Write mode by pressing **Shift-P** (P for "pedal" or "playing technique"), or by choosing **Write** > **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.

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The playing techniques popover with an example entry for a playing technique.

The playing techniques button in the Notations toolbox

The playing techniques popover

Here are some examples of what to enter into the playing techniques popover, and the playing techniques that are input as a result.

You can open the playing techniques popover in Write mode by pressing **Shift-P**, or by choosing **Write** > **Create Playing Technique**.

Enter:	For playing technique:
vibrato	*Vibrato*
senza vibrato	*Senza vibrato* (no vibrato)
nat	*Naturale* (nat.)
strong air pressure	Strong air pressure
double-tongue	Double-tongue
downbow	Down bow
upbow	Up bow
sul pont	*Sul ponticello*
sul tasto	*Sul tasto*
pst	*Poco sul tasto*
pizz	*Pizzicato*
spicc	*Spiccato*
arco	*Arco*
tongue click	Tongue click (Stockhausen)
finger click	Finger click (Stockhausen)
motor on	Vibraphone motor on
motor off	Vibraphone motor off
open	Open
damp	Damp

Enter:	For playing technique:
`damp large`	Damp (large)
`full barre`	Full *barré*
`half barre`	Half *barré*
`strum up`	Strum up
`strum down`	Strum down
`lh`	Left hand
`rh`	Right hand

This list is not comprehensive: it is intended to illustrate how you can structure your entry to input different types of playing techniques.

> **NOTE**
>
> As playing techniques correspond to specific samples, they must be input as described.

Inputting playing techniques during step input with the keyboard

To input playing techniques during step input with the keyboard:

PROCEDURE

1. In Write mode, start note input.
2. Position the caret at the rhythmic position where the playing technique should be input.
3. Open the playing techniques popover in any of the following ways:
   - Press **Shift-P**
   - Choose **Write** > **Create Playing Technique**
4. Type the appropriate short-hand for the playing technique you want into the popover, such as `vibrato` or `tongue click`.
5. Press **Return** to close the popover.

RESULT

The playing technique specified is input at the caret position.

Adding playing techniques to existing notes with the keyboard

To add playing techniques to existing notes and music with the keyboard:

PROCEDURE

1. In Write mode, select the note to which the playing technique should be added.

   > **NOTE**
   >
   > Playing techniques can only be added to one note at a time.

2. Open the playing techniques popover in any of the following ways:

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- Press **Shift**-**P**

- Choose **Write** > **Create Playing Technique**

3. Type the appropriate short-hand for the playing technique you want into the popover, such as `sul pont` or `au talon`.

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

RESULT

The playing technique specified is added to the selected note.

Inputting playing techniques with the mouse

Playing techniques can be input with the mouse by clicking options in the different sections of the **Playing Techniques** panel in Write mode.

The **Playing Techniques** panel is opened by clicking this button in the Notations toolbox on the right of the window:

The different sections in the **Playing Techniques** panel are:

- **Common**
- **Wind**
- **Brass**
- **Untuned Percussion**
- **Tuned Percussion**
- **Keyboard**
- **Choral**
- **Strings**
- **Other**

Each section contains playing technique texts and playing technique symbols appropriate for that instrument family. If you are not sure what a symbol represents, you can hover your mouse pointer over each option to show their names.

Inputting playing techniques during step input with the mouse

To input playing techniques during step input with the mouse:

PROCEDURE

1. In Write mode, start note input.

2. Position the caret at the rhythmic position where the playing technique should be input.

3. Select the playing technique you want from the options available in the **Playing Techniques** panel on the right of the window.

RESULT

The playing technique selected is input at the caret position. It is input at the caret position even if your preference is set to **Load cursor with item**.

Adding playing techniques to existing notes with the mouse

To add playing techniques to existing notes and music with the mouse:

PROCEDURE

1. In Write mode, select the note to which the playing technique should be added.

   NOTE

   Playing techniques can only be added to one note at a time.

2. Click the playing technique you want in the **Playing Techniques** panel.

RESULT

The playing technique selected is added to the selected note.

NOTE

If your preference is set to **Load cursor with item**, complete these steps in the reverse order.

If you want to add the same playing technique to multiple notes, check the box for **Allow multiple items to be created with the mouse** in the **Editing** section in **Preferences**, so that you do not have to reselect the playing technique for each note.

Positions of playing techniques

You can change the positions of playing techniques by moving individual playing techniques to different rhythmic positions in Write mode, moving them to different graphical positions in Engrave mode, and by changing the default positions of all playing techniques project-wide.

You can move playing techniques to different rhythmic positions in Write mode. They are positioned by default according to your preferences 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.

Project-wide settings for the default position of playing techniques can be set on the **Playing Techniques** page in **Engrave** > **Engraving Options**.

RELATED LINKS

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.

2. Move the playing techniques in any of the following ways:

   - Press **Alt-Right Arrow**
   - **Alt-Left Arrow**
   - Click and drag the playing technique to the right or to the left to the notehead you want.

NOTE

Only one playing technique can be moved rhythmically at a time when using the mouse.

RESULT

A single playing technique is moved to the next or previous notehead on that staff.

Multiple playing techniques are moved according to the rhythmic grid currently set.

Moving playing techniques graphically

You can move playing techniques graphically without changing the rhythmic positions to which they apply.

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 playing techniques 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 playing techniques in any direction to the positions you want.

RELATED LINKS

Moving playing techniques graphically using the Properties panel

You can move playing techniques graphically using the Properties panel in Engrave mode.

PROCEDURE

1. In Engrave mode, select the playing techniques you want to move.

2. Activate the **Start offset** property in the **Playing Techniques** group of the Properties panel.

3. The **Start offset** property has **X** and **Y** value fields. You can enter values into the value fields in the following ways:

    - Enter values into the value fields.

    - Click the arrows beside the value fields.

4. The properties move playing techniques in the following ways:

    - **Start offset X** moves playing techniques horizontally: increasing the value moves them to the right, decreasing the value moves them to the left.

    - **Start offset Y** moves playing techniques vertically: increasing the value moves them upwards, decreasing the value moves them downwards.

Changing placement of playing techniques relative to the staff

To change the placement of playing techniques relative to the staff:

PROCEDURE

1. Select the playing technique or playing techniques whose placement you want to change. This can be done in Write mode and Engrave mode.
2. Activate the **Placement** property in the **Playing Techniques** group of the Properties panel.
3. Choose between:

    - **Above**
    - **Below**

RESULT

The placement of the playing technique or playing techniques is changed to either above or below the staff.

Deleting playing techniques

To delete playing techniques:

PROCEDURE

1. In Write mode, select the playing techniques you want to delete.
2. Delete the playing techniques in any of the following ways:

    - Press **Backspace** or **Delete**.
    - Choose **Edit** > **Delete**.

RESULT

The selected playing techniques are deleted.

Adding alternative text to playing techniques
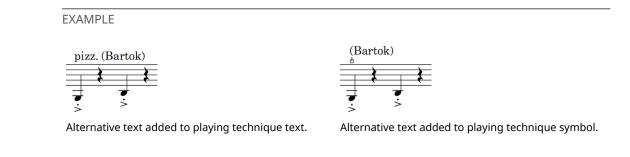
To show alternative or additional text above or alongside playing techniques:

PROCEDURE

1. Select the playing techniques to which you want to add alternative text. You can do this in Write mode and Engrave mode.
2. Activate the **Alternative text** property in the **Playing Techniques** group of the Properties panel.
3. Enter the alternative text you want into the value field.
4. Save your changes in any of the following ways:

    - Press **Return**.
    - Click anywhere outside the value field.

RESULT

The alternative text you entered into the value field is shown directly after playing technique text, and directly above playing technique symbols.

EXAMPLE

Alternative text added to playing technique text.

Alternative text added to playing technique symbol.

Project-wide Engraving Options for playing techniques

Options for the appearance and positions of playing techniques can be found on the **Playing Techniques** page in **Engraving Options**.

The options on this page allow you to change the placement of playing techniques above the staff, the arrangement of multiple playing techniques at the same rhythmic positions, and playing technique continuation styles.

Many options are accompanied by musical examples to demonstrate how each option affects the appearance of your music.

You can open **Engraving Options** in 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** editor by choosing **Play** > **Expression Maps**.

The **Expression Maps** editor shows you which playing techniques can currently be applied to each software instrument, which are shown in a list on the left of the dialog. This list includes combined playing techniques, which allows multiple playing techniques to be applied to notes simultaneously.

You can edit existing techniques, and create new combinations of playing techniques in the **Techniques** section of the dialog. For example, you can combine "Pizzicato" and "Muted" to allow the pizzicato and muted techniques to be applied to the same note.

When you input a playing technique in Write mode, that playing technique is looked for by the expression map. 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 can be shown 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 is not expecting. For example, if you input a new playing technique without canceling 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. New playing techniques can then be input without clashes.

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 you where you are in the piece, and allow players to co-ordinate themselves easily in rehearsals and concerts. As you can have greater control over where rehearsal marks appear, as opposed to bar numbers, rehearsal marks can also be used to indicate significant changes in the music.

Rehearsal marks can be added and deleted easily in Dorico, and the ordered sequence automatically adjusts to ensure there are no gaps or duplicate rehearsal marks.

They 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.

General placement conventions for rehearsal marks

As rehearsal marks are intended to be seen easily, they should be positioned conspicuously in the score: they should use a non-italic bold type that is relatively large, and be positioned above the system and outside the music. Rehearsal marks should not be positioned below the system.

They should be positioned above barlines. Although you can input rehearsal marks at rhythmic positions within a bar, this is not recommended. Depending on the style of music and the context in which it is used, it may be helpful to input a double barline beneath each rehearsal mark.

In order to ensure they are conspicuous, and are not easily confused with bar numbers if you are using numbers for rehearsal marks, they should be shown in an enclosure.

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 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 to place rehearsal marks at regular intervals as well as at significant moments: every 5-20 bars reduces the amount of bars players need to count before or after a rehearsal mark.

If a rehearsal mark coincides with a tempo change, the tempo text should be positioned to the right of the rehearsal mark. However, if space is tight, the text can be position above or below the rehearsal mark. The position of the rehearsal mark should remain clear: it should not be moved away from the barline to which it applies, otherwise its position could be misunderstood. Dorico automatically adjusts spacing to keep a rehearsal mark at the correct position.

Inputting rehearsal marks

Rehearsal marks can be input in Write mode with the mouse and the keyboard.

NOTE

If using the mouse with your mouse input preference set to **Create item at selection**, follow these steps in the given order.

If your preference is for **Load cursor with item**, follow the steps in the reverse order.

PROCEDURE

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

    *   A barline at the position where you want to input a rehearsal mark.

    *   A note, whole bar rest, or object that begins at the rhythmic position where you want to input a rehearsal mark.

2. Input a rehearsal mark in one of the following ways:

    *   Press **Shift-A**.

    *   Choose **Write** > **Create Rehearsal Mark**.

    *   Click **Rehearsal Marks** in the Notations toolbox:

RESULT

A rehearsal mark is input at a selected barline, or at the rhythmic position of the start of a note, a rest, or an object. Only one rehearsal mark can be input at a time, even if multiple items are selected.

The order of rehearsal marks is updated automatically, so they can be input at any time and in any order. This procedure can be followed to input rehearsal marks between existing rehearsal marks, and before existing rehearsal marks.

Positions of rehearsal marks

You can change the positions of rehearsal marks by moving individual rehearsal marks to different rhythmic positions in Write mode, moving them to different graphical positions in Engrave mode, and by changing the default positions of all rehearsal marks project-wide.

You can move rehearsal marks to different rhythmic positions in Write mode. They are positioned by default according to your preferences 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.

Project-wide settings for the default position of rehearsal marks, and values for the minimum distances between rehearsal marks and staves, and rehearsal marks and other items, can be set on the **Rehearsal Marks** page in **Engrave** > **Engraving Options**.

RELATED LINKS
Project-wide Engraving Options for rehearsal marks on page 542

Moving rehearsal marks rhythmically

You can move rehearsal marks to new rhythmic positions.

PROCEDURE

1. In Write mode, select the rehearsal mark you want to move.
2. Move the rehearsal mark in any of the following ways:
   - Press **Alt-Right Arrow** to snap it to the next barline.
   - Press **Alt-Left Arrow** to snap it to the previous barline.
   - Click and drag it to the right or to the left to snap it to the next or previous barline.

RESULT

The selected rehearsal mark is moved to the next or previous barline.

NOTE

You can only move one rehearsal mark rhythmically at a time when using the mouse.

You can move multiple rehearsal marks together if using the keyboard, but they are moved according to the rhythmic grid currently set instead of snapping to barlines.

Moving rehearsal marks graphically

You can move rehearsal marks graphically, without changing their rhythmic positions.

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.
   - **Alt**-**Left Arrow** to move them to the left.
   - **Alt**-**Up Arrow** to move them upwards.
   - **Alt**-**Down Arrow** to move them downwards.

     TIP

     If you want to move rehearsal marks 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 to the positions you want.

RESULT

The graphical positions of the selected rehearsal marks are changed.

NOTE

You can reset the graphical positions of rehearsal marks at any time by deactivating the **Start X offset** property in the **Rehearsal Marks** group of the Properties panel.

RELATED LINKS

Moving rehearsal marks graphically using the Properties panel

You can move rehearsal marks graphically using the Properties panel in Engrave mode.

PROCEDURE

1. In Engrave mode, select the rehearsal marks you want to move.

2. Activate the **Start offset** property in the **Rehearsal Marks** group of the Properties panel.

3. The **Start offset** property has **X** and **Y** value fields. 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.

4. The **Start offset** property moves rehearsal marks in the following ways:

- **Start offset X** moves rehearsal marks horizontally: increasing the value moves them to the right, decreasing the value moves them to the left.

- **Start offset Y** moves rehearsal marks vertically: increasing the value moves them upwards, decreasing the value moves them downwards.

Deleting rehearsal marks

To delete rehearsal marks:

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**.

RESULT

The selected rehearsal marks are deleted.

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, 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 a rehearsal mark of A or 1, position 2 appears as B or 2, and so on.

You may also want to 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 J.

To change the index position of an individual rehearsal mark:

PROCEDURE

1. Select the rehearsal mark whose index position you want to change. This can be done in Write mode and Engrave mode.

2. Activate the **Index** property in the **Rehearsal Marks** group of the Properties panel at the bottom of the window.

3. Change the value in the value field to correspond with the number or letter you want to be shown in one 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 now set, and its sequence type.

If its sequence type is **Letters**, it shows a letter. If its sequence type is **Numbers**, it shows a number.

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 would change from B to Q.

NOTE

If you want to change the rehearsal mark sequence, for example if you want rehearsal mark C to appear as rehearsal mark 3, you need to change the sequence type before changing the index position.

RELATED LINKS

Changing the rehearsal mark sequence type

Rehearsal marks can be shown as a letter, a number, or show the bar number. You can choose which type of sequence should be used project-wide on the **Rehearsal Marks** page in **Engraving Options**.

In Dorico, if required you can have all three sequences simultaneously. For example, you might want to have the main sequence of rehearsal marks showing letters, but have a secondary sequence of numbers to mark different moments, perhaps entry points for a solo line, and also have prominent bar numbers within those sections highlighted.

To change the sequence type of an individual rehearsal mark, and to create secondary rehearsal mark sequences:

PROCEDURE

1. Select the rehearsal mark whose sequence type you want to change. This can be done in Write mode and Engrave mode.

2. Activate the **Sequence type** property in the **Rehearsal Marks** group of the Properties panel at the bottom of the window.

3. Change the sequence type by selecting one of the following options:

   - **Letters**

   - **Numbers**

   - **Bar numbers**

RESULT

The selected rehearsal mark now displays a letter, a number, or the bar number, according to your selection.

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, the bar numbers sequence cannot be changed using this method.

RELATED LINKS

Adding suffixes and prefixes to rehearsal marks individually

Prefixes and suffixes can be added to rehearsal marks project-wide on the **Rehearsal Marks** page in **Engrave** > **Engraving Options**. They can also be added to rehearsal marks individually.

PROCEDURE

1. Select the rehearsal mark or rehearsal marks to which you want to add a prefix or suffix. You can do this in Write mode or Engrave mode.

2. Activate one of the following properties in the **Rehearsal Marks** group of the Properties panel:

   - **Prefix**

   - **Suffix**

3. Enter the prefix or suffix you want to add into the corresponding value field to where you want the text to be shown.

4. Save your changes in any of the following ways:

   - Press **Return**.

   - Click anywhere outside 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.

Showing rehearsal marks at multiple positions

Rehearsal marks are system objects, and so can be shown above the first bracket of selected instrument families.

To choose where system objects should appear:

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.

2. Select **Staves and Systems** from the **Category** menu.

3. Select the layouts in which you want to change the position of system objects in the **Layouts** list on the left of the dialog in the following ways:

- Click **Select All**.

- Click **Select All Full Score Layouts**.

- Click **Select All Part Layouts**.

- Click **Select All Custom Score Layouts**.

- **Ctrl**-click individual flows.

- **Shift**-click adjacent flows.

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

4. In the **System Objects** section, activate the box beside each instrument family group above which you want system objects, including rehearsal marks, to appear.

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.

System objects include rehearsal marks, but also include other items, such as tempo markings.

NOTE

Your chosen ensemble style for brackets affects where system objects appear.

RELATED LINKS

Project-wide Engraving Options for rehearsal marks

Options for the appearance and position of rehearsal marks project-wide can be found 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 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.

RELATED LINKS

Changes to the rehearsal mark font style

You can change different aspects of the font used for rehearsal marks. This changes the font in all rehearsal marks project-wide.

In the **Engrave** > **Font Styles** dialog, select **Rehearsal Mark Font** from the menu to change different aspects of the font.

Changes made to the font style apply to the entire project, including parts.

The different aspects of the rehearsal mark font style that you can change are:

Font family

Sets the overall font style.

Size

Sets the size of rehearsal marks. Rehearsal mark size can be:

- **Absolute**: always the set size, regardless of the staff size.
- **Staff-relative**: the size of rehearsal marks is proportional to the staff size, which means rehearsal marks appear smaller than the set value on smaller staves, and larger than the set value on larger staves.

Style

Sets the rehearsal mark font appearance. The rehearsal mark font can be:

- **Regular**
- **Italic**
- **Bold** (default)
- **Bold Italic**

Underlined

The rehearsal mark font appears underlined if the box beside the **Underlined** activation switch is checked.

RELATED LINKS
Project-wide Engraving Options for rehearsal marks on page 542

Changing the rehearsal mark font style

To change the font style used for rehearsal marks:

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Font Styles** to open the **Font Styles** dialog.
2. Select **Rehearsal Mark Font** from the **Font style** menu.
3. Activate the switches beside the following options to change the corresponding aspects 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
Changes to the rehearsal mark font style on page 542

Changing the rehearsal mark enclosure type

Rehearsal marks are usually shown in an enclosure, which can be a rectangle or a circle.

To change the enclosure type for rehearsal marks:

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Engraving Options**.

2. Click **Rehearsal Marks** in the page list.

3. Choose one of the following options for **Enclosure type** in the **Enclosure** section:

   - **Rectangle**
   - **Circle**
   - **No enclosure**

RESULT

Rehearsal marks in your project are shown within your chosen enclosure. The size of the enclosure is relative to the font size of the rehearsal marks, but the size and shape of the enclosure are also determined by your padding values.

EXAMPLE

Rehearsal mark in a rectangular enclosure

Rehearsal mark in a circular enclosure

Rehearsal mark with no enclosure

Rehearsal mark enclosure size and padding values

In the **Enclosures** section of the **Rehearsal Marks** page in **Engrave** > **Engraving Options**, there are a number of options to control the shape and size of rehearsal mark enclosures.

Rectangle rehearsal mark enclosure

The default settings for a rectangle enclosure create an enclosure like this one. The minimum height and minimum width are both 4 spaces, horizontal padding (left and right) is 3/4 of a space, and minimum bottom and minimum top padding are both 1/8 of a space.

Minimum width

This sets a minimum value for how wide the enclosure should appear, such as in this example where the value has been increased from 4 to 8 spaces:

Minimum height

This sets a minimum value for how high the enclosure should appear, such as in this example where the value has been increased from 4 to 8 spaces:

Minimum horizontal padding

This sets a minimum value for the distance between the two sides of the enclosure and the rehearsal mark within, such as in this example where the value has been increased from 3/4 to 3 spaces:

Minimum top padding

This sets a minimum value for the distance between the top line of the enclosure and the rehearsal mark within, such as in this example where the value has been increased from 1/2 to 2 spaces:

Minimum bottom padding

This sets a minimum value for the distance between the bottom line of the enclosure and the rehearsal mark within, such as in this example where the value has been increased from 1/8 to 2 spaces:

Circular bar number enclosure

The default settings for a circular enclosure create an enclosure like this one. The minimum diameter is 4 spaces, and the minimum padding is 1/4 of a space.

Minimum diameter

This sets a minimum value for the diameter of the enclosure, such as in this example, where the value has been increased from 4 to 8 spaces:

Minimum padding

This sets a minimum value for the distance between the enclosure line and the rehearsal mark within, such as in this example where the value has been increased from 1/4 to 2 spaces:

All enclosures

Enclosure line thickness

This allows you to control how thick the enclosure line should appear, for both rectangle and circle enclosures. The default is 1/8 of a space. The below examples demonstrate a thickness of 1/2 a space.

Repeat endings

Repeat endings are also sometimes known as volta lines, or as 1st and 2nd 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.

Dorico allows you to create repeat endings for any number of repeats.

RELATED LINKS
Adding additional endings on page 548

Inputting repeat endings

There is no popover for repeat endings: they can only be input using the **Repeat Structures** panel on the right of the window in Write mode.

You can open the **Repeat Structures** panel by clicking **Repeat Structures** in the Notations toolbox:

PROCEDURE

1. In Write mode, select the bars that you want to include in the first ending.

    You can select a single note or rest in each bar to include those bars in the first ending.

2. Click **Create Repeat Ending** in the **Repeat Endings** section of the **Repeat Structures** panel.

RESULT

The first ending segment is created, covering the bars in which you selected notes, with a second ending segment created in the bar immediately following the first ending.

An end repeat barline is created at the end of the first ending if none exists already.

Adding additional endings

You can have more than two possible endings in each repeat ending structure by adding repeats.

PROCEDURE

1. In Write mode, select the bars that you want to include in the second ending, starting with the first bar with the open second-time bracket.

2. Click **Add Section To Repeat Ending** in the **Repeat Endings** section of the **Repeat Structures** panel.

    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.

RESULT

The existing second ending segment now ends with a closed line, with an end repeat barline created if necessary.

A new, third ending segment is added in the bar after the last bar in the second ending.

You can repeat this process as many times as required.

EXAMPLE

Default repeat ending structure with two endings

Repeat ending structure with additional third ending

Changing the number of endings using the Properties panel

You can increase the number of endings included in a repeat ending structure individually using the Properties panel.

PROCEDURE

1. Select the repeat endings whose number of endings you want to change. You can do this in Write mode and Engrave mode.

2. Activate the **No. endings** property in the **Repeat Endings** 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.

    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.

RESULT

Increasing the value increases the number of repeats.

Decreasing the value decreases the number of repeats.

NOTE

This does not automatically input or reposition repeat barlines. You can input repeat barlines as appropriate manually.

Changing the total number of repeats in repeat endings

By default, each segment in repeat endings is played once, so each segment shows a single digit corresponding to the time through the music on which each ending is played. You can increase the total number of repeats for individual repeat endings.

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. Activate the **No. times played** property in the **Repeat Endings** group of the Properties panel.

3. Change the number of repeats you want by changing 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 prefers to add any repeats not already assigned to specific segments to the final closed segment.

NOTE

Once you have set the total number of repeats, you can then change which segment is used for each repeat.

RELATED LINKS

Changing the segments used for each repeat in repeat endings

You can control how the number of repeats is divided across the different segments in individual repeat endings.

PROCEDURE
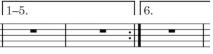
1. In Engrave mode, select an individual segment from the repeat ending structure whose number of repeats you want to change.

2. Activate the **Times played for segment** property in the **Repeat Endings** group of the Properties panel.

3. Enter the number of each repeat that you want to include in the selected segment.

For example, for a repeat ending with six repeats, you can enter 4, 5, 6 for the second segment.
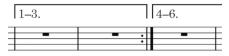
RESULT

The number of repeats included in the selected segment is changed.

EXAMPLE

The default distribution of repeats   The customized distribution of repeats

Project-wide Engraving Options for repeat endings

Options controlling the design, default position, and display of number of times played can be found on the **Repeat Endings** page in **Engraving Options.**.

The options on this page allow you to change the ends of repeat ending lines, the appearance of numbers and hooks, and the default position of repeat endings.

Many options are accompanied by musical examples to demonstrate how each option affects the appearance of your music.

You can open **Engraving Options** in 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.

Changing above which staves repeat endings appear

Repeat endings are system-attached items and appear above selected instruments. There is also an option to show repeat endings below the bottom staff of the system.

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.

2. Select **Staves and Systems** from the **Category** menu.

3. Select the layouts in which you want to change above which staves repeat endings appear in the **Layouts** list on the left of the dialog in the following ways:

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

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

4. In the **System Objects** section, check the boxes for the instrument families above which you want system objects, including repeat ending lines, to appear in the selected layouts.

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.

System objects include rehearsal marks, but also include other items, such as tempo markings.

NOTE

Your selected ensemble style for brackets affects where system objects appear.

RELATED LINKS
Changing bracket grouping according to ensemble type on page 265

Lengthening and shortening final segments in repeat endings with the keyboard

You can increase and decrease the number of bars included in the final segment of repeat endings by lengthening and shortening them with the keyboard.

PROCEDURE

1. In Write mode, select the repeat endings whose final segments you want to lengthen or shorten.

2. Change the lengths of the final segments in the following ways:

- Press **Shift-Alt-Right Arrow** to lengthen the final segment.

- Press **Shift-Alt-Left Arrow** to shorten the final segment.

RESULT

The final segments of the selected repeat endings are lengthened or shortened by snapping to the next or previous barline.

NOTE

You can only change the length of the last segment in repeat endings using the keyboard. You can change the lengths of inner segments using the mouse.

This does not automatically input or reposition repeat barlines. You need to input repeat barlines as appropriate manually.

RELATED LINKS
Lengthening and shortening segments in repeat endings with the mouse on page 552
Moving repeat endings graphically using the Properties panel on page 554

Lengthening and shortening segments in repeat endings with the mouse

You can increase and decrease the number of bars included in each segment of repeat endings by lengthening and shortening them with the mouse.

You can lengthen and shorten inner repeat ending segments as well as final repeat ending segments when using the mouse.

PROCEDURE

1. In Write mode, select the repeat ending you want to lengthen or shorten.

2. Select the circular handle at the right-hand end of the segment you want to lengthen or shorten.

The selected handle in the middle has a thicker line

3. Click and drag the handle to the right or to the left to snap it to the next or 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 or shortened.

NOTE

This does not automatically input or reposition repeat barlines. You need to input repeat barlines as appropriate manually.

RELATED LINKS
Moving repeat endings graphically using the Properties panel on page 554

Positions of repeat endings

You can change the positions of repeat endings by moving individual repeat endings to different rhythmic positions in Write mode, moving them to different graphical positions in Engrave mode, and by changing the default positions of all repeat endings project-wide.

You can move repeat endings to different rhythmic positions in Write mode. They are positioned by default according to your preferences in **Engraving Options**.

You can move repeat endings graphically in Engrave mode, however this does not change the rhythmic positions to which they are attached.

You can set project-wide options for the appearance and position of repeat endings on the **Repeat Endings** page in **Engrave** > **Engraving Options**.

RELATED LINKS
Project-wide Engraving Options for repeat endings on page 550

Moving repeat endings rhythmically

You can move repeat endings to new rhythmic positions after they have been input.

PROCEDURE

1. In Write mode, select the repeat endings you want to move.
2. Move the repeat endings to the next or previous bar 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 repeat endings to the right or to the left.

RESULT

The selected repeat endings are moved to the next or previous bar.

NOTE

This does not automatically input or reposition repeat barlines. You must input repeat barlines manually as appropriate.

NOTE

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.

NOTE

If you moved repeat endings using the keyboard, you can undo the move to restore any repeat endings deleted in the process.

However, if you moved repeat endings using the mouse, undoing the move does not restore any repeat endings deleted in the process.

Moving repeat endings back to their previous positions later does not restore any repeat endings deleted when they were moved previously. The deleted repeat endings must be re-input if necessary.

RELATED LINKS
Positions of repeat endings on page 552

Moving repeat endings graphically

You can move repeat endings graphically without changing their rhythmic positions.

PROCEDURE

1. In Engrave mode, select one of the following that you want to move:
   - Whole repeat endings
   - Individual repeat ending segments
2. Move the repeat endings or segments 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 repeat endings and segments 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 selected repeat endings or segments in any direction to the positions you want.

RESULT

The graphical positions of the selected repeat endings or repeat ending segments are changed.

NOTE

You can reset the graphical positions of repeat endings at any time by deactivating the **Start X offset**, **End X offset**, and **Y offset** properties in the **Repeat Endings** group of the Properties panel.

RELATED LINKS

Moving repeat endings graphically using the Properties panel

You can move repeat endings graphically using the Properties panel.

PROCEDURE

1. In Engrave mode, select the repeat ending segments that you want to move.
2. Activate the following properties, individually or together, in the **Repeat Endings** group of the Properties panel:
   - **Start X offset**
   - **End X offset**
   - **Y offset**
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.
4. The properties move repeat ending segments in the following ways:
   - **Start X offset** moves the start of repeat ending segments horizontally: increasing the value moves the start of repeat ending segments to the right, decreasing the value moves the start of repeat ending segments to the left.
   - **End X offset** moves the end of repeat ending segments horizontally: increasing the value moves the end of repeat ending segments to the right, decreasing the value moves the end of repeat ending segments to the left.
   - **Y offset** moves repeat ending segments vertically: increasing the value moves them upwards, decreasing the value moves them downwards.

Deleting repeat endings

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**.

RESULT

The selected repeat endings are deleted.

NOTE

Any repeat barlines input as part of the deleted repeat endings are not deleted automatically.

RELATED LINKS
Deleting barlines on page 227

Individual changes to the appearance of repeat endings

You can change the appearance of individual repeat endings, 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 these handles in the following ways:

- Select the repeat ending or segment and press **Tab** to cycle through handles until the one you want to move is selected.

- Click the handle.

Once selected, you can move handles to new graphical positions in the same ways as moving whole repeat endings graphically.

RELATED LINKS
Project-wide Engraving Options for repeat endings on page 550
Moving repeat endings graphically on page 553
Moving repeat endings graphically using the Properties panel on page 554

Changing the text shown in repeat endings

You can override the text shown in individual segments in repeat endings.

PROCEDURE

1. In Engrave mode, select the segments whose text you want to change.

2. Activate the **Custom text** property in the **Repeat Endings** group of the Properties panel.

3. Enter the new text you want into the value field.

RESULT

The text shown in the selected segments is changed.

NOTE

You can revert the text back to the default setting at any time by deactivating the **Custom text** property.

Changing the appearance of individual final repeat ending segments

You can change the appearance of the lines in the final segments of repeat endings independently of your project-wide settings in **Engraving Options**.

PROCEDURE

1. Select the repeat endings whose final segment appearance you want to change. You can do this in Write mode and Engrave mode.
2. Activate the **End of line** property in the **Repeat Endings** group of the Properties panel.
3. Select one of the following options from the menu:
   - **Open, short**
   - **Open, up to barline**
   - **Closed**

RESULT

The end of the line of the final segment in the selected repeat endings is changed according to your selection.

NOTE

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

Changing the hook length of individual repeat endings

You can change the length of the hooks in repeat endings individually, independently of your project-wide settings.

PROCEDURE

1. In Engrave mode, select the repeat endings whose hook lengths you want to change.
2. Activate the **Hook length** property in the **Repeat Endings** 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

Increasing the value makes repeat ending hooks longer.

Decreasing the value makes repeat ending hooks shorter.

Importing and exporting repeat endings in MusicXML files

Repeat endings are imported from MusicXML files and exported in MusicXML files.
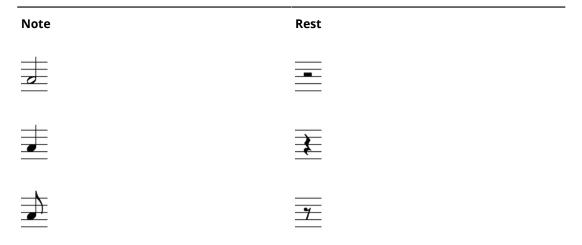
However, segments in the middle of sets of endings cannot have an open right-hand end, despite this being technically possible to represent in MusicXML.

Rests

Rests are markings that indicate no note is played for the rhythmic value indicated by the rest. 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.

The table shows some examples of notes and the rests with the equivalent rhythmic value.

Note	Rest

Dorico automatically fills the gaps between notes with rests of the appropriate duration. These are known as implicit rests, because they are implied by the gaps between the notes. Dorico notates implicit rests according to the current time signature, for example, different implicit rests are shown in 6/8 compared to 4/4.

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 with different implicit rests at the beginning of the bar in different time signatures

Explicit rests are rests that are explicitly entered during note input by forcing their duration, or rests that were explicitly created by way of importing a MusicXML file. 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
Forcing the positions and durations of rests on page 560
Turning explicit rests into implicit rests on page 562

General placement conventions for rests

Rests should be 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 should be 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, in staves with multiple voices, rests are placed higher in the staff, or above the staff, for up-stem voices and lower in the staff, or below the staff, for down-stem voices.

An example of rest positions in a multi-voice context

Rests in multiple voices should 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 561
Turning explicit rests into implicit rests on page 562

Project-wide Notation Options for rests

There are a number of options for how rests are positioned, 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 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.

You can then choose **Rests** from the **Category** menu.

Project-wide Engraving Options for rests

Options for the appearance of rests project-wide can be found on the **Rests** page in **Engraving Options**.

The options on this page allow you to change the style, appearance, and precise position of rests, including multi-bar rests.

Many options are accompanied by musical examples to demonstrate how each option affects the appearance of your music.

You can open **Engraving Options** in 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.

Forcing the positions and durations of rests

Dorico automatically notates rests as appropriate, according to their position in the bar and the time signature. If you want rests to have specific durations regardless of their rhythmic position, you can force their duration and position.

PROCEDURE
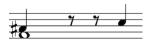
1. Select the rests whose position and duration you want to force. You can do this in Write mode and Engrave mode.

2. Activate the **Force position and duration** property in the **Notes and Rests** group of the Properties panel.

RESULT

The selected rests become explicit rests. Rests with forced durations and positions can be notated as required. If moved, they keep the same notation.

EXAMPLE

Default quarter note rest

The same rest shown as two eighth note rests with forced durations.

Showing rest colors

You can show implicit rests and explicit rests in different colors.

PROCEDURE

- To show rest colors, choose **View** > **Note and Rest Colors** > **Implicit Rests**.
  - A tick is shown beside the **Implicit Rests** option in the menu when rest colors are shown.
  - No tick is shown beside the **Implicit Rests** option in the menu when rest colors are not shown.

RESULT

Rests in your project appear gray if they are implicit, and appear black if they are explicit.

For example, this can be useful to help diagnose why rests do not disappear when you activate the **Starts voice** and **Ends voice** properties, 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 show implicit rests

RELATED LINKS
Deleting rests on page 561

Visibility of rests

You can hide implicit rests by activating the **Starts voice** and **Ends voice** properties in the **Notes and Rests** group of the properties panel.

These properties suppress all rests before the note or after the note, up to the start or the end of the flow.

You can also suppress implicit rests in any gaps between different voices that might occur in the middle of a flow, using the same properties.

NOTE

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.

RELATED LINKS
Hiding rests before the first note in voices on page 715
Hiding rests after the last note in voices on page 715

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 as a result of having multiple voices in the staff, you can choose to consolidate these rests in the **Rest position** section of the **Rests** page in **Notation Options**.

PROCEDURE

1. In Write mode, select the rests you want to delete in one of the following ways:

   - Hold down **Ctrl/Cmd** and select each rest individually.

   - Select a whole staff from which you want to delete all rests by selecting the first note in the staff, holding down **Shift**, and selecting the last note in the staff.

   - Select a whole staff from which you want to delete all rests by selecting the first note in the staff and choosing **Edit** > **Select To End Of System** or **Edit** > **Select To End Of Flow**.

   - Multiple staves from which you want to delete all rests by selecting one whole staff at the top of the range of staves from which you want to delete all rests, holding down **Shift**, and selecting the staff at the bottom of the range of staves from which you want to delete all rests.

NOTE

You can also select the bottom staff in the range, hold down Shift, and select the top staff in the range.

- Make a marquee selection that contains all the rests you want to delete.

2. Choose **Edit** > **Remove Rests**.

RESULT

All rests in the selection are deleted. This is done by 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.

NOTE

You can undo deleting rests immediately.

You can also show rests again later by selecting the notes or rests immediately to the left or right of deleted rests and deactivating the corresponding **Starts voice** or **Ends voice** properties in the **Notes and Rests** group of the Properties panel.

RELATED LINKS
Rests on page 558
Showing rest colors on page 560
Visibility of rests on page 561
Hiding rests before the first note in voices on page 715
Hiding rests after the last note in voices on page 715
Project-wide Notation Options for rests on page 559

Turning explicit rests into implicit rests

Implicit rests and explicit rests behave differently. For example, you can hide implicit rests can be hidden using the Properties panel, whereas you cannot hide explicit rests or rests with forced durations.

You may want to turn explicit rests into implicit rests so you can activate the **Starts voice** and **Ends voice** properties in the **Notes and Rests** group of the Properties panel to hide rests in multi-voice contexts.

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**.

RESULT

The selected explicit rests are now implicit rests. You can check this by showing rest colors.

RELATED LINKS
Showing rest colors on page 560
Hiding rests after the last note in voices on page 715
Hiding rests before the first note in voices on page 715

Changing the vertical position of rests individually

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. You can also show multiple rests for each voice in the staff individually.

NOTE

You cannot change the vertical position of rests 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 the **Rest pos.** 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 the value moves rests upwards. Decreasing the value moves rests downwards.

If there are multiple voices in the staff with rests of the same duration, multiple rests are now shown.

Changes to the horizontal position of individual rests

The horizontal position of rests, and the spacing around them, can be changed in Engrave mode when **Note Spacing** is activated, in the same ways changing the position of notes.

RELATED LINKS
Note spacing on page 171
Adjusting note spacing at individual rhythmic positions in Engrave mode on page 172
Adjusting the note spacing of individual notes, independently of their rhythmic positions on page 173

Slurs are tapered, curved lines that join notes to indicate articulation and phrasing.

They are not to be confused with ties, which look superficially similar, but which join notes of the same pitch to indicate that they should be played as a single note. In that sense, ties are part of rhythmic notation, while slurs are considered articulation.

Depending on 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 should be 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 should be played legato and under one bow.

For singers, slurs indicate that more than one note is sung to the same syllable.

General placement conventions for slurs

Where a slur is placed relative to the staff depends on the appearance of the notes within the slur.

Slur direction

A slur on a single staff always curves upwards, unless all of the notes under the slur are stem-up, in which case it curves downwards.

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

It is only standard for slurs always to appear above notes in jazz scores, where a slur is sometimes treated as an articulation and so positioning it above the staff is preferred.

Slurs between unbeamed notes

In Dorico, slurs between unbeamed notes appear between their stems, and the default setting is for them to attach a short distance from the end of the stem.

You can change where a slur attaches to a stem by adjusting the **Vertical offset from end of stem** option on the **Slurs** page in **Engraving Options**.

Slur position relative to tie chains

The convention for slur position relative to tie chains is different for modern use and historical editions.

Modern practice is for slurs to start from the first note in a tie chain, and end on the last note in a tie chain.

Slur ending on the last note of a tie chain.

Slur starting from the first note in a tie chain.

However, for historical editions you might want slurs to end on the first note in a tie chain, and start from 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 from the last note in a tie chain.

You can choose whether ties start from the first or last note in a tie chain, and end on the first or last note in a tie chain, on the **Slurs** page in **Engrave** > **Engraving Options**. This applies to all slurs project-wide.

RELATED LINKS

Changing the position of slurs relative to tie chains individually

You can change the position of individual slurs relative to tie chains, independently of your project-wide setting for the position of slurs relative to tie chains.

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. Activate the following properties in the **Slurs** group of the Properties panel:

   - **Start pos. in tie chain**

   - **End pos. in tie chain**

3. Choose one of the following options for each property:

   - **First note**

- **Last note**

Slur placement relative to grace notes

Slurs that start from a grace note, or over multiple grace notes, and attach directly to the next standard note have special placement rules.

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 if a slur attaches to a standard note at any rhythmic position beyond the note immediately after the grace note.

Grace notes only appear stem down by default when there are multiple voices in a staff. When there is only one voice in a staff, grace notes appear stem up by default, even if the notehead to which they are attached is stem down. Therefore in Dorico, slurs appear below the grace note and curve downwards by default.

Automatic changes to the curvature direction of slurs on grace notes in multi-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

Slur position relative to staff lines

Slur endpoints should not touch staff lines, and Dorico handles this automatically.

In addition, the high point of the arc curves should not stop on a staff line; however, Dorico does not yet automatically prevent this happening.

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 stops on a staff line, you can adjust its height so that it peaks either above or below the staff.

You can set a value for the minimum distance between slur endpoints and staff lines on the **Slurs** page of **Engrave** > **Engraving Options**.

Slur endpoint position relative to other items

You can change the default positions of slur endpoints relative to noteheads, stems, articulations, ties and other slurs, and staff lines.

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.

Vertical and horizontal offsets for the ends of slurs can be set in the **Endpoint Positioning** section of the **Slurs** page in **Engraving Options**. However, you may also need to reduce the value for **Minimum gap inside slur curvature to avoid collisions**, as endpoints cannot be closer to noteheads than the value of this option.

NOTE

This value affects all collisions, so you should check how changing this affects other areas in your project.

Slur endpoints relative to articulations

By default, articulations of force and stress go above the slur, and articulations of duration go below the ends of a slur, 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 or ends on the same note.

You can change this by increasing or decreasing the value for **Minimum vertical gap between two slurs starting or ending on the same note**, found under **Vertical Positioning** 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.

Slur endpoints relative to staff lines

The default position of slur endpoints relative to staff lines is 1/4 space above or below, to ensure the start and end points do not touch the staff line.

You can change this by increasing or decreasing the value for **Minimum distance between slur endpoint and staff line**, found under **Vertical Positioning** in the **Avoiding Collisions** section of the **Slurs** page in **Engraving Options**.

Inputting slurs during step input

You can input slurs directly during step input.

PROCEDURE

1. In Write mode, start note input.

2. Start a slur from the currently selected note in any of the following ways:

    •   Press **S**.

    •   Click **Slur** in the Notes panel:

3. Input the notes you want. The slur extends automatically, even if there are rests between the notes you input.

4. Press **Shift-S** to end the slur on the currently selected note.

Adding slurs to existing notes

You can add slurs to notes after they have been input. You can add slurs to multiple staves at the same time.

PROCEDURE

1. In Write mode, select the notes to which you want to add slurs.
    If you only select one note, the slur connects that note to the next note on the staff.

2. Add a slur in any of the following ways:

    •   Press **S**.

    •   Click **Slur** in the Notes panel:

    Alternatively, click **Slur** in the Notes panel first, and then click and drag to input a slur and extend it to your preferred length.

RESULT

The selected notes are connected by slurs. If you select notes in multiple staves, for example, if you select two notes in one staff and two notes in another staff, two slurs are input. They connect the notes in each selected staff.

Inputting cross-staff slurs

In grand staff instruments, such as piano and harp, sometimes a phrase starts on one staff and ends on the other, and should be joined by a slur.

You can input slurs that start on one staff and end on another staff.

PROCEDURE

1. In Write mode, select the note where you want the slur to start.

2. **Ctrl/Cmd**-click the note where you want the slur to end. Only those two notes should be selected.

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

    - Press **S**.

    - Click **Slur** in the Notes panel:

RESULT

A slur is added spanning the notes selected. It is placed either above or below the group of notes, depending on the stem direction within the selection. This can be across two or more staves.

NOTE

You can also change the curvature direction of individual slurs.

RELATED LINKS
Changing the curvature direction of slurs individually on page 583

Inputting cross-voice slurs

Cross-voice slurs are slurs that start in one voice but end in a different voice.

Dorico positions cross-voice slurs in the same way as it positions standard slurs, so their appearance may be the same as standard slurs. However, cross-voice slurs do not behave in the same way when you move, lengthen, or shorten them.

A cross-voice slur cannot be lengthened if the next note in the same voice as the one the slur started or ended in is too far away. It also cannot be shortened if noteheads under the slur are in a different voice to the one the slur started or ended in.

Similarly, a cross-voice slur cannot be moved if the next note in the same voice as the one the slur started or ended in is too far away, in either direction.

The different voices can be on the same staff, or on different staves.

PROCEDURE

1. In Write mode, select the note from which you want the slur to start, in any voice.

2. Hold **Ctrl/Cmd** and click the note on which you want the slur to end, in any voice.

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

    - Press **S**.

    - Click **Slur** in the Notes panel:

RESULT

A cross-voice slur is added spanning the notes selected. It is placed either above or below the notes, depending on the stem direction within the selection.

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 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.

You can increase or decrease the project-wide value for the **Minimum vertical gap between two slurs starting or ending on the same note** setting, in the **Avoiding Collisions** section of the **Slurs** page of **Engraving Options**.

Nested slurs can be added in the same way as ordinary slurs, and Dorico makes automatic adjustments to their positioning to avoid collisions if you have not activated the **Disable auto curve adjustment** property in the Properties panel in Engrave mode.

RELATED LINKS

Inputting nested slurs during step input

You can input nested slurs directly during step input.

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 the notes you want. The slurs extend automatically as you continue inputting notes, even if there are rests between the notes you input.
4. Press **Shift-S** once to end the inner slur on the currently selected note.
5. Continue inputting notes.
6. Press **Shift-S** then again to end the outer slur on the currently selected note.

   NOTE

   You can also start another inner slur by pressing **S** before ending the outer slur.

Adding nested slurs to existing notes

You can add slurs to existing notes that are nested within another slur.

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**.

   NOTE

   You can follow these steps 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 the **Disable auto curve adjustment** property in the **Slurs** group of the Properties panel for individual notes.

RELATED LINKS
Slur collision avoidance on page 586

Moving slurs

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

   Only move one slur can be moved rhythmically at a time when using the mouse.

2. Move the whole 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 or to the 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 end up covering longer or shorter durations than before they were moved.

You can adjust the shape and position of individual slurs graphically in Engrave mode.

RELATED LINKS
Slurs in Engrave mode on page 575

Lengthening and shortening slurs

You can change the length of slurs rhythmically after they have been input.

PROCEDURE

1. In Write mode, select the slur you want to make longer or shorter.

   NOTE

   You cannot lengthen or shorten multiple slurs at the same time.

2. Lengthen and shorten the slur in any of the following ways:

   - Press **Shift**-**Alt**-**Right Arrow** to move the right end of the slur to the next notehead in the staff.
   - Press **Shift**-**Alt**-**Left Arrow** to move the right end of the slur to the previous notehead in the staff.
   - Click and drag the right end or left end of the slur to the next or previous notehead.

RESULT

The slur is lengthened or shortened.

RELATED LINKS

Slur segments

A standard slur consists of one segment. You can make more elaborate shapes with slurs with multiple segments.

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. This can allow you to drag a slur into unusual and complicated shapes using the mouse, or by nudging with the arrow keys.

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.

An unusual slur shape created using five segments.

The same slur, showing the positions of the handles of all five segments.

Changing the number of segments in individual slurs

You can change the number of segments in individual slurs.

PROCEDURE

1. In Engrave mode, select the slurs whose number of segments you want to change.
2. Activate the **Number of segments** property in the **Slurs** group of the Properties panel.
3. Change the value in the value field to increase or decrease the number of segments in any of the following ways:
   - Enter a value into the value field.
   - Click the arrows beside the value field.

RESULT

The number of segments in the selected slurs is changed.

Deleting slurs

PROCEDURE

1. In Write mode, select the slurs you want to delete.
2. Delete the slurs in any of the following ways:
   - Press **Backspace** or **Delete**.
   - Choose **Edit** > **Delete**.

RESULT

The selected slurs are deleted.

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 between staves, or enter them simultaneously.

If slurs are linked, that means 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.

You can also manually link and unlink slurs.

RELATED LINKS
Adding slurs to existing notes on page 568
Linking slurs together on page 574
Unlinking slurs on page 574

Linking slurs together

Dorico automatically links slurs of the same duration at the same rhythmic positions together automatically. 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. Link the selected slurs together in any of the following ways:

- Choose **Edit** > **Slurs** > **Link**.
- Right-click and choose **Slurs** > **Link** from the context menu.

RELATED LINKS
Linked slurs across multiple staves on page 573

Unlinking slurs

You can unlink slurs manually that were previously automatically linked together.

PROCEDURE

1. In Write mode, select a slur from each linked group you no longer want to be linked.
2. Unlink the whole linked group of slurs in any of the following ways:

- Choose **Edit** > **Slurs** > **Unlink**.
- Right-click and choose **Slurs** > **Unlink** from the context menu.

RESULT

All slurs linked to the selected slurs are unlinked.

RELATED LINKS
Linked slurs across multiple staves on page 573

Project-wide Engraving Options for slurs

Options for the position, placement, and appearance of slurs project-wide can be found on the **Slurs** page in **Engraving Options**.

The options on this 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.

Many options are accompanied by musical examples to demonstrate how each option affects the appearance of your music.

You can open **Engraving Options** in 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.
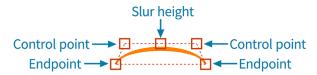
Slurs in Engrave mode

In Engrave mode, each slur has five square handles that can be moved separately. When using slur handles to edit slurs in Engrave mode, each handle adjusts the corresponding part of the slur.

NOTE

However, this may also affect the positions of other slur handles.

For example, moving the left endpoint moves the left end 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.

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 581
Slur height on page 580

Changing the shape of slurs individually

You can change the shape of individual slurs by moving their handles to different positions. 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 slur handles whose position you want to change in any of the following ways:

    - Select a whole slur and press **Tab** to cycle through the handles until the one you want to move is selected.

- Click the handle you want to move.

- **Ctrl/Cmd**-click individual handles on multiple slurs.

2. Move the handles in any of the following ways:

- 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 the handles in any direction to the positions you want.

RELATED LINKS
Slur height on page 580
Slur shoulder offset on page 581

Changing the shape of slurs individually using the Properties panel

You can change the shape of individual slurs by moving their handles using the Properties panel. 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 slur handle whose position you want to change in any of the following ways:

- Select a whole slur and press **Tab** to cycle through the handles until the one you want to move is selected.

- Click the handle you want to move.

- **Ctrl/Cmd**-click individual handles on multiple slurs.

2. Activate the following properties, individually or together, in the **Slurs** group of the Properties panel:

- **Start offset**: left endpoint of slurs

- **End offset**: right endpoint of slurs

- **Start handle offset**: left control point of slurs

- **End handle offset**: right control point of slurs

3. Each property has **X** and **Y** value fields. 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.

4. The properties move slur handles in the following ways:

- **Start offset X** moves the left endpoints of slurs horizontally: increasing the value moves them to the right, decreasing the value moves them to the left.

- **Start offset Y** moves the left endpoints of slurs vertically: increasing the value moves them upwards, decreasing the value moves them downwards.

- **End offset X** moves the right endpoints of slurs horizontally: increasing the value moves them to the right, decreasing the value moves them to the left.

- **End offset Y** moves the right endpoints of slurs vertically: increasing the value moves them upwards, decreasing the value moves them downwards.
- **Start handle offset X** moves the left control points of slurs horizontally: increasing the value moves them to the right, decreasing the value moves them to the left.
- **Start handle offset Y** moves the left control points of slurs vertically: increasing the value moves them upwards, decreasing the value moves them downwards.
- **End handle offset X** moves the right control points of slurs horizontally: increasing the value moves them to the right, decreasing the value moves them to the left.
- **End handle offset Y** moves the right control points of slurs vertically: increasing the value moves them upwards, decreasing the value moves them downwards.

RELATED LINKS
Slur height on page 580
Slur shoulder offset on page 581

Changing the shape of multi-segment slurs individually

Each segment of multi-segment slurs, such as S-shaped slurs, can be edited independently in Engrave mode. The inner control point works in parallel with the corresponding inner control point of the neighboring segment to ensure a smooth and symmetrical shape.
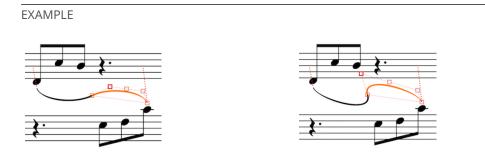
The outer control points for each segment in S-shaped slurs, the ones closest to the tapered ends, can be moved independently.

The inner control points, the ones closest to the center of a slur, can be moved independently on the vertical axis, but their movement on the horizontal axis is mirrored by the corresponding inner control point on the adjacent segment.

This is designed to avoid tight corners, so that multi-segment slurs are always as smoothly curved as possible.

NOTE

You can move slur handles in S-shaped slurs in the same ways as for any other slur.

EXAMPLE

RELATED LINKS
Slurs in Engrave mode on page 575
Changing the shape of slurs individually on page 575

Changing the angle or rotation of slurs individually without affecting their shape

You can change the angle or rotation of slurs individually without affecting their 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, 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.

   NOTE

   You can select individual handles on multiple slurs by holding down **Ctrl/Cmd** and clicking.

2. Hold down **Alt** and click and drag the endpoints to the positions you want.

   You cannot use the keyboard to change the angles of individual slurs.

RESULT

The angle or rotation of the selected slurs is changed without affect their shape.

EXAMPLE

Moving endpoints without holding **Alt**

Moving endpoints while holding **Alt**

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, as shown in the example slur in the middle.

The example on the right shows handles have been moved poorly, making the curve far too angular.

In the bottom row, you can see how the handles have been placed to create the curve of each example slur.

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 the curve made more angular

Default slur handle placement	Slur handle placement to create the slur above	Slur handle placement to create the slur above

TIP

When adjusting curve ends, the best results are achieved 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 guidelines to help you judge this.

You can adjust the shape of curve ends in short slurs in three ways:

- Project-wide, by increasing the value for **Offset shoulders by fraction of half length of short slur**, found by disclosing **Advanced Options** in the **Design** section of the **Slurs** page in **Engrave** > **Engraving Options**.

- Individually, by activating the **Start handle offset** and **End handle offset** properties in the Properties panel, and changing their **X** value fields.

- Individually, by moving the handles of slurs in Engrave mode.

RELATED LINKS

Changing the thickness of slurs individually

You can change the thickness of individual slurs, independently of your project-wide settings for the thickness of slurs.

You can 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. Activate the following properties, individually or together, in the **Slurs** group of the Properties panel:

   - **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.

You can revert the thickness of the slurs to your default settings at any time by deactivating the corresponding properties.

Slur height

Slur height is how far above or 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 limit, a balance must be found 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

NOTE

You can change the project-wide settings for the height of short slurs, short flat slurs, long slurs, and long flat slurs by disclosing **Advanced Options** in the **Design** section of the **Slurs** page in **Engrave** > **Engraving Options**.

RELATED LINKS
Changing the height of slurs individually on page 580
Project-wide Engraving Options for slurs on page 575

Changing the height of slurs individually

You can change the height of individual slurs by moving their slur height handles, which is the middle handle on slurs in Engrave mode.

PROCEDURE

1. In Engrave mode, select the slur height (middle) handle of the slurs whose height you want to change.

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**-**Left Arrow**.

• Click and drag the handles upwards or downwards to the height you want.

RESULT

The height of the selected slurs is changed.

NOTE

To maintain a visually pleasing and symmetrical curve when changing the height of a slur manually, you may need to move the slur height handle to the right or to the left by a small amount, as well as upwards or downwards.

Slur shoulder offset

Slur shoulders affect the angles of the curves of slurs as they taper towards an endpoint, as 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.

A long slur with default shoulder offset of **1/5**

A long slur with increased shoulder offset of **1**

A long slur with decreased shoulder offset (**-1/5**)

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, found by disclosing **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
Changing the shoulder offset of slurs individually on page 581
Changing the shoulder offset of slurs individually using the Properties panel on page 582

Changing the shoulder offset of slurs individually

You can adjust the shoulders of individual slurs by moving their control point handles. You can move each control point independently of the other one.

PROCEDURE

1. In Engrave mode, select one of the control point handles of the slurs whose shoulders you want to adjust.

> **NOTE**
>
> You can select individual handles on multiple slurs.

2. Move the handles in any of the following ways:

 - Press **Alt**-**Up Arrow** to move them to the right.

 - Press **Alt**-**Down Arrow** to move them to the left.

 - Press **Alt**-**Right Arrow** to move them upwards

 - Press **Alt**-**Left Arrow** to move them upwards.

 > **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 handles in any direction to the positions you want.

3. Optional: Repeat steps 1 and 2 for the other control point handles.

RESULT

The shoulder offset of the selected slurs is changed.

RELATED LINKS

Changing the shoulder offset of slurs individually using the Properties panel

You can change the shoulder offset of individual slurs by using the Properties panel.

PROCEDURE

1. In Engrave mode, select the slurs whose shoulder offset you want to change.

2. Activate the following properties, individually or together, in the **Slurs** group of the Properties panel:

 - **Start handle offset**

 - **End handle offset**

3. Each property has **X** and **Y** value fields. 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.

4. The properties move slur handles in the following ways:

 - **Start handle offset X** moves the left control points of slurs horizontally: increasing the value moves them to the right, decreasing the value moves them to the left.

 - **Start handle offset Y** moves the left control points of slurs vertically: increasing the value moves them upwards, decreasing the value moves them downwards.

 - **End handle offset X** moves the right control points of slurs horizontally: increasing the value moves them to the right, decreasing the value moves them to the left.

 - **End handle offset Y** moves the right control points of slurs vertically: increasing the value moves them upwards, decreasing the value moves them downwards.

RESULT

The shoulder offset of the selected slurs is changed.

Slur curvature direction

You can change the curvature direction of individual slurs, independently of your project-wide settings for slur curvature.

The following options for slur curvature direction are available when you activate the **Direction** property 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 (mirrored S-shape)

Forces slurs to comprise of two segments: the first curves upwards, the second curves downwards in 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 (S-shape)

Forces slurs to comprise of two segments: the first curves downwards, the second curves upwards in 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

The precise shapes of slurs, and each slur segment, can be further adjusted in Engrave mode using the square handles on each slur.

Changing the curvature direction of slurs individually

You can make individual changes to the curvature direction of slurs.

PROCEDURE

1.	Select the slurs whose curvature direction you want to change. You can do this in Write mode and Engrave mode.

2. Activate the **Direction** property in the **Slurs** group of the Properties panel.

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.

NOTE

You can adjust the precise shapes of slurs, and each slur segment, in Engrave mode using the handles on each slur.

RELATED LINKS

Slur styles

Activating the **Style** property in the **Slurs** group of the Properties panel allows you to change the style of slurs individually.

Choose from the following options:

Solid

The slur appears as a tapered solid line. It is thinner at the ends and thicker in the middle.

This is the default style for slurs.

Dashed

The slur appears as a tapered dashed line.

Dotted

The slur appears as a dotted line. The dots are the same size and the same distance apart over the whole length of the slur.

Half-dashed start

The first half of the slur appears as a dashed line, the second half as a solid line. It is used to denote that a slur was written incompletely in the source in critical editions.

Half-dashed end

The first half of the slur appears as a solid line, the second half as a dashed line. It is used to denote that a slur was written incompletely in the source in critical editions.

Editorial

Slurs appear as a solid black line, but with a smaller vertical line intersecting the line exactly halfway along its length. It is used to show that slurs have been added by the editor and were not present in the original source.

NOTE

The precise parameters of each of these options can be set project-wide in **Engrave** > **Engraving Options**. For example, you can change the height and width of the notch in **Editorial** slurs, the sizes of dots and dashes, and the sizes of the gaps between dots and dashes.

Changing the style of slurs individually

You can change the style of slurs individually 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. Activate the **Style** property in the **Slurs** group of the Properties panel.

3. Select one of the following options from the menu:

   - **Solid**
   - **Dashed**
   - **Dotted**
   - **Half-dashed start**
   - **Half-dashed end**
   - **Editorial**

Changing individual slurs to flat slurs (Curvature style)

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 for slur style.

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

You can change the project-wide slur style on the **Slurs** page in **Engrave** > **Engraving Options**

PROCEDURE

1. Select the slurs whose curvature style you want to change. You can do this in Write mode and Engrave mode.

2. Activate the **Curvature style** property in the **Slurs** group of the Properties panel.

3. Choose one of the following options:

   - **Curved**
   - **Flat**

NOTE

It is best to avoid changing curvature style for only one or two slurs in a project. A better effect may be to modify them rather than changing curvature style, for example, making an individual slur thicker or thinner, adjusting the shoulder offset of slurs, or adjusting its height using the slur height handle in Engrave mode.

RESULT

The style of the selected slurs is changed.

NOTE

You can change the style of all slurs project-wide in the **Design** section of the **Slurs** page in **Engrave** > **Engraving Options**

RELATED LINKS

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.

In the **Avoiding Collisions** section of the **Slurs** page in **Engrave** > **Engraving Options** you can choose options for how slurs are adjusted to collisions.

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**, there is an option to activate or deactivate collision avoidance for cross-staff slurs.

Due to the increased complexity in positioning slurs across staves, this setting tries to avoid collisions but further manual adjustment in Engrave mode may be required.

NOTE

This setting does not apply to S-shaped slurs between staves; these slurs do not perform 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 amount of the stems of flat signs slurs can bisect, on the **Slurs** page in **Engraving Options**.

RELATED LINKS
Deactivating slur collision avoidance for individual slurs on page 587
Project-wide Engraving Options for slurs on page 575

Deactivating slur collision avoidance for individual slurs

You can stop individual slurs automatically adjusting to avoid collisions, independently of your project-wide setting for slur collision avoidance.

PROCEDURE

1. In Engrave mode, select the slurs for which you want to deactivate collision avoidance.

2. Activate the **Disable auto curve adjustment** property in the **Slurs** group of the Properties panel.

RESULT

Slur collision avoidance is deactivated for the selected slurs when the **Disable auto curve adjustment** property is activated.

RELATED LINKS
Slur collision avoidance on page 586

Slurs over system and frame breaks

Slurs automatically cross system breaks and frame breaks.

A system or frame break divides slurs into two halves. The end of the first half of the slur, and the start of the second half of the slur, are both positioned one space vertically outside the staff by default.

If multiple slurs cross the same system break or frame break, such as if a phrase split by a break contains nested slurs, the ends of the slurs are stacked automatically and spaced a minimum of half a space apart vertically.

The end of a system showing the first half of a slur; the end on the right shows a continuation to the next system.

The start of the next system showing the second half of a slur; the end on the left shows a continuation from the previous system.

In Engrave mode, each half of a slur can be moved separately using the square handles on each segment. This allows you to adjust the start and end height of each half of a slur independently on each system.

Slurs in playback

Slurs trigger the legato playing technique in playback. By default, this increases the length of the MIDI notes without affecting the notation of the music.

Slurred notes sound for 102 % 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 so the legato technique is no longer required.

These values can be edited on the **Timing** page in **Play** > **Playback Options**.

The below example shows how MIDI note length, the lighter blue rectangle, is increased when slurs are used. 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, 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 a piano staff
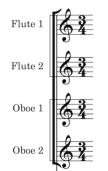
The same phrase in the piano roll in Play mode

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Staff labels

Staff labels are used to identify staves in music containing multiple players. Usually, staff labels indicate the instrument or instruments currently playing the music in the staff or staves to which they apply.

Staff labels are positioned to the left of systems, before the initial barline of each system.

It is usual to show instrument names in full in the staff labels for the first systems in each flow, and abbreviated instruments names in the staff labels of subsequent systems. Using abbreviated instrument names in staff labels allows you to save horizontal space and 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 single and plurals names for each instrument, and single and plural abbreviations for each instrument.

You do not need to number instruments manually, as Dorico automatically numbers instruments when there are multiple players of the same type playing instruments of the same type.

For players holding multiple instruments, the staff label shows the instrument they are currently playing automatically.

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 includes 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.

Instrument names in staff labels

Staff labels use the instrument names set for each instrument. Staff labels can show long instrument names and short instrument names, depending on your settings on the **Staves and Systems** page in **Layout Options**.

- **Full** staff labels use long instrument names.

- **Abbreviated** staff labels use short instrument names.

You can change the instrument names for each instrument in the **Edit Instrument Names** dialog in Setup mode.

NOTE

Changing instrument names does not change the layout 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 move the piccolo parts around so that the second flute is Flute 2 & Piccolo 2.

Changing the length of names shown in staff labels project-wide

By default in full score layouts, full staff labels are shown on the first system of each flow, using long instrument names, and show abbreviated staff labels, using short instrument names, on subsequent systems. By default, staff labels in part layouts are not shown on any systems.

You can change the length of instrument names depending on their context on the **Staves and Systems** page 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.
2. Select **Staves and Systems** from the **Category** menu.
3. Select the layouts whose staff label name lengths you want to change in the **Layouts** list on the left of the dialog in the following ways:
   - Click **Select All**.
   - Click **Select All Full Score Layouts**.
   - Click **Select All Part Layouts**.
   - Click **Select All Custom Score Layouts**.
   - **Ctrl**-click individual flows.
   - **Shift**-click adjacent flows.

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

You can change settings for other layouts before closing the dialog.

NOTE

You can change long instrument names and short instrument names in the **Edit Instrument Names** dialog.

RELATED LINKS

Changing the length of names shown in staff labels at specific positions

You can change the length of names in staff labels at specific points, independently of your project-wide settings on the **Staves and Systems** page in **Layout Options**.

The project-wide 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 can change the staff labels at the start of each subsequent flow individually.

Similarly, it is often not necessary to show any staff labels in choral music, if the parts are clear from the context. However, if a few systems in a project contain more complicated parts, solo lines, or *divisi* lines, you may want to show staff labels on those systems only.

PROCEDURE

1. In Engrave mode, select a note or rest at the position where you want to change the staff labels. For example, to change the staff labels at the start of a new flow, select the first note or rest in the flow.

2. Insert a system break in one of the following ways:

   - Press **Shift**-**S**

   - Choose **Engrave** > **Format Systems** > **Insert System Break**

   - Click **Insert System Break** in the **Format Systems** section of the Formatting panel:

3. Select the system break signpost.

4. Activate the **Staff labels** property in the **Format** group of the Properties panel.

5. 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 position of the system break are changed, according to your selection.

NOTE

The horizontal spacing is automatically adjusted so the system fills the width of the music frame.

EXAMPLE

Full staff labels shown   No staff labels shown

Showing and hiding instrument transpositions in staff labels

Transposing instruments, such as Horn in F and Clarinet in B♭, are commonly shown with their transposition (or "pitch") as part of their instrument name or layout name.

You can choose to show or hide instrument transpositions (or "instrument pitches") in staff labels project-wide for each layout in your project. For example, you could hide instrument transpositions in staff labels in the full score but show them in the part.

NOTE

Depending on the options set for **Show transposition** in the **Edit Instrument Names** dialog for each transposing instrument, they may show transpositions in staff labels even if you have chosen to hide transpositions in staff labels in their layout.

Dorico sets common transposing instruments to follow the layout options set, including instruments like Clarinet in ♭ and Trumpet in ♭.

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.

You can change the option for **Show transposition** to **Follow Layout Options** in the **Edit Instrument Names** dialog for each instrument.

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.
2. Select **Staves and Systems** from the **Category** menu.
3. Select the layouts in which you want to show or hide instrument transpositions in staff labels in the **Layouts** list on the left of the dialog in the following ways:
   - Click **Select All**.
   - Click **Select All Full Score Layouts**.
   - Click **Select All Part Layouts**.
   - Click **Select All Custom Score Layouts**.
   - **Ctrl**-click individual flows.
   - **Shift**-click adjacent flows.

   By default, the layout currently open in the music area is selected when you open the dialog.
4. Check or uncheck the box beside **Show instrument pitch in staff labels**.
   - Checking the box shows instrument transpositions in staff labels
   - Unchecking the box hides instrument transpositions in staff labels
5. Click **Apply**, then **Close**.

RESULT

Instrument transpositions are shown or hidden in staff labels project-wide in the selected layouts.
You can change settings for other layouts before closing the dialog.

Showing instrument transpositions before or after instrument names in full staff labels

You can change the position of instrument transpositions in staff labels. They can be shown before instrument names and after instrument names in each layout independently of other layouts.

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.
2. Select **Staves and Systems** from the **Category** menu.
3. Select the layouts whose instrument transposition position you want to change in the **Layouts** list on the left of the dialog in the following ways:
   - Click **Select All**.
   - Click **Select All Full Score Layouts**.
   - Click **Select All Part Layouts**.
   - Click **Select All Custom Score Layouts**.
   - **Ctrl**-click individual flows.
   - **Shift**-click adjacent flows.

   By default, the layout currently open in the music area is selected when you open the dialog.
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 is changed project-wide in the selected layouts.

TIP

You can change settings for other layouts before closing the dialog.

Staff labels for percussion kits

The staff labels shown for percussion kit staves depends on how kits are presented in your project. Kits can be presented as 5-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
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	Floor tom, Tom 1, Tom 2, Crash Cymbal, Ride Cymbal, Hi-hat, Snare Drum, Kick Drum
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	Floor tom, Tom 1, Tom 2, Crash Cymbal, Ride Cymbal, Hi-hat, Snare Drum, Kick Drum

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: open the **Edit Instrument Names** dialog from inside the **Edit Percussion Kit** dialog in Setup mode to change the names of individual instruments

● 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 **Engrave** > **Paragraph Styles** dialog.

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 and eighth notes 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.

Notes with stems, ranging from a half note (minim) on the left to a 128th note (semihemidemisemiquaver) on the right

The stems of notes and chords may be directed upwards or 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.

Notes on the middle line of the staff can be notated with their stems pointing up or pointing down. In Dorico, the stems of notes on the middle lines of staves point down by default, but their stem direction is automatically changed according to the notes around them.

Notes on the middle line stem up   Notes on the middle line stem down

You can change the default stem direction for notes on the middle lines of staves, and turn off automatic adjustments of stem directions for notes on the middle lines of staves, on the **Notes** page in **Engraving Options**.

RELATED LINKS

Project-wide Engraving Options for stems

Options for the appearance of stems project-wide can be found on the **Notes** page in **Engraving Options**.

The options on this page allow you to change the design, collision avoidance, length, and width of stems. You can also set when stems are stem-up or stem-down, and when stems are shortened in various contexts.

Many options are accompanied by musical examples to demonstrate how each option affects the appearance of your music.

You can open **Engraving Options** in 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.

RELATED LINKS

Changing the design of stem flags project-wide

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Engraving Options**.
2. Click **Notes** in the page list.
3. Choose one of the following options for **Flag design** in the **Stems** section:
   - **Default flags**
   - **Straight flags**
4. Click **Apply**, then **Close**.

RESULT
The design of all flags project-wide is changed.

EXAMPLE

Default flags

Straight flags

Changing the lengths of stems project-wide

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Engraving Options**.
2. Click **Notes** in the page list.
3. Change the values for any or all of the following options in the **Stems** section as appropriate for your project:
   - **Default stem length**
   - **Shortened stem length for quarter (crotchet) and longer**
   - **Shortened stem length for eighth (quaver)**
   - **Shortened stem length for 16th (semiquaver) and shorter**
   - **Minimum stem length for note with flag**
   - **Minimum stemlet length for beamed rest**
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.

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

Changing the thickness of stems project-wide

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Engraving Options**.
2. Click **Notes** in the page list.
3. Change the value for **Stem thickness** in the **Stems** section in any of the following ways:
   - • Enter values into the value fields.
   - • Click the arrows beside the value fields.
4. Click **Apply**, then **Close**.

Changing the stem direction of notes on the middle lines of staves by context

The stems of notes on the middle lines of staves can point upwards or downwards. You can choose whether the stem direction is determined by the stem directions of the notes around notes on the middle lines of staves, or always use the default direction.

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Engraving Options**.
2. Click **Notes** in the page list.
3. Choose one of the following options for **Stem direction for notes on the middle line of the staff** under the **Stem Directions** heading in the **Stems** section:
   - • **Determine by context**
   - • **Use default direction**
4. Click **Apply**, then **Close**.

RELATED LINKS
Changing the default stem direction of notes on the middle lines of staves on page 599

Changing the default stem direction of notes on the middle lines of staves

PROCEDURE

1. In Engrave mode, choose **Engrave** > **Engraving Options**.
2. Click **Notes** in the page list.
3. Choose one of the following options for **Default stem direction for notes on the middle line of the staff** under the **Stem Directions** heading in the **Stems** section:
   - • **Up**
   - • **Down**

4.   Click **Apply**, then **Close**.

Stem lengths

The lengths of stems are created by default in Dorico, according to accepted standards for the appearance of stems of notes at different positions on staves.

If you find that you need to adjust the lengths of stems, you can lengthen and shorten them in Engrave mode.

You can later reset any changes you make to the lengths of stems and revert them to your project-wide settings for stem length.

RELATED LINKS
Changing the lengths of stems project-wide on page 598

Lengthening and shortening stems individually

You can lengthen and shorten the stems of individual notes.

PROCEDURE

1.   In Engrave mode, select the stems you want to lengthen or shorten.

2.   Lengthen and 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 move lengthen and 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 ends of the stems upwards or downwards to the length you want.

  NOTE

  If multiple stems are selected, clicking and dragging one square handle in the selection lengthens and shortens all selected stems by the same amount.

RESULT

The selected stems are lengthened or shortened according to their stem direction. For example, lengthening a down-stem note by pressing **Alt-Up Arrow** makes the end of the stem move downwards, away from the notehead.

RELATED LINKS
Lengthening and shortening stems individually using the Properties panel on page 601

Lengthening and shortening stems individually using the Properties panel

You can lengthen and shorten stems by specific values using the Properties panel in Engrave mode.

PROCEDURE

1.   In Engrave mode, select the noteheads whose stems you want to lengthen or shorten.

2.   Activate the **Stem length adjustment** property in the **Notes and Rests** 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

Increase the value makes stems longer. Decreasing the value makes stems shorter.

Resetting the lengths of individual stems

You can reset the lengths of stems to revert them back to your project-wide settings for stem length.

PROCEDURE

1.   In Engrave mode, select the stems whose length you want to reset.

2.   Deactivate the **Stem length adjustment** property in the **Notes and Rests** group of the Properties panel.

Stem directions in multi-voice contexts

When there are multiple voices on a single staff, the direction of stems is determined by the stem direction of the voice. For example, the stems of all notes in Up-stem voice 1 point upwards and the stems of all notes in Down-stem voice 1 point downwards.

This stem direction is followed even if the stems of notes would normally point in the other direction, based on their position in the staff.

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 their normal direction for their pitch.

RELATED LINKS
Automatic changes to stem directions when only one voice contains notes on page 713
General placement conventions for notes in multiple voices on page 706

Changing the stem direction of notes individually

You can 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 any of the following ways:

      •   Choose **Edit** > **Stem** > **Force Stem Up**

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- Right-click and choose **Stem** > **Force Stem Up** from the context menu
- Choose **Edit** > **Stem** > **Force Stem Down**
- Right-click and choose **Stem** > **Force Stem Down** from the context menu

RESULT

The stem direction of the selected notes is changed.

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

Removing stem direction changes

You can remove changes to the directions of stems to revert them to their default stem directions.

PROCEDURE

1. Select the notes whose stem direction changes you want to remove.

2. Remove stem direction changes in any of the following ways:

- Choose **Edit** > **Stem** > **Remove Forced Stem**
- Right-click and choose **Stem** > **Force Stem Up** from the context menu

RESULT

All stem direction changes for the selected notes are removed. The stems of the selected notes revert to their default directions.

Hiding stems

Stemless noteheads are not yet supported in Dorico, however they are planned for future versions. You can make stems short so they cannot be seen in the staff.

PROCEDURE

1. In Engrave mode, select one of the following, depending on how you want to hide stems:

- With the keyboard or mouse: select the stems you want to hide
- Using the Properties panel: select the noteheads whose stems you want to hide

2. Hide the stems in the following ways:

- Press **Alt-Down Arrow** until the stems cannot be seen

> **NOTE**
>
> To shorten the stem by larger increments, press **Ctrl/Cmd** as well.

- Click and drag the stems towards the notehead until they cannot be seen
- Activate the `Stem length adjustment` property in the Notes and Rests group of the Properties panel, 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 may become partially visible. This is because stem length is automatically adjusted depending on the position of notes in the staff. You can repeat these steps at any time to adjust the stem length again.

RELATED LINKS

Split stems for altered unisons

Split stems, also know as a "cherry stalks" or a "trees", can be used in chords containing altered unisons. They show the main body of the chord as normal, but with a stem branch coming off the main stem that connects noteheads in altered unisons to the chord.

Split stem chord

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** by in 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.

RELATED LINKS

Tempo marks

Tempo marks indicate how fast music should be played, often with a combination of text instructions and metronome marks.

Text instructions are traditionally expressed in Italian, such as *largo* or *allegretto*, but these days other languages are widely accepted. The text instruction can express simply how fast the music should be played, but can also suggest its character too. For example, *grave* means slow but also solemn and sad, and *vivo* means fast but also lively and possibly bouncy and sprightly.

Metronome marks show the speed by indicating how many beats should be played per minute, or "bpm". The more beats per minute, the faster the music. 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 can be useful if the metronome mark is intended to be a guide rather than an expectation.

A tempo mark can show just text, or just a metronome mark, or a combination of the two.

Tempo marks use a bold font with a large point size, so they are conspicuous on the page. They do not usually use an italic font.

Types of tempo marks

There are four types of tempo mark in Dorico, although they can all be input, moved, and deleted in the same ways.

The four types are:

Absolute Tempo Change

These indicate a defined change in tempo, and are often shown with a metronome mark.

Gradual Tempo Change

These indicate a change in tempo over a defined period of time, such as *rallentando* (slowing down) or *accelerando* (speeding up).

Relative Tempo Change

These indicate a change in tempo that is relative to the previous tempo, such as *mosso* (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 set a relative metronome mark change as a percentage of the previous metronome mark.

Reset Tempo

These return 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

General placement conventions for tempo marks

As tempo marks usually apply to all players, they automatically apply to all staves. They always appear above the top staff in the score, but can also be shown at multiple positions in the score.

They should be positioned above notation, such as slurs, ties, and octave lines, and are often aligned with rehearsal marks to ensure they can be read quickly and easily.

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, the tempo mark should align with the accidental.

If a repeat mark occurs mid-system and is not treated as a barline, tempo marks should align with the repeat mark.

When a tempo mark includes both text and a metronome mark, the text should appear first, followed by the metronome mark. When horizontal space is tight, the metronome mark may be positioned below the tempo mark text.

Inputting tempo marks with the keyboard

You can input tempo marks with the keyboard by using the tempo popover in Write mode.

You can open the tempo popover by pressing **Shift**-**T** (T for "tempo"), or by choosing **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.

The tempo popover with an example entry for a tempo

The tempo button in the Notations toolbox

The tempo popover

Here are some examples of what to enter into the tempo popover, and the tempo marks that are input as a result.

You can open the tempo popover in Write mode by pressing **Shift**-**T**), or by choosing **Write** > **Create Tempo**.

Enter:	For tempo mark:
`Adagio`	*Adagio*
`Presto q = 176` or `Presto q=176`	*Presto* ♩ = 176
`Largo (q = 52)` or `Largo (q=52)`	*Largo* (♩ = 52)
`q = 96=112` or `q=96-112` or `6 = 96-112` or `6=96-112`	♩ = 96-112
`h = 60` or `h=60` or `7 = 60` or `7=60`	♩ = 60
`e = 120` or `e=120` or `5 = 120` or `5=120`	♪ = 120

Enter:	For tempo mark:
`e. = 90` or `e.=90` or `5. = 90` or `5.=90`	♪ = 90
`rit.` or `rit`	*rit.*
`accel.` or `accel`	*accel.*
`più`	*più*
`meno`	*meno*
`Faster, with energy`	Faster, with energy

This list is not comprehensive: it is intended to illustrate how you can structure your entry to input different types of tempo marks.

NOTE

The tempo popover is case-sensitive. If you want your tempo mark to start with a capital letter, you must type a capital letter into the popover.

RELATED LINKS

Inputting tempo marks during step input with the keyboard

To input tempo marks during step input with the keyboard:

PROCEDURE

1. In Write mode, start note input.
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, such as `q=72` or `Allegretto`.
4. Press **Return** to close the popover.

RESULT

The tempo mark specified is input at the caret position.

Adding tempo marks to existing music with the keyboard

To add tempo marks to existing music with the keyboard:

PROCEDURE

1. In Write mode, select a barline, notehead, or rest at the rhythmic position where you want to add a tempo mark.
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, such as `q=72` or `Allegretto`.

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

RESULT

The tempo mark specified is added at the rhythmic position of the selected barline, notehead, or rest.

Inputting tempo marks with the mouse

Tempo marks can be input with the mouse 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:

The panel can be hidden and shown using its disclosure arrow, or by pressing **Ctrl/Cmd-9**.

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 **Dorico** > **Preferences** (key command **Ctrl/Cmd-,**).

The Tempo panel

The different types of tempo marks can be found in the five sections of the **Tempo** panel in Write mode.

Used in This Flow

Any tempo marks already used in the flow are shown in this section, including custom tempo marks added using the tempo popover.

Absolute Tempo Change

This section has a range of tempos with both an Italian tempo indication, and a metronome mark. You can choose later whether the metronome mark is shown for individual tempo marks.

You can narrow the range shown in the list by adjusting the range of the sliding bar at the top.

Gradual Tempo Change

These indicate a change in tempo over a defined period of time, such as *rallentando* or *accelerando*.

Gradual tempo changes can have modifiers added to them. Modifiers are shown are the top of the section in boxes.

Relative Tempo Change

These 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.

Relative tempo changes can have modifiers added to them. Modifiers are shown are 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

These return the tempo to the previous tempo, such as *A tempo*, or a previously defined tempo, such as *Tempo primo*.

RELATED LINKS

Inputting tempo marks during step input with the mouse

To input tempo marks during step input with the mouse:

PROCEDURE

1. In Write mode, start note input.
2. Click on a tempo mark from the available options in the **Tempo** panel.

3. If you want, you can select a modifier from the available options.

> NOTE
>
> Modifiers can only be added to a **Gradual Tempo Change** or a **Relative Tempo Change**.

RESULT

The tempo mark specified is input at the caret position.

Adding tempo marks to existing music with the mouse

To add tempo marks to existing music with the mouse:

PROCEDURE

1. In Write mode, select a barline, notehead, or rest at the rhythmic position where you want to add a tempo mark.

2. Click on a tempo mark from the available options in the **Tempo** panel.

3. If you want, you can select a modifier from the available options.

> NOTE
>
> Modifiers can only be added to a **Gradual Tempo Change** or a **Relative Tempo Change**.

RESULT

The tempo mark specified is added at the rhythmic position of the selected barline, notehead, or rest.

Positions of tempo marks

You can change the positions of tempo marks by moving individual tempo marks to different rhythmic positions in Write mode, moving them to different graphical positions in Engrave mode, and by changing the default positions of all tempo marks project-wide.

You can move tempo marks to different rhythmic positions in Write mode. They are positioned by default according to your preferences in **Engraving Options**.

You can move tempo marks graphically in Engrave mode, however this does not change the rhythmic positions to which they are attached.

Project-wide settings for the default position and appearance of tempo marks can be set on the **Tempo** page in **Engrave** > **Engraving Options**.

RELATED LINKS
Project-wide Engraving Options for tempo marks on page 611

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.

2. Move tempo marks according to the rhythmic grid currently set 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 or to the left to the position you want.

  NOTE

  Only one tempo mark can be moved at a time when using the mouse.

RESULT

The selected tempo marks are moved according to the rhythmic grid currently set.

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.

If you moved tempo marks using the keyboard, you can undo the move to restore any tempo marks deleted in the process.

However, if you moved tempo marks using the mouse, undoing the move does not restore any tempo marks deleted in the process.

Moving tempo marks back to their previous positions later does not restore any tempo marks deleted when they were moved previously. The deleted tempo marks must be re-input if necessary.

Moving tempo marks graphically

You can move tempo marks graphically without changing the rhythmic positions to which they apply.

PROCEDURE

1. In Engrave mode, select the tempo marks you want to move.

2. Move the tempo 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.

     NOTE

     If you want to move tempo marks 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 tempo marks in any direction the positions you want.

RELATED LINKS

Moving tempo marks graphically using the Properties panel

You can move tempo marks graphically using the Properties panel in Engrave mode.

PROCEDURE

1. In Engrave mode, select the tempo marks you want to move.

2. Activate the **Start offset** property in the **Tempo** group of the Properties panel.

3. The **Start offset** property has **X** and **Y** value fields. 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.

4. The property moves rehearsal marks in the following ways:

- **Start offset X** moves tempo marks horizontally: increasing the value moves them to the right, decreasing the value moves them to the left.
- **Start offset Y** moves tempo marks vertically: increasing the value moves them upwards, decreasing the value moves them downwards.

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**.

RESULT

The selected tempo marks are deleted.

Project-wide Engraving Options for tempo marks

Options for the appearance of tempo marks project-wide can be found on the **Tempo** page in **Engraving Options**.

The options on this 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 relative to barlines of continuation lines for gradual tempo marks.

Many options are accompanied by musical examples to demonstrate how each option affects the appearance of your music.

You can open **Engraving Options** in 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.

Individual changes to the appearance of tempo marks

There are a number of options to change how tempo marks appear individually that you can activate in the **Tempo** group of the Properties panel at the bottom of the window.

You can open the Properties panel in the following ways:

- Press **Ctrl/Cmd-8**.
- Click its disclosure arrow.

You can activate some of these properties in both Write mode and Engrave mode. However, there are more options available in Engrave mode.

If you change your mind at any time, deactivating any of these properties returns tempo marks to the project-wide settings for that aspect of the tempo, which you can set on the **Time Signatures** page in **Engrave** > **Engraving Options**.

Changing which tempo mark components are shown, and how they appear

Tempo marks can include different components in different combinations, depending on your preference or the requirements for different projects.

You can activate properties that correspond to the different components in the **Tempo** group of the Properties panel. These tempo mark properties can be activated in any combination:

- **Text shown**: text is shown when activated, text is hidden when deactivated.
- **Metronome mark shown**: metronome marks are shown when activated, metronome marks are hidden when deactivated.
- **Parenthesized**: metronome marks are shown in parentheses when activated, metronome marks are not shown in parentheses when deactivated. Approximate metronome marks can also be shown in parentheses by activating this property.
- **Is approximate**: metronome marks are shown as approximate when activated, metronome marks are shown as absolute when deactivated.

  NOTE

  Activating the **Is approximate** property reveals two further properties that apply specifically to approximate tempo marks:

  - **Approximate appearance**: choose how the approximate metronome marks appear from the available options, for example, **c.** or **circa**.
  - **Show equals sign**: an equals sign is shown when the box beside the activation switch is checked. An equals sign is not shown when the box beside the activation switch is not checked.

To change the components included in individual tempo marks:

PROCEDURE

1. Select the tempo marks whose components you want to change. You can do this in Write mode and Engrave mode.
2. Activate any of the following properties in the **Tempo** group of the Properties panel:
   - **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 change to include the corresponding components.

> **NOTE**
>
> If none of these properties is activated, no tempo mark is shown in the music. Instead, a signpost is shown at the position of the tempo mark.

Changing the tempo text shown

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. Enter the tempo text you want into the value field for the **Text** property in the **Tempo** group of the Properties panel.

3. Save your changes in any of the following ways:

- Press **Return**.

- Click anywhere outside the value field.

RESULT

The tempo text for the selected tempo marks is changed.

Changing the abbreviation text for tempo marks

To change the tempo text abbreviation of tempo marks:

PROCEDURE

1. Select the tempo marks whose tempo text abbreviation you want to change. You can do this in Write mode and Engrave mode.

2. Activate the **Abbreviation** property in the **Tempo** group of the Properties panel.

3. Enter the abbreviated tempo text you want into the value field.

RESULT

The abbreviated text for the selected tempo marks is changed.

You can switch between showing abbreviated tempo text and full tempo text.

RELATED LINKS
Switching between abbreviated tempo text and full tempo text on page 613

Switching between abbreviated tempo text and full tempo text

You can switch between showing abbreviated text and full tempo text for individual tempo marks.

PROCEDURE

1. Select the tempo marks whose shown text you want to change.

2. Activate the **Abbreviate** property in the **Tempo** group of the Properties panel.

3. Check the box beside the activation switch.

RESULT

When the box beside the activation switch is checked, abbreviated tempo text is shown.

When the box beside the activation switch is not checked, or the property is deactivated, full tempo text is shown.

Changing the metronome mark value

The metronome mark value tells you how fast the music should be played, by giving a speed indication in beats per minute, or "bpm". For example, a bpm of 60 means a beat happens every second.

To change the metronome mark value:

PROCEDURE

1. Select the tempo marks whose metronome mark values you want to change. You can do this in Write mode and Engrave mode.

2. Change the value for the **Tempo (bpm)** property in the **Tempo** group of the Properties panel 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 anywhere outside the value field.

RESULT

The metronome mark value is changed for the selected tempo marks, even if no metronome mark component is shown for those tempo marks.

RELATED LINKS

Changing which tempo mark components are shown, and how they appear on page 612

Showing the metronome mark value as a range

You can show the metronome mark value as a range. This can be helpful to show that multiple speeds are acceptable.

PROCEDURE

1. Select the tempo mark or tempo marks whose metronome mark values you want to show as a range. You can do this in Write mode and Engrave mode.

2. Activate the **Tempo range (bpm)** property in the **Tempo** 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.

   NOTE

   The minimum metronome mark value of the range is set by the value set for the **Tempo (bpm)** property.

RESULT

The maximum tempo, expressed as beats per minute, for the selected tempo marks is changed.

Time signatures

Time signatures indicate the meter, and apply to all bars from where they first appear until a subsequent change of time signature is found. 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 terms used in mathematics to describe 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.

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. 4/2 would be four half notes in a bar, and 4/8 would be four 8th notes in a bar. 3/4 and 6/8 both contain six 8th 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.

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 divided into beats: for example, a 7/8 bar could appear in the following two ways:

Numerator shown as a single number for the whole bar.

Numerator showing the beat groups in the bar.

The denominator can appear as a number, like 4 or 8, as a notehead showing the equivalent duration, or not at all.

Denominator shown as a number.

Denominator shown as a notehead (beat length).

No denominator shown.

If shown as a notehead, it can either show the length of each beat in the bar, or the note duration for the bar (see the below examples). When showing the beat length, the numerator may be changed; in the below 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 in a 6/8 bar.

Denominator showing the note duration in a 6/8 bar.

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.

RELATED LINKS

General placement and appearance conventions for time signatures

Over time, the placement and appearance of time signatures has developed conventions to ensure they are always understood. Dorico follows these conventions automatically.

Appearance conventions

A time signature should fill the height of the staff. There is a risk it may not be seen if it is any smaller than this. The size of time signatures on staves with fewer than five lines should be the same as that of a time signature on a five 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, however this is planned for future versions.

Placement conventions

A time signature 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 a time signature change occurs 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.

A time signature applies until the end of a movement or the end of a piece, or until a time signature change if one occurs before the end of a movement or the end of a piece.

Types of time signature
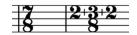
There are different types of time signature, which can be used to indicate various and complex meters.

Simple and compound

A simple time signature is one where each beat is divided by two into equal groups of notes, such as 4/4 or 2/8. A compound time signature is one where each beat is divided by three into equal groups of dotted notes, such as 6/8 or 9/4.

Irregular and additive

An irregular time signature is one that cannot be divided into equal groups of notes, for example 5/4 or 7/8. Because the numerator is odd, these time signatures must be divided into unequal beat groups. An additive time signature is one that shows how the beat groups should be organized, 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 order they are shown in the alternating time signature. For example, for a phrase with twelve 8th 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, for example 3/4–2/4. There does not have to be a fixed pattern of how the time signatures are used, unlike alternating time signatures. They can have different types of separator in Dorico, which can be set project-wide and can also be changed individually.

Aggregate

An aggregate time signature is one that shows two or more time meters within the same bar, for example 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 in either of these two ways, 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
Changes to the appearance of time signatures on page 629
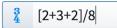
Inputting time signatures with the keyboard

You can input time signatures can be input with the keyboard by using the time signatures popover in Write mode.

You can open the time signatures popover by pressing **Shift-M** (M for "meter"), or by choosing **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.

The time signatures popover with an example entry for a time signature

The time signatures button in the Notations toolbox

The 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 by pressing **Shift-M** (M for "meter"), or by choosing **Write** > **Create Time Signature**.

For example, enter:	For time signature:
2/4 or 6/8 or 3/4 or 5/4 and so on	Simple time signatures: 2/4, 6/8, 3/4, 5/4 and so on
4/4,1.5 or 6/8,2 and so on	Time signatures with a pick-up: such as a 4/4 bar with a dotted quarter note pick-up, or a 6/8 bar with pick-up of two eighth notes.
6/8 + 3/4	Alternating time signatures, such as 6/8+3/4. The spaces either side of the plus sign are

For example, enter:	For time signature:
	important to include when typing into the popover.
c	Common time, the equivalent of 4/4
cutc or ¢	Cut common time, the equivalent of 2/2
X or x	Open meter
3+2+2/8 or 3+2/4 and so on	Additive time signature with explicit beat grouping.
[2+3+2]/8	Specify beat grouping, but don't show it: for example, typing this example into the popover shows a time signature of 7/8, but beaming is grouped into 2+3+2 eighth notes.
2/4|6/8	Aggregate time signature: a dashed barline is shown in the bar to show the division between the different meters.
2/4 (6/8) or 2/4 / 6/8 or 2/4 = 6/8 or 2/4 – 6/8	Interchangeable time signature, with different styles: parenthesized, slash, equals sign, and dashed. The spaces between numbers and parentheses, and either side of slashes, equals signs, and dashes are important to include when typing into the popover.

This list is not comprehensive: it is intended to illustrate how you can structure your entry to input different time signatures.

Inputting time signatures during step input with the keyboard

To input time signatures during step input with the keyboard:

PROCEDURE

1. In Write mode, start note input.
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, such as 3/4 or [2+2+3]/8.
4. Press **Return** to close the popover.

RESULT

The time signature is added at the caret position, even if this is in the middle of an existing bar.

All subsequent bars follow the input time signature, until the next existing time signature or the end of the flow, whichever comes first.

Adding time signatures to existing music with the keyboard

To add time signatures to existing music with the keyboard:

PROCEDURE

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

    - The barline where you want a new time signature to start

    - A notehead or rest immediately to the right of the position where you want a new time signature to start

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, such as `3/4` or `[2+2+3]/8`.

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

RESULT

The time signature is 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.

All subsequent bars follow the input time signature, until the next existing time signature or the end of the flow, whichever comes first.

Inputting time signatures on single staves with the keyboard

By default, time signatures apply to the whole score. However, there are some situations that require some parts to have their own time signature, independently of the rest of the ensemble.

You can input time signatures on single staves with the keyboard, both during step input and by adding them later to existing music.

PROCEDURE

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

    - Start note input.

    - Select an existing barline where you want an independent time signature to start, or select a notehead or rest immediately to the right of the position where you want an independent time signature to start.

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, such as `3/4` or `[2+2+3]/8`.

4. Hold down the **Alt** key while pressing **Return** to close the popover.

RESULT

Holding down the **Alt** key inputs the time signature only on the selected staff.

It behaves just like any other time signature: all subsequent bars on the staff follow the input time signature, until the next existing time signature or the end of the flow, whichever comes first.

NOTE

Adding different time signatures to different staves can be used to create polymetric music: that is, music with multiple simultaneous meters. However, the relationship between the beat lengths

in each time signature is fixed across all staves in your project. For example, if you have a time signature of 4/4 and on a different stave, you have a time signature of 6/8, then one quarter note in the 4/4 time signature equals one quarter note in the 6/8 time signature.

RELATED LINKS
Inputting notes on page 94

Inputting pick-up bars with the keyboard

To input an upbeat or pick-up bar with the keyboard, you need to input a new time signature that includes the upbeat.

PROCEDURE

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

- The barline where you want a time signature with a pick-up to start.

- A notehead or rest immediately to the right of the position where you want a new time signature to start.

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, followed immediately by a comma, and then the number of beats you want in your pick-up. For example, entering `4/4,1` into the 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 8th note upbeat, whereas `6/8,2` would create an upbeat of two 8th notes.

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

RESULT

The time signature with pick-up is 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. Although commonly used at the start of a work, in Dorico, time signatures with pick-ups can be input anywhere in the score.

All subsequent bars follow the input time signature, until the next existing time signature or the end of the flow, whichever comes first.

Inputting time signatures with the mouse

Time signatures can be input with the mouse using the **Time Signatures** panel on the right of the window in Write mode, where there are common time signatures ready to use. There is also a **Create Time Signature** section to create uncommon time signatures.

You can open the **Time Signatures** panel by clicking **Time Signatures** in the Notations toolbox:

The panel can be hidden and shown using its disclosure arrow (key command **Ctrl/Cmd-9**).

The different sections in the **Time Signatures** panel are:

- **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**: you can design your own time signatures in this section, including alternating time signatures and aggregate time signatures.

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 **Dorico** > **Preferences** (key command **Ctrl/Cmd**-,).

Create Time Signature section

In the **Time Signatures** panel on the right of the window, there is a **Create Time Signature** section where you can create uncommon time signatures. This section can be shown and hidden by clicking on the section title, which has a disclosure arrow beside it.

There are four parts of the **Create Time Signature** section:

1 The menu where you can choose what type of time signature you can to input:

- **Regular**

- **Interchangeable**

- **Aggregate**

- **Alternating**

2 Spaces for up to four time signatures. For a **Regular** time signature, you can only specify one time signature, however for the other three types you can include up to four.

3 An option to include a pick-up bar, with three available options:

- 1/2 beat

- 1 beat

- 2 beats

4 The button at the bottom, which you click on to input the time signature. If nothing in the project is selected, the time signature is loaded onto the cursor.

The **Create Time Signature** section of the **Time Signatures** panel.

Inputting time signatures during step input with the mouse

To input time signatures during step input with the mouse:

PROCEDURE

1. In Write mode, start note input.

2. Click on a time signature from the available options in the **Time Signatures** panel, or use the **Create Time Signature** section to create your own.

RESULT

The time signature is added at the caret position, even if this is in the middle of an existing bar.

All subsequent bars follow the input time signature, until the next existing time signature or the end of the flow, whichever comes first.

RELATED LINKS
Inputting notes on page 94
Create Time Signature section on page 622

Adding time signatures to existing music with the mouse

To add time signatures to existing music with the mouse:

PROCEDURE

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

    - The barline where you want a new time signature to start.

    - A notehead or rest immediately to the right of the position where you want a new time signature to start.

2. Click on a time signature from the available options in the **Time Signatures** panel, or use the **Create Time Signature** section to create your own.

RESULT

The time signature is 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.

All subsequent bars follow the input time signature, until the next existing time signature or the end of the flow, whichever comes first.

NOTE

Follow these steps in the above order if your mouse input preference is set to **Create item at selection**.

If your preference is for **Load cursor with item**, follow the steps in the reverse order. However, even with this preference the time signature is added at the caret position during step input.

RELATED LINKS
Create Time Signature section on page 622

Inputting time signatures on single staves with the mouse

By default, time signatures apply to the whole score. However, there are some situations that require some parts to have their own time signature, independently of the rest of the ensemble.

You can input time signatures on single staves with the mouse, both during step input and by adding them later to existing music.

PROCEDURE

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

    - Start note input.

    - Select an existing barline where you want an independent time signature to start, or select a notehead or rest immediately to the right of the position where you want an independent time signature to start.

2. Hold down **Alt**.

3. Click on a time signature from the available options in the **Time Signatures** panel, or use the **Create Time Signature** section to create your own.

RESULT

Holding down **Alt** inputs the time signature only on the selected staff.

It behaves just like any other time signature: all subsequent bars on the staff follow the input time signature, until the next existing time signature or the end of the flow, whichever comes first.

NOTE

Follow these steps in the above order if your mouse input preference is set to **Create item at selection**.

If your preference is for **Load cursor with item**, follow the steps in the reverse order.

RELATED LINKS

Inputting pick-up bars with the mouse

To input an upbeat or pick-up bar with the mouse, you need to input a new time signature that includes your preferred upbeat.

NOTE

Follow these steps in the above order if your mouse input preference is set to **Create item at selection**.

If your preference is for **Load cursor with item**, start at Step 2, and complete Step 1 at the end. Clicking on the **Create Time Signature** button after creating your time signature loads it onto the mouse pointer. You can then click the time signature into your score where you want it.

PROCEDURE

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

- The barline where you want a time signature with a pick-up to start.
- A notehead or rest immediately to the right of the position where you want a new time signature to start.

2. Use the **Create Time Signature** section to create the time signature you want the pick-up to attach to.

3. Activate the **Pickup bar of** option at the bottom and choose 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 8th note upbeat in 6/8 cannot be produced by any of these three options. In such cases, the upbeat should be input with the keyboard using the time signatures popover.

4. You should see your time signature shown at the bottom of the section.

When you hover the mouse pointer over it, you can see this is a button.

5. Click the button to input your time signature with a pick-up.

RESULT

The time signature with pick-up is 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. Although commonly used at the start of a work, in Dorico, time signatures with pick-ups can be input anywhere in the score.

All subsequent bars follow the input time signature, until the next existing time signature or the end of the flow, whichever comes first.

RELATED LINKS

Changing time signatures

To change an existing time signature:

PROCEDURE

1. In Write mode, select the time signature you want to change.

2. Change the time signature in any of the following ways:

   - Press **Shift-M**.

     Enter the new time signature you want into the popover, and press **Enter**.

   - Click **Time Signature (Meter)** in the Notations toolbox to open the **Time Signatures** panel:

     .

     Click one of the time signatures in the **Common** section of the **Time Signatures** panel. Alternatively, create a time signature in the **Create Time Signature** section.

RELATED LINKS

Positions of time signatures

Time signatures in Dorico appear in the correct positions by default. However, you can change the positions of time signatures individually should you find it necessary to do so.

RELATED LINKS

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 the following ways:

- Press **Ctrl/Cmd-Shift-E** in any mode.

- Choose **Engrave** > **Engraving Options** in Engrave mode.

The following minimum values that relate to time signatures are:

- **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.

NOTE

Time signatures can only be moved along staves.

If you want to move an individual time signature across staves, you must first delete the individual time signature from its first position, then add a new individual time signature to the staff you wanted to move it to.

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 rhythmic grid currently set 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.

If you moved time signatures using the keyboard, you can undo the move to restore any time signatures deleted in the process.

However, if you moved time signatures using the mouse, undoing the move does not restore any time signatures deleted in the process.

Moving time signatures back to their previous positions later does not restore any time signatures deleted when they were moved previously. The deleted time signatures must be re-input if necessary.

RELATED LINKS

Moving time signatures graphically

Time signatures can be moved individually to new graphical positions in Engrave mode without affecting the positions of any other items.

PROCEDURE

1. In Engrave mode, activate **Note Spacing** in the panel on the left of the window.

2. Select the square handle above the time signature you want to move, as shown in the example below.

3. Once you have selected a square handle, a smaller circular handle appears beside the time signature.

4. Select the circular handle.

5. Nudge the time signature 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 time signatures by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

RESULT

The time signature is moved graphically to the left or to the right.

NOTE

You cannot change the position of **Note Spacing** handles with the mouse, they can only be moved using the keyboard.

RELATED LINKS
Changes to note spacing in Engrave mode on page 461

Moving time signatures graphically using the Properties panel

Time signatures can be moved graphically using the Properties panel in Engrave mode.

NOTE

Changing the value for the **Spacing Offset** property also affects the positions of whole bar rests in the bar immediately after the selected time signature.

PROCEDURE

1. In Engrave mode, select the time signatures you want to move.

627

2. Activate the **Spacing Offset** property in the **Time Signatures** 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.

4. The **Spacing Offset** property moves time signatures in the following ways:

   - Increasing the **Spacing Offset** value moves time signatures to the right.

   - Decreasing the **Spacing Offset** value moves time signatures to the left.

RELATED LINKS

Hiding time signatures

To hide a time signature without deleting it from the project:

PROCEDURE

1. Select the time signature you want to hide. This can be done in Write mode and Engrave mode.

2. Activate the **Hide time signature** property in the **Time Signatures** group of the Properties panel.

3. Check the box beside the activation switch.

RESULT

A signpost is shown at the position of the time signature so it is never lost, meaning you can always find it again. However, the signpost is not printed by default.

You can choose to print time signature signposts if you activate **View options** in the **Annotations** section of the print options panel on the right of the window in Print mode.

You can deactivate the **Hide time signature** property at any time and the original time signature reappears.

NOTE

Hidden time signatures do not take up any rhythmic space, so hiding or re-showing a time signature affects rhythmic spacing.

Hiding time signature signposts

To hide and show time signature signposts in any mode, choose **View** > **Signposts** > **Time Signatures**.

RESULT

Signposts for time signatures no longer appear in the project. You can show them again at any time by choosing **View** > **Signposts** > **Time Signatures** again. If a tick appears beside **Time Signatures** in this menu, then time signature signposts are shown in the project.

Deleting time signatures

To delete a time signature completely from the score:

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**.

RESULT

The time signature is deleted from the score. Bars after its previous position 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.

Changes to the appearance of time signatures

You can change the appearance of all time signatures project-wide on the **Time Signatures** page in **Engraving Options**. You can also change the appearance of individual time signatures, independently of your project-wide settings.

You can change the appearance of time signatures individually by using properties in the Properties panel at the bottom of the window.

You can activate some of these properties in both Write mode and Engrave mode, however there are more options available in Engrave mode.

NOTE

If you change your mind at any time, you can deactivate any of these properties to revert time signatures to your project-wide settings for the corresponding aspect of the time signature.

RELATED LINKS

Project-wide Engraving Options for time signatures

Options for the appearance of time signatures project-wide can be found on the **Time Signatures** page in **Engraving Options**.

You can open **Engraving Options** in the following ways:

- Press **Ctrl/Cmd-Shift-E** in any mode.
- Choose **Engrave** > **Engraving Options** in Engrave mode.
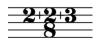
Choosing how numerators appear project-wide

In the **Design** section of the **Time Signatures** page in **Engraving Options**, there are two options for the default appearance of numerator style project-wide:

- **Show single number**

- **Show beat groups**

Choosing how denominators appear project-wide

Also in the **Design** section, there are two options for the default appearance of denominator style project-wide:

- **Show single number**

- **Show note duration**

- **Show nothing**

NOTE

You cannot choose both the denominator **Show nothing** option and the numerator **Show beat groups** option simultaneously. In this situation, the default number denominator is shown.

Choosing how denominator notes appear (if used) project-wide

You can also choose how denominator notes appear in the **Design** section, if the denominator style **Show note duration** is used:

- **Show beat length**

- **Show note duration**

Choosing how interchangeable time signatures are separated project-wide

Also in the **Design** section, there are six options for the default appearance of interchangeable time signatures project-wide:

- **Parentheses**

- **(Square) brackets**

- **Equals sign**

- **Slash**

- **Space**

- **Hyphen**

Choosing how open meter time signatures appear project-wide

Again in the **Design** section, there are three options for the default appearance of open meter signatures project-wide:

- **None** (this example shows the signpost that automatically appears)

- **X** (default)

- **N** (Penderecki's symbol)

Choosing how large the gaps are between time signatures, separators, and parentheses

In the **Gaps** section of the **Time Signatures** page in **Engraving Options**, you can set values for the following gaps:

- Gap between alternating time signature and separator
- Gap between interchangeable time signatures (if a space rather than a separator is used)
- Gap between a time signature and its parentheses
- Gap between a time signature and its brackets

RELATED LINKS
Time signatures on page 615

Changing the numerator style of time signatures individually

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 for the appearance of numerators.

PROCEDURE

1. Select the time signatures whose numerator style you want to change. You can do this in Write mode and Engrave mode.
2. Activate the **Numerator style** property in the **Time Signatures** group of the Properties panel.
3. Choose one of the following options:
    - **Number**, such as 7/8
    - **Beat group**, such as 2+2+3/8

RESULT

The numerator style of the selected time signatures is changed.

NOTE

You can change the numerator style of all time signatures project-wide on the **Time Signatures** page in **Engrave** > **Engraving Options**.

RELATED LINKS
Project-wide Engraving Options for time signatures on page 629

Changing the denominator style of time signatures individually

You can change the denominator style of individual time signatures, independently of your project-wide setting for the appearance of denominators.

PROCEDURE

1. Select the time signatures whose denominator style you want to change. You can do this in Write mode and Engrave mode.
2. Activate the **Denominator style** property in the **Time Signatures** group of the Properties panel.
3. Choose one of the following options:
    - **Show single number**
    - **Show note duration**

- **Show nothing**

RESULT

The denominator style of the selected time signatures is changed.

NOTE

You can change the denominator style of all time signatures project-wide on the **Time Signatures** page in **Engrave** > **Engraving Options**.

RELATED LINKS
Project-wide Engraving Options for time signatures on page 629

Changing the open meter style of time signatures individually

The **Open style** property in the **Time Signatures** group of the Properties panel is automatically activated when you input open meter signatures. You can change the open meter style of individual time signatures, independently of your project-wide setting for the appearance of open meters.

PROCEDURE

1. Select the open meter time signatures whose open meter style you want to change. You can do this in Write mode and Engrave mode.

2. Choose one of the following options for the **Open style** property in the **Time Signatures** group of the Properties panel:

   - **None** (Empty)

   - **X** (default)

   - **N** (Penderecki's symbol)

RESULT

The open meter style of the selected time signatures is changed.

NOTE

You can change the style of all open meter time signatures project-wide on the **Time Signatures** page in **Engrave** > **Engraving Options**.

RELATED LINKS
Project-wide Engraving Options for time signatures on page 629

Changing the separator style of interchangeable time signatures individually

You can change the separator shown in the middle of individual interchangeable time signatures, independently of your project-wide setting for the separator used in interchangeable time signatures.

PROCEDURE

1. Select the interchangeable time signatures whose separator you want to change. You can do this in Write mode and Engrave mode.

   The **Separator** property in the **Time Signatures** group of the Properties panel is automatically activated for interchangeable time signatures.

2. Select one of the following options from the **Separator** property menu:

- **Parentheses**

- **Brackets** (square)

- **Equals sign**

- **Slash**

- **Space**

- **Hyphen**

RESULT

The separator style of the selected interchangeable time signatures is changed.

NOTE

Although they might look similar to interchangeable time signatures, aggregate time signatures behave differently. Aggregate time signatures are separated by a "+" sign, whereas interchangeable time signatures can be shown with six different separators but not a "+" sign.

Therefore, although you can activate this property and choose from the available options for aggregate time signatures, the property only affects the appearance of interchangeable time signature separators, and not the appearance of aggregate time signature separators.

RELATED LINKS
Project-wide Engraving Options for time signatures on page 629

A tie is a curved line that joins two notes of the same pitch, and a tie chain can be created by joining multiple, adjacent notes with a sequence of ties.

Each sequence of tie chains, whether the tie chain joins 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 of the 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 or should not 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 should be 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; if notes are stem-down, ties curve upwards.

NOTE

If there are multiple voices in 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 places the ends of ties outside noteheads, meaning above or below them, ideally positioned at the horizontal center of noteheads. The other convention places the ends of ties between noteheads, ideally positioned at the vertical center of noteheads.

You can see the difference between these two conventions in the below examples.

A tie outside noteheads.

A tie between noteheads.

The placement of ties is often automatically adjusted in Dorico so that neither of the end points of ties, nor the apex of tie curves, starts on a staff line or ends on a staff line. If this happens, it can cause the shape of ties to appear distorted, which can make the music harder to read.

To avoid this, Dorico can change the vertical position of ties slightly, and make small changes to the curvature of ties. These changes are small, however you can see in the below examples how 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 not staff line with which it could collide.

Wherever possible, clef changes should not be positioned in the middle of a tie chain. Changing the clef changes the position of the tied note in the staff, which could easily cause a performer to misread the tie as a slur and play two different notes. Clef changes can be input in the middle of tie chains in Dorico, however it is best to position clef changes either before a whole tie chain, or after a whole tie chain.

Ties can look distorted, or can even be easily missed, when they are very short. You can change the minimum length of ties when they are within a single system on the **Ties** page in **Engrave** > **Engraving Options**.

NOTE

Although they look very similar to slurs, ties and slurs are not the same. Ties affect the behavior of notes differently to slurs.

RELATED LINKS

Positions of ties

In Dorico, the positions of ties are determined according to horizontal and vertical positioning rules.

Horizontal positioning rules

The ends of ties are positioned as close as possible to the notes that they join while avoiding collisions with other notations.

Vertical positioning rules

The ends and the middle of the tie curvatures avoid abutting staff lines.

Chains of tied notes

In some cases, ties are extended over several bars.

This occurs if you input a note that is longer than a whole note in a 4/4 time signature, for example.

The ties are then displayed as a chain of tied notes, which is often referred to as a tie chain.

Ties versus 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 in the staff.

Ties can be used in conjunction with articulation, however 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. 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.

Applied rules for changed tied notes

Dorico applies specific rules when you make changes to tied notes.

Dorico automatically adjusts the tied notes for you 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.

RELATED LINKS

Inputting ties during step input

Ties can be input manually during step input to join two notes of the same pitch.

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 where necessary.

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 should be tied together are not rhythmically adjacent: for example, if the notes are separated by intervening notes of a different pitch.

- If the notes that should be tied together are in different voices.

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

To input ties during step input:

PROCEDURE

1. In Write mode, start note input.

2. Input the note that you want at the start of the tie.

3. Start a tie in one of the following ways:

- Press **T**

- Click **Tie** in the Notes toolbox:

4. Position the caret at the position you want to input the note at the end of the tie.

5. 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

The two notes input are joined by a tie.

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 may instead create a 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 the following ways:

- Press **O**

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

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

RELATED LINKS

Adding ties to existing notes

To join existing notes together with a tie:

PROCEDURE

1. In Write mode, select the note from which you want a tie to start.

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

    - Press **T**

    - Click **Tie** in the Notes toolbox:

    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

The selected note is joined by a tie to the next note of the same pitch in 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 may instead create a 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 the following ways:

- Press **O**

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

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

Ties in other contexts

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. These types of ties must be input manually in Dorico.

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: selecting one note in a tie chain that crosses a system break or page break in Write mode selects all notes in the tie chain.

The horizontal space for the ends of ties shown to the left of notes at the start of new systems or new pages may not be sufficient to show an ideal tie curve.

You can adjust the spacing of notes at the start of systems and pages to give the ends of ties more space. In Engrave mode, activate **Note Spacing** and nudge the handle beside the note in the tie chain at the start of a new system or new page to the right using **Alt-Right Arrow**, or to the left using **Alt-Left Arrow**.

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 on new systems or new pages are not shown by default. If you choose to show accidentals beside notes in tie chains at the start of new systems or pages, the position of the notes is changed to accommodate accidentals. However, as described in the section above, this automatic position may not leave sufficient room for the end 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 shown in parentheses.

Ties across time signature changes

Ties are automatically positioned between notes that span a change of time signature. If ties crossing a time signature change are joining notes mostly 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.

Cross-clef ties

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 may be misread as slurs, so you may want to consider moving the change of clef to either before the tied note or 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, as shown in the examples below.

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 show *laissez vibrer* ties on 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 641
Inputting ties between notes in different voices on page 642
Inputting ties between notes in different staves on page 642
Individual changes to the appearance of accidentals on page 191

Inputting ties between non-adjacent notes

You can input ties between notes that are not rhythmically adjacent manually.

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 one of the following ways:

    - Press **T**

    - Click **Tie** in the Notes toolbox ⏜.

RESULT

A tie is input. The tie joins the two selected notes together.

RELATED LINKS
Inputting ties during step input on page 637

Inputting ties between notes in different voices

You can input ties between notes that are not in the same voice manually.

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 one of the following ways:

- Press **T**

- Click **Tie** in the Notes toolbox ⏝.

RESULT

A tie is input. The tie joins two selected notes together.

RELATED LINKS
Inputting ties during step input on page 637

Inputting ties between notes in different staves

You can input ties between notes that are not in the same staff manually.

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 one of the following ways:

- Press **T**

- Click **Tie** in the Notes toolbox ⏝.

RESULT

A tie is input. The tie joins two selected notes together.

RELATED LINKS
Inputting ties during step input on page 637

Showing laissez vibrer ties

PROCEDURE

1.   Select the notes on which you want to show a *laissez vibrer* tie. You can do this in Write mode and Engrave mode.

2.   Activate the **Laissez vibrer tie** property in the **Notes and Rests** group of the Properties panel.

RESULT

A *laissez vibrer* tie is shown on the selected notes. It is positioned automatically.

You can edit the length and shape of *laissez vibrer* ties individually in Engrave mode.

RELATED LINKS
Changing the position and shape of ties individually on page 645

Showing cautionary accidentals beside notes in tie chains

To show a cautionary accidental beside subsequent notes in tie chains, for example, after a system break:

PROCEDURE

1. In Engrave mode, select the noteheads beside which you want to show a cautionary accidental.

2. Activate the **Accidental** property in the **Notes and Rests** group of the Properties panel.

3. Select one of the following options from the menu:
- **Hide**
- **Show**
- **Parenthesize**

Deleting ties

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.

To delete all ties from tie chains:

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 one 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 644
Changing the duration of selected notes on page 102

Splitting tie chains

To split tie chains without removing all ties from tie chains:

PROCEDURE

1. In Write mode, select the tie chain you want to split.

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

   - Press **Shift**-**N**.

   - Press **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.

4. Split the tie chain in one 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 in one of the following ways:

   - Use **Right Arrow** and **Left Arrow** to move the caret left or right, according to the rhythmic grid currently set

   - Press **Space** to advance the caret to the next rhythmic position, according to the note value currently selected

RESULT

The tie chain is split at the caret position.

Positions of articulations relative to tie chains

The positions of articulations relative to tie chains depends on the type of articulation. You can change the positions of articulations relative to tie chains project-wide and for individual tie chains.

RELATED LINKS
Positions of articulations on page 208
Changing the positions of articulations on tied notes project-wide on page 210
Changing the positions of articulations on tied notes individually on page 212

Project-wide Engraving Options for ties

Options for the position, placement, and appearance of ties project-wide can be found on the **Ties** page in **Engraving Options**.

The options on this page allow you to change the default curvature, shape, and appearance of ties, and their positions relative to noteheads and other ties in tie chains.

Many options are accompanied by musical examples to demonstrate how each option affects the appearance of your music.

You can open **Engraving Options** in the following ways:

- Press **Ctrl/Cmd**-**Shift**-**E** in any mode.

● Choose **Engrave** > **Engraving Options** in Engrave mode.
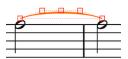
You can then click **Ties** in the page list on the left of the dialog.

Changing the position and shape of ties individually

Each tie has five square handles that can be moved separately. You can move each handle separately to change the appearance and shape of individual ties.

A tie in Engrave mode.

However, moving one handle may also affect the position of other handles.

For example, moving the left endpoint moves the left end 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 whose positions you want to move. You can select tie handles 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.

2. Move the tie 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 the tie handles in any direction to the positions you want.

RESULT

The positions of the selected tie handles is changed, which changes the shape of the corresponding ties.

NOTE

You can reset the positions of tie handles at any time by deactivating the properties in the **Ties** group of the Properties panel that correspond to the moved handles.

RELATED LINKS
Changing the position and shape of ties individually using the Properties panel on page 646

Changing the position and shape of ties individually using the Properties panel

You can change the position and shape of ties using the Properties panel.

PROCEDURE

1. In Engrave mode, select the ties whose position or shape you want to change.

2. Activate the following properties, individually or together, in the **Ties** group of the Properties panel:

    - **Start offset**: left endpoint

    - **End offset**: right endpoint

    - **Start handle offset**: left control point

    - **End handle offset**: right control point

3. Each property has **X** and **Y** value fields. 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.

4. The properties change the positions of tie handles in the following ways:

    - **Start offset X** moves left endpoints horizontally: increasing the value moves them to the right, decreasing the value moves them to the left.

    - **Start offset Y** moves left endpoints vertically: increasing the value moves them upwards, decreasing the value moves them downwards.

    - **End offset X** moves right endpoints horizontally: increasing the value moves them to the right, decreasing the value moves them to the left.

    - **End offset Y** moves right endpoints vertically: increasing the value moves them upwards, decreasing the value moves them downwards.

    - **Start handle offset X** moves left control points horizontally: increasing the value moves them to the right, decreasing the value moves them to the left.

    - **Start handle offset Y** moves left control points vertically: increasing the value moves them upwards, decreasing the value moves them downwards.

    - **End handle offset X** moves right control points horizontally: increasing the value moves them to the right, decreasing the value moves them to the left.

    - **End handle offset Y** moves right control points vertically: increasing the value moves them upwards, decreasing the value moves them downwards.

RELATED LINKS

Changing the curvature direction of ties individually

You can change the curvature direction of individual ties. In Write mode this applies to whole tie chains, but in Engrave mode you can change the style of each tie within tie chains separately.

PROCEDURE

1. Select the ties whose curvature direction you want to change. You can do this in Write mode and Engrave mode.

2. Activate the **Direction** property in the **Ties** group of the Properties panel.

3. Choose one of the following options:

- **Up**

- **Down**

RESULT

The curvature direction of the selected ties is changed.

NOTE

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.
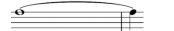
Tie shoulder offset

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.
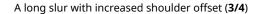
Increasing the shoulder offset makes the onset of the curve shallower, whereas decreasing the shoulder offset makes the onset steeper.

You can change the project-wide settings for the offset of tie shoulders by changing the value for the following options under the **Advanced Options** disclosure arrow in the **Design** section of the **Ties** page in **Engrave** > **Engraving Options**:

- **Shoulders are offset by [X]% of half the length of a short tie**
- **Shoulders are offset by [X]% of half the length of a long tie**

A long tie with default shoulder offset (**1/10**)

A long slur with increased shoulder offset (**3/4**)

You can change the shoulder offset of ties individually by moving their handles in Engrave mode.

- Moving tie offset handles further apart reduces the shoulder offset.
- Moving tie offset handles closer together increase the shoulder offset.

RELATED LINKS
Project-wide Engraving Options for ties on page 644
Changing the shoulder offset of ties individually on page 647

Changing the shoulder offset of ties individually

PROCEDURE

1. In Engrave mode, select one of the control point handles of the ties whose shoulders you want to adjust.

   NOTE

   You can select individual handles on multiple ties.

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 the handles in any direction to the positions you want.

RESULT

The shoulder offset of the selected ties is changed.

RELATED LINKS

Changing the shoulder offset of ties individually using the Properties panel

You can change the tie shoulder offset of individual ties by using properties in the **Ties** group of the Properties panel in Engrave mode.

PROCEDURE

1. In Engrave mode, select the ties whose shoulder offset you want to change.
2. Activate the following properties, individually or together, in the **Ties** group of the Properties panel:
   - **Start handle offset**
   - **End handle offset**
3. Each property has **X** and **Y** value fields. 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.
4. The properties move tie handles in the following ways:
   - **Start handle offset X** moves the left control points of ties horizontally: increasing the value moves them to the right, decreasing the value moves them to the left.
   - **Start handle offset Y** moves the left control points of ties vertically: increasing the value moves them upwards, decreasing the value moves them downwards.
   - **End handle offset X** moves the right control points of ties horizontally: increasing the value moves them to the right, decreasing the value moves them to the left.
   - **End handle offset Y** moves the right control points of ties vertically: increasing the value moves them upwards, decreasing the value moves them downwards.

RESULT

The shoulder offset of the selected ties is changed.

Tie height

You can change values for the heights of all short ties and long ties project-wide by disclosing **Advanced Options** in the **Design** section of the **Ties** page in **Engraving Options**. You can also change the height of individual ties in Engrave mode.

Increasing the height of ties makes them extend further from the staff, giving them a rounder shape and meaning 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 needs to 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 individually

PROCEDURE

1. In Engrave mode, select the tie height (middle) handle of the ties whose height you want to change.

2. Change the height of the selected ties in any of the following ways:

   - Press **Alt-Up Arrow** to move the handles upwards.

   - Press **Alt-Down Arrow** to move the handles 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 the handles upwards or downwards to the heights you want.

Tie styles

There are different styles of tie available in Dorico, which can be used to indicate different meanings.

Solid

Ties are shown as tapered solid lines: thinner at the ends and thicker in the middle (default).

Dashed

Ties are shown as tapered dashed lines: thinner at the ends and thicker in the middle.

Dotted

Ties are shown as dotted lines. The dots are the same size and the same distance apart over the whole length of the tie.

Half-dashed start

The first half of ties appear as dashed lines, the second half as solid lines. Used to denote that a tie was written incompletely in the source in critical editions.

Half-dashed end
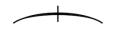
The first half of ties appear as solid lines, the second half as dashed lines. Used to denote that a tie was written incompletely in the source in critical editions.

Editorial

Ties appear as solid black lines, but with a smaller vertical line intersecting them exactly halfway along its length. Used to show that tie have been added by the editor and were not present in the source.

Changing the style of ties individually

You can change the style of ties individually. In Write mode this applies to whole tie chains, but in Engrave mode you can change the style of each tie within tie chains separately.

PROCEDURE

1. Select the ties whose style you want to change. You can do this in Write mode and Engrave mode.

2. Activate the **Style** property in the **Ties** group of the Properties panel.

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, according to your selection.

NOTE

The precise parameters of each of these options can be set project-wide in **Engrave** > **Engraving Options**. For example, you can change the height and width of the notch in **Editorial** ties, the sizes of dots and dashes in ties, and the sizes of the gaps between dots and dashes.

Changing the thickness of dashed and dotted ties individually

You can change thickness of dashed and dotted ties as whole tie chains and as individual ties. You can also change the thickness of all dashed ties and dotted ties project-wide on the **Ties** page in **Engraving Options**.

PROCEDURE

1. Select the dashed and dotted tie chains whose thickness you want to change.

   NOTE

   You can select whole tie chains in Write mode and Engrave mode.

   You can select individual ties in Engrave mode.

2. Activate the **Dash/dot** property in the **Ties** 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 thickness the selected dashed and dotted ties or dashed and dotted tie chains is changed. Increasing the value makes dashes and dots thicker. Decreasing the value makes dashes and dots thinner.

RELATED LINKS
Project-wide Engraving Options for ties on page 644

Changing the size of gaps in dashed and dotted ties individually

You can change the sizes of gaps in dashed and dotted ties for individual tie chains and individual ties. You can also change the sizes of the gaps between dashes and dots in all dashed ties and dotted ties project-wide on the **Ties** page in **Engraving Options**.

PROCEDURE

1. Select the dashed or dotted tie chains whose gap sizes you want to change.

   NOTE

   You can select whole tie chains in Write mode and Engrave mode.

   You can only select individual ties in Engrave mode.

2. Activate the **Gap** property in the **Ties** 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 size of the gaps between dashes or dots for the selected ties or tie chains is changed. Increasing the value makes the gaps between dashes or dots larger. Decreasing the value makes the gaps between dashes and dots smaller.

RELATED LINKS

Changing styles of tie chains individually

You can change the style of all ties within tie chains.

PROCEDURE

1. In **Write** mode, select a note, a chord, or a tie within a tie chain.

   This selects all notes, chords, and ties that are part of the same chain.

2. Activate the **Style** property in the **Ties** group of the Properties panel.

3. From the pop-up menu, select one of the available styles.

4. Optional: If you selected one of the dashed/dotted styles, activate **Dash/dot** and enter or select a value in the **Spaces** field.

RESULT

The appearance of all ties in the tie chain is changed.

Changing styles of individual ties within tie chains

You can change the styles of individual ties within a tie chain.

PROCEDURE

1. In **Engrave** mode, select a tie.

2. Activate the **Style** property in the **Ties** group of the Properties panel.

3. From the pop-up menu, select one of the available styles.

4. Optional: If you selected one of the dashed/dotted styles, activate **Dash/dot** and enter or select a value in the **Spaces** field.

RESULT

The appearance of the selected tie is changed. All other ties in the chain remain unaffected.

Directions of tie curvatures

The direction of tie curvatures is different depending on note stem direction, the number of notes in chords, and the number of voices in the staff.

The direction of the curvature of a tie is determined by many factors, including the following:

- The stem direction of the note or chord at each end of the tie

- The number of voices that are active on the staff

- The number of notes in the chord at each end of the tie

Tied single notes in single-voice contexts

If a single voice is active and a tie joins two single notes, the direction of the ties 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-stemmed voices, the ties curve upwards.
- For down-stemmed voices, the ties curve downwards.
- For overlapping or interlocking pitches of multiple voices, the rules for tied chords in one-voice pieces of music are used. All notes in all voices are treated as if they belong to a single voice.

Changing curvature directions between notes of different stem directions

You can specify that a tie between two notes of different stem directions curves away from the middle staff line.

By default, the direction of the curvature is upwards.

PROCEDURE

1. In Engrave mode, select **Engrave** > **Engraving Options**.
2. Select the **Ties** category.
3. In the **Ties Direction** subcategory, in the **Curvature direction for ties when stem directions differ** section, select **Ties curve away from staff**.
4. Click **Apply**.

Changing curvature directions in tie chains

You can change the curvature direction of all ties within a tie chain.

PROCEDURE

1. In **Write** mode, select a note, a chord, or a tie within a tie chain.
   This selects all notes, chords, and ties that are part of the same chain.
2. Activate the **Direction** property in the **Ties** group of the Properties panel.
3. Select one of the following options:

   - **Up**
   - **Down**

RESULT

The direction of all ties in the chain of tied notes is changed.

Changing curvature directions of individual ties

You can change the curvature direction of individual ties within a tie chain.

PROCEDURE

1. In **Engrave** mode, select a tie.
2. Activate the **Direction** property in the **Ties** group of the Properties panel.
3. Select one of the following options:

    - **Up**
    - **Down**

RESULT

The direction of the tie is changed. All other ties in the chain remain unaffected.

Tremolos

Tremolos are thick, slanted lines that cross individual stems or are positioned between multiple stems. They are used to indicate that notes should be repeated, either individual notes or sequences of multiple notes.

Using tremolo strokes instead of notating each notehead you want can save horizontal space in scores and make fast passages easier to read.

The number of tremolo strokes used indicates both how many times players should repeat notes, and how fast they should be. In measured tremolos, for example, one tremolo stroke on the stem of a quarter note indicates two eighth notes should be played, whereas three tremolo strokes on the stem of a quarter note indicates eight 32nd notes should be played.

Quarter note with one stroke single-note tremolo and its equivalent notation

Quarter note with three strokes single-note tremolo and its equivalent notation

There are different types of tremolo:

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 should be played as fast as possible, whatever the tempo.

Single-note tremolos

> Individual notes are repeated.

Multi-note tremolos

> Multiple notes, usually two, are played in sequence similar to a trill.

Tuplet tremolos

> Multiple notes in tuplets are played in sequence.

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 should have 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 may be instances where you want all notes to have the same number of tremolo strokes, whatever their duration. You may also want to 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 single-note tremolo strokes on individual notes in tie chains on page 656

Changing the number of single-note tremolo strokes on individual notes in tie chains

PROCEDURE

1. In Engrave mode, select the noteheads of the notes whose number of tremolo strokes you want to change.

2. Activate the **Single stem tremolo** property in the **Notes and Rests** group of the Properties panel.

3. Select one of the following options from the menu:
   - **None**
   - **One stroke**
   - **Two strokes**
   - **Three 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
Changing the number of tremolo strokes of existing tremolos on page 660

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 in the middle of all the notes.

Tremolo strokes are slightly thinner than beams, so that the gaps between strokes is 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 in 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 may not move every time you change the pitch of notes, as demonstrated in this example.

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 tremolos are determined by the positions of the ends of the stems to which the multi-note tremolos apply. You can change the angles of multi-note tremolos individually by moving the position of the stems at each end.

You can change values for the default positions of tremolo strokes project-wide on the **Tremolos** page in **Engrave** > **Engraving Options**.

RELATED LINKS

Inputting tremolos

Tremolos can only be input by clicking buttons in the **Tremolos** section of the **Repeat Structures** panel on the right of the window in Write mode.

Tremolos are included in the **Repeat Structures** panel because they indicate that notes should be repeated, either individually as single-note tremolos or in sequences as multi-note tremolos.

The **Tremolos** section of the **Repeat Structures** panel

Inputting single-note tremolos

PROCEDURE

1. In Write mode, select the notes on which you want to input single-note tremolos.

2. Click the button with the numbers 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.

EXAMPLE

Single-note tremolos with two tremolo strokes

RELATED LINKS
Deleting tremolo strokes on page 660

Inputting multi-note tremolos

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.

2. Click the button with the numbers 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:

RESULT

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.

NOTE

The appearance of multi-note half note tremolos depends on your choice on the **Tremolos** page in **Engrave** > **Engraving Options**.

EXAMPLE

Multi-note tremolos with three tremolo strokes

RELATED LINKS
Deleting tremolo strokes on page 660
Changing the appearance of multi-note half note tremolos project-wide on page 664

Inputting multi-note tremolos across tuplets

You can input multi-note tremolos across more than two notes if they are tuplets. This indicates that the notes in the tuplet should be repeated in the notated sequence.

PROCEDURE

1. In Write mode, select the tuplets across which you want to input multi-note tremolos.

   TIP

   You can select whole tuplets, including their brackets, or just the noteheads in the tuplets.

2. Click the button with the numbers 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:

RESULT

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 deleted, and a signpost is shown at the start of each tuplet indicating its ratio.

NOTE

The appearance of multi-note half note tremolos depends on your choice on the **Tremolos** page in **Engrave** > **Engraving Options**.

EXAMPLE

Multi-note tremolos with three tremolo strokes across tuplets

RELATED LINKS
Changing the appearance of multi-note half note tremolos project-wide on page 664

Changing the number of tremolo strokes of existing tremolos

PROCEDURE

1. In Write mode, select the tremolos whose number of tremolo strokes you want to change.

   The corresponding buttons to the numbers of tremolo strokes included in your selection are shown as selected 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 numbers 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 strokes in the tremolos on the selected notes is changed.

RELATED LINKS

[Changing the number of single-note tremolo strokes on individual notes in tie chains](#) on page 656
[Deleting tremolo strokes](#) on page 660

Deleting tremolo strokes

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
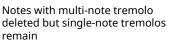
If you click **Remove Single-note tremolo**, single-note tremolo strokes are deleted.

If you click **Remove Multi-note tremolo**, multi-note tremolo strokes are deleted.

Both types of tremolo strokes are deleted if you click both buttons.

EXAMPLE

Notes with single-note tremolos and multi-note tremolo

Notes with multi-note tremolo deleted but single-note tremolos remain

Notes with both multi-note tremolo and single-note tremolos deleted

Moving notes with tremolos rhythmically

You can move notes with single-note tremolos and multi-note tremolos to new rhythmic positions in the same ways as moving 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.

However, simply moving multi-note tremolos back to their previous positions later does not restore any multi-note tremolo strokes deleted when they were moved previously. The deleted multi-note tremolo strokes must be re-input if necessary.

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, in the same ways that normal notes are.

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
Positions of notes on page 461
Changing the number of single-note tremolo strokes on individual notes in tie chains on page 656

Positions of tremolo strokes

Dorico automatically positions tremolo strokes correctly relative to noteheads and staff lines. However, if you find you need to change the positions of tremolo strokes, you can move individual tremolos graphically in Engrave mode.

You can move tremolo strokes upwards and downwards along their stems in Engrave mode. You cannot move tremolo strokes to the right or left.

NOTE

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.

You can also change the positions of tremolo strokes for all tremolos project-wide on the **Tremolos** page in **Engrave** > **Engraving Options**.

RELATED LINKS
Project-wide Engraving Options for tremolos on page 663

Moving tremolo strokes graphically

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.

        NOTE

        If you want to move tremolo strokes 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 tremolo strokes upwards and downwards to the positions you want.

    Moving multi-note tremolo strokes also changes the length of the stems to which they are attached.

RESULT

The selected tremolo strokes are moved upwards or downwards.

RELATED LINKS
Project-wide Engraving Options for tremolos on page 663

Moving single-note tremolo strokes graphically using the Properties panel

PROCEDURE

1. In Engrave mode, select the noteheads whose single-note tremolo strokes you want to move.
2. Activate the **Tremolo Y** property in the **Notes and Rests** 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.
4. The property moves single-note tremolo strokes in the following ways:
    *   Increasing the value moves single-note tremolo strokes upwards.
    *   Decreasing the value moves single-note tremolo strokes signs downwards.

RELATED LINKS
Project-wide Engraving Options for tremolos on page 663

Moving multi-note tremolo strokes graphically using the Properties panel

You can move multi-note tremolo strokes graphically using the Properties panel. You can also change the angles of multi-note tremolo strokes using the same method, as each end of multi-note tremolo strokes is moved independently.

PROCEDURE

1. In Engrave mode, select the noteheads at the beginning of the multi-note tremolos whose strokes you want to move.

2. Activate the **Start Y offset** property in the **Beaming** 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.

4. The property moves the left end of multi-note tremolo strokes in the following ways:

   - Increasing the value moves the left end of multi-note tremolo strokes upwards.

   - Decreasing the value moves the left end of multi-note tremolo strokes signs downwards.

5. Select the noteheads at the ends of the multi-note tremolos whose strokes you want to move.

6. Activate the **End Y offset** property in the **Beaming** group of the Properties panel.

7. 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.

8. The property moves the right end of multi-note tremolo strokes in the following ways:

   - Increasing the value moves the right end of multi-note tremolo strokes upwards.

   - Decreasing the value moves the right end of multi-note tremolo strokes signs downwards.

RELATED LINKS

Project-wide Engraving Options for tremolos

Options for the appearance and positions of tremolos project-wide can be found on the **Tremolos** page in **Engraving Options**.

The options on this page allow you to change the appearance of tremolo strokes, and their positions relative to the ends of stems, stem flags, noteheads, and beams.

Many options are accompanied by musical examples to demonstrate how each option affects the appearance of your music.

You can open **Engraving Options** in 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**.
2. Click **Tremolos** in the page list.
3. Choose one of the following options for the **Appearance of half note (minim) tremolos** option in the **Multi-note Tremolos** section:

    - **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 on the **Timings** page in **Playback Options**. This considers both the number of tremolo strokes and the number of beam lines that would be used for the note.

For example, if the option is set to require three tremolo strokes, an eighth note (quaver) 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 (crotchet) played at 120 quarters per minute.

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 the **Default unmeasured tremolo length** option in the **Tremolos** section on the **Timings** page in **Playback Options**.

TIP

If you hover your mouse pointer over either of the arrows beside the value field for the **Default unmeasured tremolo length** option, a small box appears that displays the current fraction as a decimal.

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** by choosing **Play** > **Playback Options** in Play mode, or by pressing **Ctrl/Cmd-Shift-P** in any mode.

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 eight 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 above examples, the triplet quarter notes are shown under a bracket with the number 3. The duplet eighth notes do not need to have a bracket as they are joined by a beam, which has a number 2 beside it.

Tuplets in Dorico can be shown with a tuplet bracket, with a tuplet bracket and a tuplet number or ratio, or with a tuplet bracket and a tuplet number or ratio and a note indicating the note value of the tuplet.

General placement conventions for tuplets

Tuplet brackets and tuplet numbers or 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 or ratio.

According to convention, tuplet brackets and tuplet numbers or 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.

Inputting tuplets with the keyboard

Tuplets are input like normal notes, and so can only be input during note input.

PROCEDURE

1. In Write mode, start note input.

2. Position the caret at the rhythmic position where you want to input tuplets.

3. Open the tuplets popover in any of the following ways:

   - Press ;

   - Choose **Write** > **Create Tuplet**

4. Enter the tuplet you want into the popover as a ratio, such as 3:2. 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.

5. Press **Return** to close the popover and enter the tuplet.

6. Enter or play in the pitches you want.

7. Stop inputting tuplets in one of the following ways:

   - Press **Shift-;** to return to inputting normal notes.

   - Move the caret with the arrow keys to return to inputting normal notes.

   - Press **Esc** to stop note input completely.

   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 type in or play in are input as tuplets, starting from the caret position.

RELATED LINKS

The 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 activated by pressing ;, or by choosing **Write** > **Create Tuplet**.

Tuplets are often described in ratios, such as 3:2, so the tuplets popover uses this key to be memorable.

The icon on the left-hand side of the popover matches the corresponding button in the Notes toolbox on the right of the window.

The tuplets popover with an example entry for a tuplet

The 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

Here are some examples of what to enter into the tuplets popover, and the tuplets that are input as a result.

Enter:	For tuplet type:
3 or 3:2	Triplet, three notes in the space of two.
3:4	Triplet, three notes in the space of four.
5:4	Quintuplet, five notes in the space of four.
5:2	Quintuplet, five notes in the space of two.
7:4	Septuplet, seven notes in the space of four.
7:2	Septuplet, seven notes in the space of two.
2:3	Duplet, two notes in the space of three, often used in compound meters.
5:6	Quintuplet, five notes in the space of six, often used in compound meters.

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.

Inputting nested tuplets with the keyboard

Nested tuplets are tuplets within larger tuplets.

An example of nested tuplets.

You can input nested tuplets in new, empty staves, or select an existing tuplet and input a nested tuplet within it.

PROCEDURE

1. In Write mode, start note input.

2. Position the caret at the rhythmic position where you want to input nested tuplets.

3. Open the tuplets popover in any of the following ways:

- Press `;`

- Choose **Write** > **Create Tuplet**

4. If inputting nested tuplets in an empty staff, enter the ratio for the outer tuplet into the popover, such as `3:2`.

5. Press **Return** to close the popover and enter the outer tuplet.

> NOTE
>
> You can skip steps 4 and 5 if you are inputting nested tuplets to existing tuplets.

6. Open the tuplets popover again.

7. Enter the ratio for the inner tuplet into the popover, such as `5:4`.

8. Press **Return** to close the popover and enter the inner tuplet.

9. Enter or play in the pitches you want.

10. Stop inputting tuplets in one of the following ways:

- Press **Shift-;** to return to inputting normal notes.

- Move the caret with the arrow keys to return to inputting normal notes.

- Press **Esc** to stop note input completely.

RESULT

The pitches you type in or play in are input as nested tuplets, starting from the caret position. They continue as the specified nested tuplet until stopped in one of the ways described above.

Inputting tuplets with the mouse

Tuplets are input like normal notes, and so can only be input during note input.

> NOTE
>
> When inputting with the mouse, only triplets can be input and they can only be input one at a time. You can input all other tuplets and nested tuplets by using the tuplets popover with the keyboard.

PROCEDURE

1. In Write mode, start note input.

2. Position the caret at the rhythmic position where you want to input a triplet.

3. Select the note value of the triplet in the Notes toolbox. For example, if you want to input a triplet of three eighth notes in the space of two normal eighth notes, select the eighth note button.

4. Click **Tuplets** in the Notes toolbox:

5. Click in or play in the pitch or pitches you want.

RESULT

The pitches you click in are input as a triplet at the caret position. Repeat these steps to input more triplets.

RELATED LINKS

Inputting tuplets with the keyboard on page 666
Inputting nested tuplets with the keyboard on page 668
Inputting notes on page 94

Inputting nested tuplets with the mouse

Nested tuplets are tuplets within larger tuplets.

An example of nested tuplets.

You can input nested tuplets in new, empty staves, or select an existing tuplet and input a nested tuplet within it.

NOTE

When inputting with the mouse, only triplets can be input and they can only be input one at a time. You can input all other tuplets and nested tuplets by using the tuplets popover with the keyboard.

PROCEDURE

1. In Write mode, start note input.

2. Position the caret at the rhythmic position where you want to input a nested triplet.

3. If inputting a nested triplet in an empty staff, select the note value of the outer triplet in the Notes toolbox. For example, if you want to input a triplet of three quarter notes in the space of two normal quarter notes, select the quarter note button.

4. Click **Tuplets** in the Notes toolbox:

NOTE

You can skip steps 3 and 4 if you are inputting a nested triplet to existing an existing tuplet.

5. Select the note value of the inner triplet in the Notes toolbox. For example, if you want to input a triplet of three eighth notes in the space of two eighth notes in the outer triplet, select the eighth note button.

6. Click **Tuplets** in the Notes toolbox again.

7. Click in or play in the pitch or pitches you want.

RESULT

The pitches you type in or play in are input as a nested triplet at the caret position.

RELATED LINKS
Inputting tuplets with the keyboard on page 666
Inputting nested tuplets with the keyboard on page 668

Changing the pitch of tuplets

The pitch of tuplets can be changed after they have been input like any other note.

PROCEDURE

1. In Write mode, select the tuplets whose pitch you want to change.

2. Use the following key commands to change the pitch:

- **Alt**-**Up Arrow** to transpose tuplets up one note
- **Ctrl/Cmd**-**Alt**-**Up Arrow** to transpose tuplets up one octave
- **Alt**-**Down Arrow** to transpose tuplets down one note
- **Ctrl/Cmd**-**Alt**-**Down Arrow** to transpose tuplets down one octave

Adding accidentals and articulation to tuplets

Accidentals and articulation can be added to tuplets in the same ways as they can be added to normal notes.

Simply press **/** and type your preferred tuplet ratio into the tuplets popover, or click **Tuplets** in the Notes panel, to input tuplets instead of normal notes.

The tuplets button

Articulation is positioned between noteheads or stems and tuplet brackets, so they are closer to the notes than tuplet brackets or tuplet numbers or ratios.

RELATED LINKS
Adding accidentals to existing notes on page 189
Inputting notes with accidentals on page 188
Inputting articulations during step input with the keyboard on page 205
Inputting articulations during step input with the mouse on page 206

Adding slurs to tuplets

Slurs can be added to tuplets in the same ways as they can be added to normal notes.

RELATED LINKS
Inputting slurs during step input on page 568
Adding slurs to existing notes on page 568
Slurs in Engrave mode on page 575

Moving tuplets rhythmically

You can move tuplets to different rhythmic positions after they have been input.

NOTE

Tuplets cannot be moved rhythmically using the mouse.

PROCEDURE

1. In Write mode, select the tuplets you want to move.

    NOTE

    A tuplet number or ratio, or a tuplet bracket must be included in the selection if you want the notes to stay a tuplet. If a tuplet number or ratio, or a tuplet bracket is not selected, the notes become normal notes of their rhythmic value.

2. Move the selected tuplets in any of the following ways:

    - **Alt**-**Right Arrow**
    - **Alt**-**Left Arrow**

RESULT

The selected tuplets move to the right or to the left along the staff according to the rhythmic grid currently set.

If a tuplet number, tuplet 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, as demonstrated in the examples. However, it is not adjusted at the mid-point of bars, where it is convention to split tuplets to show the beat division. You may want to change this manually.

EXAMPLE

Deleting tuplets

PROCEDURE

1. In Write mode, select the tuplets you want to delete.

    TIP

    To delete an entire tuplet and all the notes within it, select all the noteheads and either the tuplet bracket, or tuplet number or ratio.

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

    - Press **Backspace** or **Delete**.
    - Choose **Edit** > **Delete**.

RESULT

The selected tuplets are deleted.

Selecting just the notes deletes the notes, but not the tuplet. Selecting just the tuplet bracket or tuplet number or ratio deletes the tuplet, but not all of the notes. How many notes remain depends on their rhythmic values.

Tuplet beams

Tuplet beams join notes in tuplets that can be joined with beams just like non-tuplet beams. You can make the same changes to tuplet beams that you can make to any other beam.
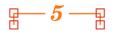
RELATED LINKS
Beaming on page 246
Tuplets within beams on page 259
Beaming notes together on page 251
Unbeaming notes on page 250
Splitting beam groups on page 249
Changing the direction of partial beams on page 250
Changing beam slants individually on page 254

Tuplet brackets

Tuplet brackets show the duration of triplets 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 left end and the right 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 brackets graphically

You can move tuplets numbers or ratios and tuplet brackets graphically without changing the rhythmic positions to which they apply.

PROCEDURE

1. In Engrave mode, select any of the following that you want to move:the tuplet brackets, tuplet numbers, or tuplet ratios you want to move.

    *   Tuplet brackets

    *   Tuplet numbers

    *   Tuplet ratios

2. Move the tuplet brackets 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 tuplet brackets 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 to the positions you want.

RESULT

The selected tuplet brackets, tuplet numbers, or tuplet ratios are moved to a new graphical positions, without changing their rhythmic positions.

Moving tuplet brackets graphically using the properties panel

You can move tuplet brackets graphically using the Properties panel. As you can change values for the properties for each end of tuplet brackets independently of each other, you can also use the properties to change the angles of tuplet brackets.

PROCEDURE

1. In Engrave mode, select one of the following that you want to move:
   - Tuplet brackets
   - Tuplet numbers
   - Tuplet ratios

2. Activate the following properties, individually or together, in the **Tuplets** group of the Properties panel:
   - **Start offset**
   - **End offset**

3. Each property has **X** and **Y** value fields. 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.

4. The properties move tuplet brackets, tuplet numbers, and tuplet ratios in the following ways:
   - **Start offset X**: increasing the value moves the left end of tuplet brackets to the right, decreasing the value moves the left end of tuplet brackets to the left.
   - **Start offset Y**: increasing the value moves the left end of tuplet brackets upwards, decreasing the value moves the left end of tuplet brackets downwards.
   - **End offset X**: increasing the value moves the right end of tuplet brackets to the right, decreasing the value moves the right end of tuplet brackets to the left.
   - **End offset Y**: increasing the value moves the right end of tuplet brackets upwards, decreasing the value moves the right end of tuplet brackets downwards.
   - **Hook length**: increasing the value makes tuplet bracket hooks longer, decreasing the value makes tuplet bracket hooks shorter.

   > NOTE
   >
   > Tuplet bracket hooks of the same tuplet cannot be different lengths.
   >
   > Both **Start offset** and **End offset** properties have the same effect on tuplet numbers and tuplet ratios. Their **X** values both move tuplet numbers and ratios horizontally, and their **Y** values both move tuplet numbers and ratios vertically.

Changing the angles of tuplet brackets individually

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 the square handle on one of the corners of the tuplet brackets whose angles you want to change.

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 the handles in any direction to the positions you want.

RELATED LINKS
Moving tuplet brackets graphically on page 672
Changing whether tuplet brackets are angled or horizontal individually on page 677
Tuplet brackets on page 672

Individual changes to the appearance and position of tuplet numbers or ratios and tuplet brackets

You can change the appearance and positions of tuplet numbers, tuplet numbers, and tuplet ratios, independently of your project-wide settings.

Changing the appearance of tuplet numbers and ratios individually

To change which tuplet number or ratio is shown for individual tuplets:

PROCEDURE

1. Select the tuplet brackets of the tuplets whose tuplet number or ratio you want to change. You can do this in Write mode and Engrave mode.

   NOTE
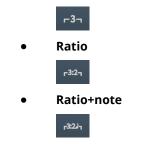
   The **Tuplets** group of the Properties panel is only shown if you selected tuplet brackets. It is not shown if you select notes within the tuplet, or notes within the tuplet and the tuplet bracket.

2. Activate the **Number** property in the **Tuplets** group of the Properties panel.

3. Select one of the following options:

   - **None**

   - **Number**

┌3┐

- **Ratio**

  ┌3:2┐

- **Ratio+note**

  ┌3:2♩┐

RESULT

The tuplet number or ratio shown for the selected tuplets is changed according to your selection.

deactivating the property returns selected tuplets to your project-wide settings for number or ratio.

NOTE

You can change which tuplet number or ratio appears 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 on page 677

Changing the position of tuplet numbers and ratios individually

You can change the horizontal positions of tuplet numbers and ratios in individual tuplet brackets.

PROCEDURE

1. Select the tuplet brackets whose tuplet number or ratio positions you want to change. You can do this in Write mode and Engrave mode.
2. Activate the **Center** property in the **Tuplets** group of the Properties panel.
3. Select one of the following options:

   - **Visual**: positions tuplet numbers or ratios at the visual center of the tuplet beam or tuplet bracket.

   - **Rhythmic**: positions tuplet numbers or ratios at the rhythmic center of the tuplet beam or tuplet bracket, which may be visually off-center.

RESULT

The position of the tuplet numbers or ratios for the selected tuplets is changed according to your selection.

deactivating the property returns selected tuplets to your project-wide settings for tuplet number or ratio horizontal position.

NOTE

You can change the horizontal position of tuplet numbers or ratios on all tuplets project-wide in the **Number and Ratio** section of the **Tuplets** page in **Engrave** > **Engraving Options**.
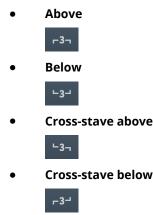
RELATED LINKS
Tuplet brackets on page 672
Changing the angles of tuplet brackets individually on page 674

Changing the placement of tuplet brackets relative to the staff

To change the placement of tuplets relative to the staff or staves:

PROCEDURE

1. Select the tuplet brackets whose placement you want to change. You can do this in Write mode and Engrave mode.

2. Activate the **Placement** property in the **Tuplets** group of the Properties panel.

3. Select one of the following options:

- **Above**

  ⌐3¬

- **Below**

  └3┘

- **Cross-stave above**

  └3¬

- **Cross-stave below**

  ⌐3┘

RESULT

The placement of the selected tuplet brackets is changed according to your selection.

deactivating the property returns selected tuplets to their default placement.

NOTE

You can change the placement of all tuplet brackets for vocal staves project-wide in the **Placement** section of the **Tuplets** page in **Engrave** > **Engraving Options**.

Changing the rhythmic end positions of tuplet brackets

To change the end positions of tuplet brackets rhythmically relative to 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. Activate the **End position** property in the **Tuplets** group of the Properties panel.

3. Select one of the following options:

- **End at right-hand side of final note**

  ⌐3¬

- **End immediately before following note**

  ⌐3¬

- **End at position of final tuplet division**

  ⌐3¬

The end position for the selected tuplet brackets is changed according to your selection.

deactivating the property returns selected tuplets to your project-wide settings for tuplet bracket end position.

NOTE

You can change the horizontal position of tuplet numbers or ratios on all tuplets project-wide in the **Horizontal Position** section of the **Tuplets** page in **Engrave** > **Engraving Options**.

RELATED LINKS

Changing whether tuplet brackets are angled or horizontal individually

You can change whether individual tuplet brackets appear angled or horizontal.

PROCEDURE

1. Select the tuplet brackets whose angle you want to change. This can be done in Write mode and Engrave mode.

2. Activate the **Can slope** property in the **Tuplets** group of the Properties panel.

3. Select one of the following options:

   - Check the box beside the activation switch to allow the selected tuplet brackets to appear angled.

   - Leave the box beside the activation switch unchecked to force the selected tuplet brackets to appear horizontal.

RESULT

The selected tuplet brackets appears angled if the box if checked, and appear horizontal if the box is not checked.

deactivating the property returns selected tuplets to your project-wide settings for angled brackets.

NOTE

You can change whether tuplet brackets appear angled or horizontal on all tuplets project-wide in the **Brackets** section of the **Tuplets** page in **Engrave** > **Engraving Options**.

RELATED LINKS

Project-wide Engraving Options for tuplets

Options for the appearance of tuplets, tuplet brackets, and tuplet numbers or ratios project-wide can be found on the **Tuplets** page in **Engraving Options**.

The options on this page allow you to change the appearance and angles of tuplet brackets, and the position of tuplet brackets, tuplet numbers, and tuplet ratios relative to the staff and noteheads.

Many options are accompanied by musical examples to demonstrate how each option affects the appearance of your music.

You can open **Engraving Options** in 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 kits that can then be displayed differently in different layouts.

There are different percussion kit presentation types in Dorico which are layout-specific, meaning you can present percussion kits using one presentation type in the score and another in the percussion part.

You can also customize and create new playing technique-specific noteheads for unpitched percussion. This allows you to express how players should play notes by using different noteheads for different playing techniques on each instrument in percussion kits.

RELATED LINKS

Percussion kits versus 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.

To show multiple unpitched percussion instruments held by a single player at the same time, they must be combined into a percussion kit, for example, a drum set instrument. 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 consisting of the two bongo drums, typically written on a grid with two lines: the smaller drum shown on the top line, and the larger drum shown on the bottom line.

Showing individual percussion instruments separately can be appropriate if a player only has one or two percussion instruments. However, combining percussion instruments into a kit gives you more flexibility over the presentation of music, which you can vary in each layout independently. Kits also give you greater control over the labeling of instruments.

If instrument changes are enabled on the **Players** page in **Setup** > **Layout Options**, Dorico 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.

Project-wide Engraving Options for unpitched percussion

Options for the appearance and position of percussion legends and ghost notes project-wide can be found on the **Percussion** page in **Engraving Options**.

You can open **Engraving Options** in the following ways:

- Press **Ctrl/Cmd-Shift-E** in any mode.
- Choose **Engrave** > **Engraving Options** in Engrave mode.

Project-wide Notation Options for unpitched percussion

Options for how notes in percussion kits are notated project-wide can be found 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 on the **Percussion** page of **Write** > **Notation Options**.

You can open **Notation Options** in 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.

Percussion kits

You can create percussion kits in Setup mode. You can combine existing unpitched percussion instruments into kits, add empty kits and add unpitched percussion instruments to the empty kit, and you can 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 changed unpitched percussion instruments to other unpitched percussion instruments, and you can only change the percussion instruments in kits within the **Edit Percussion Kit** dialog.

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 Setup mode, expand the player card of the player whose percussion kit you want to export in the **Players** panel.

2.   Click the arrow in the instrument label of the percussion kit.

3.   Choose **Edit Percussion Kit** from the context menu to open the **Edit Percussion Kit** dialog.

4.   Click **Export Kit** at the bottom of the dialog.

5.   Enter a name for the library file and select a location on your computer to save it.

6.   Save the file in any of the following ways:

   - Press **Return**.

   - 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 you have exported and saved previously. This allows you to use kits again without having to create them from scratch.

PROCEDURE

1.   Add a new solo player in the **Players** panel in Setup mode.

2.   Open the instrument picker 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.

3.   Click **Import Kit** in the instrument picker.

4.   Select the library file of the percussion kit you want to import from its location on your computer.

5.   Import the selected library file in any of the following ways:

   - Press **Return**.

   - 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.

Note input 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

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**.

   ● Press **Return**.

   ● Choose **Write** > **Note Input**.

   ● Double-click the staff.

3. Move the caret up and down to input notes on different instruments by pressing the following keys:

   ● 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 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. Finish inputting notes by pressing **Esc** or **Return**.

RELATED LINKS

Changing the playing techniques of existing notes on percussion kit staves

You can change the playing techniques of notes after they have been input by cycling through the available playing techniques for the instruments to which the notes belong.

PROCEDURE

1. In Write mode, select the notes whose playing technique 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 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.

RELATED LINKS

Default note selection during step input for percussion kits

During step input in percussion kits, you can use the letters you press on a computer keyboard 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.

You can set the **Input notes onto kit or grid** option in **Preferences** to **Use staff position**.

If you have the staff positions set relative to **Treble G clef**, then F could mean either the bottom space in the staff or the top line in 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 in the staff when only one voice in the staff contains notes, regardless of their voice.

RELATED LINKS

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.   Selected the unpitched percussion notes that you want to show as ghost notes. You can do this in Write mode and Engrave mode.
2.   Activate the **Ghost note** property in the **Notes and Rests** group of the Properties panel.

RESULT

The noteheads of the selected notes are shown in parentheses.

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 may 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 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.

Crossing notes to other instruments

You can cross notes between percussion instruments in the same ways as for normal notes when using the single-line instruments kit presentation type, or when players hold multiple individual percussion instruments that are not combined into a kit.

You cannot cross notes to other instruments when using the grid or five-line staff kit presentation types.

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 showing percussion stickings.

However, you can add lyrics as an approximation in all kit presentation types:

- Grid and five-line staff presentation types: Select a note in the instrument in which you want to show stickings.

- Single-line instruments presentation type: Input lyrics directly into instruments in which you want to show stickings.

RELATED LINKS
Inputting articulations during step input with the keyboard on page 205
Inputting articulations during step input with the mouse on page 206
Inputting tuplets with the keyboard on page 666
Inputting tuplets with the mouse on page 668
Crossing notes to other staves on page 462
Inputting playing techniques with the keyboard on page 527
Inputting playing techniques with the mouse on page 530

Dynamics in percussion kits

Unlike other items, dynamics are not shared between the grid and 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 either grid presentation or five-line staff presentation.

Therefore, you can add dynamics in the grid and five-line staff presentation types independently of the single-line instruments presentation type.

RELATED LINKS
Inputting dynamics with the keyboard on page 331
Inputting dynamics with the mouse on page 335

Percussion kit presentation types

You can show percussion kits in three different presentation types, which can be different in each layout in your project.

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 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. However, 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.

The numbers down the right-hand side of the editing area correspond to the number of staff spaces between each instrument line. By default, all instruments in a grid are two spaces apart.
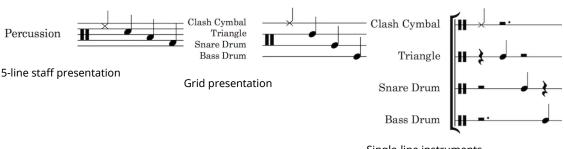
The order in which the instruments are listed matches the order in which they appear in the score.

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 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 distances defined on the **Vertical Spacing** page in **Setup** > **Layout Options**.

RELATED LINKS

Changing the presentation type of percussion kits

You can change the presentation type of percussion kits in each layout independently of other layouts. For example, you can use a 5-line staff in the score but a grid in the percussion part.

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.

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

3. Select the layouts in which you want to change the percussion kit presentation type in the **Layouts** list on the left of the dialog in the following ways:

    - Click **Select All**.

    - Click **Select All Full Score Layouts**.

    - Click **Select All Part Layouts**.

    - Click **Select All Custom Score Layouts**.

    - **Ctrl**-click individual flows.

    - **Shift**-click adjacent flows.

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

4.   In the **Percussion** section, choose one of the following options for percussion kit presentation 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 corresponding percussion kits in the selected layouts.

NOTE

You can have different presentation types for different percussion kits in the same layout.

Playing technique-specific noteheads for unpitched percussion instruments

You can specify playing techniques for unpitched percussion instruments by using different noteheads, positioning notes in spaces directly above or below the line on which notes are normally written, or by adding articulations or single-note tremolos.

You can use these in addition to adding playing techniques in the same ways as adding playing techniques to 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 **Edit Percussion Playing Techniques** dialog, which you can open in the following ways:

- For individual percussion instruments: 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 context 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**

At the top of the **Edit Percussion Playing Techniques** dialog are the main playing technique-specific noteheads currently defined for this percussion instrument, showing the notehead set and the staff position corresponding to this playing technique as applicable. Normally, percussion instruments define at least the **Natural** playing technique, which is usually shown using the default notehead set.

You can add new playing technique-specific noteheads for unpitched percussion instruments, and you can define how combinations of articulations and tremolo strokes behave in playback.

Three different snare drum playing technique-specific noteheads followed by two clash cymbal playing technique-specific noteheads.

All of these settings are saved in the percussion instrument within your project, and you can export them from one project and import them into others.

NOTE

Overrides for articulations and tremolos are not currently respected in playback, but this is planned for future versions.

RELATED LINKS
Edit Percussion Kit dialog on page 71
Defining how combinations of articulations and single-note tremolos sound in playback on page 703
Exporting percussion kits on page 681
Importing percussion kits on page 681

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 **Edit Percussion Playing Techniques** dialog 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** from the context 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, select the instrument whose playing techniques you want to edit in the main editing area, and click **Edit Percussion Playing Techniques**.

2. Click **Add Playing Technique**:

3. Select the playing technique you want to create in the dialog that opens.

4. Click **OK** to add the selected playing technique to the list at the top of the dialog.

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.

RELATED LINKS
Inputting playing techniques with the keyboard on page 527
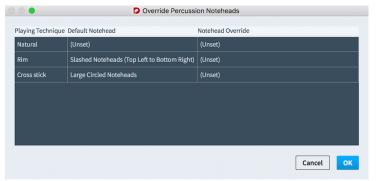
Overriding the appearance of playing technique-specific noteheads

It may be necessary to override the appearance of playing technique-specific noteheads in order to disambiguate the notes for one instrument from another if they share a staff position in five-line staff kit presentations.

PROCEDURE

1. In Setup mode, expand the card of the player holding the kit whose playing technique-specific noteheads you want to override in the **Players** panel.

2. Click the arrow in the kit instrument label and choose **Edit Percussion Kit** from the context menu to open the **Edit Percussion Kit** dialog.

3. Select the instrument whose noteheads you want to override in the main editing area of the dialog.

4. Click **Edit Noteheads**.

    The **Override Percussion Noteheads** dialog that opens lists the playing technique-specific noteheads defined for the selected instrument in the **Edit Percussion Playing Techniques** dialog, and shows which notehead type is mapped for each technique.

    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.

RESULT

The playing technique-specific notehead is overridden for the selected instrument in five-line staff kit presentations.

NOTE

This does not affect the appearance of playing technique-specific noteheads in grid and single-line instrument kit presentation types.

RELATED LINKS

Percussion legends

When using the five-line presentation type, it can be helpful to use percussion legends to show which instruments are represented on the staff, or 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 Legends** 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 **Engrave** > **Paragraph Styles** dialog.

Percussion legends appear as signposts if there are no instruments sounding at their position, or when using the grid or individual instruments presentation type. You can choose to hide or show percussion legend signposts.

RELATED LINKS

Adding percussion legends to five-line staff kit presentations

PROCEDURE

1. In Write mode, select an item on the staff at the rhythmic position where you want to add a percussion legend.

2. Choose one of the following, depending on the type of percussion legend you want:

    - **Edit** > **Percussion** > **Legend for All Instruments**

    - **Edit** > **Percussion** > **Legend for Sounding Instruments**

RESULT

A percussion legend is added above the staff. It lists instruments in the order in which they appear in the five-line staff, from highest down to lowest.

Lengthening and shortening the range for sounding instrument percussion legends

You can change the rhythmic range of sounding instrument percussion legends to include more or fewer instruments in the legend, according to 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 lengthen or shorten.

2. Lengthen and shorten the range in the following ways, according to the rhythmic grid currently set:

    - Press **Shift**-**Alt**-**Right Arrow** to lengthen the range.

    - Press **Shift**-**Alt**-**Left Arrow** to shorten the range.

- Click and drag the circular handle at the right end of the percussion legend to the right or to the left.

RESULT

The rhythmic range covered by the selected sounding instrument percussion legend is changed. The instruments included in the percussion legend is automatically updated, according to 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. Activate the **Legend Type** property in the **Percussion Legend** group of the Properties panel.

   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 in percussion legends.

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. Activate the **Use short names** property in the **Percussion Legends** group of the Properties panel.

RESULT

Short instrument names are shown in the selected percussion legends.

NOTE

You can show full instrument names again in percussion legends at any time by deactivating the **Use short names** property.

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 to custom text.
2. Activate the **Custom Text** property in the **Percussion Legend** group of the Properties panel.
3. Enter the custom text you want shown in the selected percussion legends into the value field.
4. Save your changes in any of the following ways:

    - Press **Return**.
    - Click anywhere outside 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. Activate the **Placement** property in the **Percussion Legend** group of the Properties panel.
3. Choose one of the following options:

    - **Above**
    - **Below**

RESULT

The placement of the selected percussion legends relative to the staff is changed.

NOTE

You can revert percussion legends to their default placement relative to the staff at any time by deactivating the **Placement** property.

You can change the default position of percussion legends in the **Percussion Legends** section of the **Percussion** page in **Engrave** > **Engraving Options**.

RELATED LINKS
Project-wide Engraving Options for unpitched percussion on page 680
Project-wide Notation Options for unpitched percussion on page 680

Deleting percussion legends

PROCEDURE

1. In Write mode, select the percussion legends you want to delete.

NOTE

Make sure no notes beneath the percussion legends are included in your selection, unless you want to delete them as well.

2. Delete the percussion legends in any of the following ways:

- Press **Backspace** or **Delete**.
- Choose **Edit** > **Delete**.

RESULT

The selected percussion legends are deleted.

Hiding and showing percussion legend signposts

Percussion legends appear as signposts if there are no instruments sounding at their position, or when using grid and single-line instrument presentation types.

Choose **View** > **Signposts** > **Percussion Legends** to hide and show percussion legend signposts.

RESULT

Percussion legend signposts are shown when a tick is shown beside **Percussion Legends** in the menu, and hidden when no tick is shown beside the option.

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.

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 of **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 of **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 which 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

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 Setup mode, expand the card of the player holding the kit you want to define as a drum set in the **Players** panel.

2. Click the arrow in the kit instrument label and choose **Edit Percussion Kit** from the context menu to open the **Edit Percussion Kit** dialog.

3. Check the box for **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 uncheck the box for **Drum set** in the **Edit Percussion Kit** dialog for that kit at any time.

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. Change the voice of the selected notes in the following ways:

    *   Choose the voice you want by choosing an option from **Edit** > **Percussion** > **Change Voice**.

    *   Right-click and choose the voice you want by choosing an option from **Percussion** > **Change Voice**.

    NOTE

    For example, to change the selected notes to the second down-stem voice, choose **Edit** > **Percussion** > **Change Voice** > **Down-stem Voice 2**.

    You can choose a new voice for notes in percussion kits in the same submenu. For example, choose **Edit** > **Percussion** > **Change Voice** > **Extra Down-stem Voice**.

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.

> NOTE
>
> You can reset the voice of individual notes by selecting them and choosing **Edit** > **Percussion** > **Change Voice** > **Reset Note Destination Voice**, or right-clicking and choosing **Percussion** > **Change Voice** > **Reset Note Destination Voice** from the context menu.

Specifying the stem directions and voices of unpitched percussion instruments in kits

You can specify the stem direction for each instrument in individual percussion kits. You can also set which voice they are in for their current stem direction, allowing you to control which instruments share voices in percussion kits.

PROCEDURE

1. In Setup mode, expand the card of the player holding the kit whose instrument stem directions and voices you want to specify in the **Players** panel.
2. Click the arrow in the kit instrument label and choose **Edit Percussion Kit** from the context menu to open the **Edit Percussion Kit** dialog.
3. Select an instrument whose stem direction and voice you want to specify.
4. Choose the stem direction you want for the selected instrument for **Stem direction and voice**:

    - **Up-stem**

      ♩

    - **Down-stem**

      ♩

5. Specify the voice you want 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. For example, Up-stem Voice 1 and Down-stem Voice 1 are different voices.

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.

Percussion maps for the playback of unpitched percussion

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.

Here are 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, describing which MIDI note to play, and if another MIDI note is needed as a keyswitch to trigger particular playing techniques.

A set of percussion maps for the unpitched percussion patches that are part of the HALion Symphonic Orchestra and HALion Sonic SE factory libraries is provided with Dorico. 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 by choosing **Play** > **Percussion Maps** in Play mode.

The **Percussion Maps** dialog

The **Percussion Maps** dialog is divided into four sections:

- List of percussion maps available in the current project on the left of the dialog
- **Percussion Map** section
- **Drum Kit Note Map** section
- **Edit Drum Kit Note** section

Percussion Map section

In the **Percussion Map** section of the **Percussion Maps** dialog you can specify the display **Name** for the percussion map that appears in the **Endpoint Setup** dialog.

NOTE

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 enter any content in the ID field.

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.

Individual instrument

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.

Drum Kit Note Map section

This 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.

Edit Drum Kit Note section

This section at the bottom of the dialog allows you to specify data in different 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 keyswitch if this sound requires another MIDI note to be played to trigger this specific combination of instrument and playing techniques.

NOTE

Keyswitches 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. Open the **Percussion Maps** dialog by choosing **Play** > **Percussion Maps**.

2. Create a new custom percussion map in any of the following ways:

    - Empty map: Click **Add Percussion Map**:

    - New map based on an existing percussion map: Select the map on which you want to base your custom map in the list on the left of the dialog, and click **Duplicate**.

3. Click **Lock Info** to unlock fields in the **Percussion Map** section of the dialog.

    Locked

    Unlocked

4. Enter the display name you want for the percussion map in the **Name** field in the **Percussion Map** section.

    This name appears in the **Endpoint Setup** dialog.

5.   Enter any unique identification name in the **ID** field in the **Percussion Map** section.

It can 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.paulsmith.hso.cowbell`.

6.   Choose one of the following options for **Map defines sounds for** in the **Percussion Map** section, as appropriate for the current percussion map:

- **Multiple instruments**
- **Individual instrument**

7.   Click **Show all** in the **Drum Kit Note Map** section to show unmapped notes.

8.   Select the row corresponding to the MIDI note for which you want to create a new mapping in the **Drum Kit Note Map** section.

9.   Select the instrument that corresponds to the sound produced by the selected MIDI note from the list in the dialog that opens when you click this button beside the **Instrument** field in the **Edit Drum Kit Note** section:

       ···

10.   Click **OK**.

11.   Select the appropriate playing techniques for the sound produced by the selected MIDI note from the list in the dialog that opens when you click this button beside the **Techniques** field in the **Edit Drum Kit Note** section:

       ···

For example, hold down **Ctrl/Cmd** and click **Buzz roll** and **Rim**.

12.   Click **OK**.

13.   Enter the display name you want for this combination of instrument and playing technique in the **Name** field in the **Edit Drum Kit Note** section.

14.   Specify the MIDI note number of the keyswitch if this sound requires one in the **Keyswitches** field in the **Edit Drum Kit Note** section.

15.   Click **Apply**.

16.   Optional: Repeat these steps for each MIDI note until you have created all the required mappings for your project.

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

RESULT

Your new percussion map is created. You can export the percussion map if you want to use it in other projects.

NOTE

Once you have created your percussion map, you must apply it to the VST instrument or MIDI device that provides the patch corresponding to the percussion map.

RELATED LINKS

Exporting percussion maps

PROCEDURE

1.   Open the **Percussion Maps** dialog by choosing **Play** > **Percussion Maps**.

    2.   Click **Export Library**.

    3.   Enter a name for the library file and select a location on your computer to save it.

    4.   Export the file in any of the following ways:

- Press **Return**.
- Click **Save**.

Importing percussion maps

PROCEDURE

    1.   Open the **Percussion Maps** dialog by choosing **Play** > **Percussion Maps**.

    2.   Click **Import Library**.

    3.   Select the percussion map file you want to import from its location on your computer.

    4.   Import the file in any of the following ways:

- Press **Return**.
- Click **Open**.

Linking percussion maps to VST instruments and MIDI devices

Once you have created percussion maps, you must apply them to the VST instrument or MIDI device that provides the patch corresponding to each percussion map.

PROCEDURE

    1.   In Play mode, click this 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.

> NOTE
>
> You can check into which channel your percussion patch is loaded in the **VST Instrument Window**, which you open by clicking this 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 context 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 Technique** 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. Save your changes and close the dialog in any of the following ways:

    -   Press **Return**.

    -   Click **OK**.

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 690

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.

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.

NOTE

It is not currently possible to drag notes from one percussion instrument to another, or to change their duration within Play mode.

RELATED LINKS
Percussion maps for the playback of unpitched percussion on page 697

Unpitched percussion import from MIDI files

You can import information about unpitched percussion from MIDI files.

When importing MIDI files, Dorico optionally interprets music for tracks set to use channel 10 as drum sets if the **Interpret channel 10 as General MIDI percussion** option is set in the **MIDI Import Options** dialog.

NOTE

The **MIDI Import Options** 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 import from MusicXML files

Unpitched percussion music can be expressed in a number of ways in MusicXML, and all applications take different approaches to what data is exported, and how it is encoded. Therefore, the results of importing MusicXML into Dorico may vary 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 is 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. Finale tends to include information about which percussion instrument maps onto each staff position, but Sibelius does not. As a result, you may find that Dorico chooses different instruments than you might expect, but you can change instruments using the **Edit Percussion Kit** dialog.
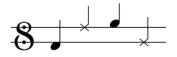
RELATED LINKS
Edit Percussion Kit dialog on page 71
Changing instruments in percussion kits on page 74
Adding instruments to percussion kits on page 73

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, mrindangam, and pakhawaj.

An Indian drum clef is automatically added to the staff when you add tabla instruments to players.

You can input Indian drum clefs by clicking **Indian drum clef** in the **Uncommon Clefs** section of the **Clefs** panel.
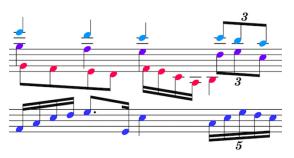
RELATED LINKS
Adding instruments to players on page 68
Inputting clefs with the mouse on page 272

Voices

Generally, each staff contains a single musical line in a single voice that can be read left to right along the staff. When multiple, independent lines need to be shown in a single staff, each line can be given 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 are often shown in a single staff, and the tenor and bass lines are shown in a single 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 in each staff. Each voice is assigned a color, which you can see if you can turn on voice colors. This can be helpful to track which notes are in which voices in music with lots of overlapping musical lines.

Voice colors shown.

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 in the staff.

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

General placement conventions for notes in multiple voices

Notes are usually placed directly above each other and at the same horizontal position, so that it is immediately clear which notes should be played together.

When there are three or more voices in a single staff, some notes need to 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 order often takes up less horizontal space then positioning notes stem to stem, as notes can overlap.

2   Stem to stem, which does not allow noteheads to overlap. This 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. In the below examples, you can see how the voice column for some voices changes as more voices are added.

RELATED LINKS
Project-wide Notation Options for voices on page 707

Project-wide Notation Options for voices

There are a number of options for how notes in multiple voices are positioned project-wide that you can choose from on the **Voices** page in **Notation Options**.

The options on this page allow you to change the position and order of notes in multi-voice contexts, and choose when notes in different voices can overlap noteheads.

The options are accompanied by musical examples to demonstrate how each option affects the appearance of your music.

You can open **Notation Options** in 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.

You can then select **Voices** from the **Category** menu.

Inputting multiple voices during step input

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.

To input notes into other voices:

PROCEDURE

1. In Write mode, start note input.

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

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

    *   Press **Shift**-**V**.

    *   Choose **Write** > **Create Voice**.

    NOTE

    You can repeat this step if the first new voice added is not the voice into which you want to input notes. For example, in a staff with nothing input, creating a new voice once allows you to input notes into the first down-stem voice, but creating a new twice allows you to input notes into the second up-stem voice.

4. When a new voice is added, a + sign appears beside the symbol of a quarter note beside the caret. A number is also shown if the new voice is not the first voice with the stem direction indicated by the quarter note symbol.

5. Input the pitches you want as you would normally.

RESULT

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

RELATED LINKS
Inputting notes on page 94
Adding notes above and below existing notes on page 105

Switching between voices during step input

You can switch between voices as you input notes during step input. However, you must have already created at least one new voice in the staff.

PROCEDURE
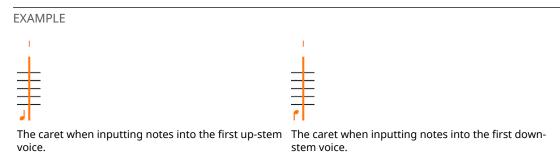
1. In Write mode, start note input.

2. Switch between voices in one of the following ways:

    *   Press **V**.

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

3. Continue inputting notes as normal.

RESULT

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.

EXAMPLE

The caret when inputting notes into the first up-stem voice.

The caret when inputting notes into the first down-stem voice.

Adding voices to existing music

To add new notes in a new voice to a staff with existing notes:

PROCEDURE

1. In Write mode, select the staff to which you want to add new notes in a new voice.

2. Start note input.

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

   - Press **Shift**-**V**

   - Choose **Write** > **Create Voice**

4. Input the notes you want in the new voice.

RESULT

Notes are input into a new voice, as indicated by the caret symbol. The stem directions of existing notes at the same rhythmic position are changed automatically as necessary.

RELATED LINKS
Inputting multiple voices during step input on page 708
Swapping the contents of voices on page 711
Swapping the order of voices on page 711
Adding notes above and below existing notes on page 105

Changing the voices of existing notes

To change the voice of existing notes:

PROCEDURE

1. In Write mode, select the notes whose voice you want to change.

2. Change the voice in one of the following ways:

   - Choose **Edit** > **Voices** > **Change Voice** and select an existing voice, or a new voice if there is only one voice in the staff currently.

   - Right-click, choose **Voices** > **Change Voice**, and select an existing voice, or a new voice if there is only one voice in the staff currently, from the context menu.

RESULT

The voice of the selected notes is changed. The directions of stems for the selected notes and other notes in the staff may be changed, and implicit rests may be added.

RELATED LINKS

Pasting notes into different voices

To copy notes and paste them into a new staff, but into a different voice to their original voice:

PROCEDURE

1. In Write mode, select the notes you want to copy.

2. Copy the notes in one of the following ways:

   - Press **Ctrl/Cmd-C**

   - Choose **Edit** > **Copy**

   - Right-click and choose **Copy** from the context menu.

3. Select the staff to which you want to paste the notes, at the position from which you want the selection to be start.

4. Paste the notes into a new voice in one of the following ways:

   - Choose **Edit** > **Paste Into Voice** and select an existing voice or a new voice into which you want to paste the notes.

   - Right-click, choose **Paste Into Voice**, and select an existing voice or a new voice into which you want to paste the notes from the context menu.

Showing voice colors

To show noteheads in each voice with a different color in your project, choose **View** > **Note and Rest Colors** > **Voice Colors**.

RESULT

Each voice in your project is shown with differently colored noteheads, according to the voice they are in.

NOTE

You can turn off voice colors by choosing **View** > **Note and Rest Colors** > **None**.

Deleting unused voices

You can create as many voices as you want in each staff. Any unused voices are automatically deleted when you close a project, but voices cannot be manually deleted once created.

If you later want to input notes in a voice you had previously created but was automatically deleted when you closed the project previously, you can create a new voice at any time and at any rhythmic position.

RELATED LINKS

Swapping the contents of voices

To swap the contents of selected voices:

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.
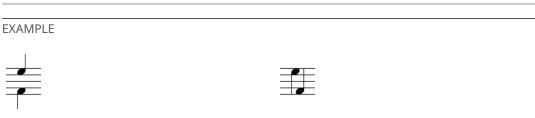
2.   Swap the contents in one of the following ways:

- Choose **Edit** > **Voices** > **Swap Voice Contents**
- Right-click and choose **Voices** > **Swap Voice Contents** from the context menu.

RESULT

The contents of the voices are swapped. For example, the notes previously in Up-stem voice 1 are now in Down-stem voice 1, and the notes previously in Down-stem voice 1 are now in Up-stem voice 1.

> NOTE
>
> Depending on the pitches involved in the swap and their stem directions, the notes may now 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 find that you need to change this arrangement, you can change the order of voices or change the voice column index.

EXAMPLE

An E in the up-stem voice, an F in the down-stem voice.

Now 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.

To swap the order in which 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.   Swap the order in one of the following ways:

- Choose **Edit** > **Voices** > **Swap Voice Order**
- Right-click and choose **Voices** > **Swap Voice Order** from the context menu.

RESULT

The order of the selected notes is changed.

NOTE

Swapping the order of notes automatically activated the **Voice column index** property in the **Notes and Rests** group of the Properties panel. If you later swap the contents of notes whose order has been previously swapped, their positions may not be as expected. deactivating the **Voice column index** property 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.

Crossing notes 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.

For example, if notes in Up-stem voice 1 in the upper staff of a piano part are crossed to the lower staff, when there are already notes in the Up-stem voice 1 in the lower staff. In this situation, the notes from the two staves are not combined, but are instead treated as two voices in a multi-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 up.

You can change the stem direction of the notes originally in the lower staff in the following ways:

- Select the notes originally in the lower staff and change their voice to another voice, such as Down-stem voice 1.
- Select the notes originally in the lower staff and change their stem direction.

Alternatively, you could 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 voices of existing notes on page 709

Changing the voice column index of notes individually

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. You can deactivate the property at any time.

You can activate this property to change the index number, and therefore the horizontal order, of individually selected notes.

> 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 everything else at that rhythmic position, or move everything at the same rhythmic position.

RELATED LINKS

Automatic changes to stem directions when only one voice contains notes

By default, notes are first input into Up-stem voice 1, and Dorico treats notes as the only voice in the staff until you input more voices.

This means that when there is only one voice in the staff, the stems of notes are positioned both up and down, depending on the position of the notes in the staff.

When there are multiple voices in a staff and all voices contain notes, the stem direction of notes is determined by the stem direction of their voice. For example, notes in Up-stem voice 1 and Up-stem voice 2 point upwards, and notes in Down-stem voice 1 and Down-stem voice 2 point downwards.
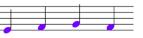
> NOTE
>
> The order in which notes appear between different up-stem voices and different down-stem voices depends on their pitch, and your settings on the **Voices** page in **Write** > **Notation Options**. You can also change the voice column index of notes individually.
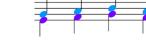
When there are multiple voices in a staff but not all voices contain notes or rests, the stem direction of notes may not follow the stem direction of their voice but instead are positioned as if there is only one voice in the staff. For example, if a staff contains Up-stem voice 1 and Down-stem voice 1 but only Down-stem voice 1 contains notes or rests, then the stems of notes in Down-stem voice 1 may point upwards, depending on the position of the notes in the staff.

If you later input notes into other voices, the stem direction of notes changes. For example, if you input notes into Up-stem voice 1 in a bar where there were previously only notes in Down-stem voice 1, the stems of all notes in Down-stem voice 1 at rhythmic positions where there are now voices in Up-stem voice 1 point downwards.

Notes in Up-stem voice 1 shown in blue.

Notes in Down-stem voice 1 shown in purple. As Down-stem voice 1 is the only voice to contain notes in this bar, the stems point upwards despite being in a down-stem voice due to their position in the staff.

When both Up-stem voice 1 and Down-stem voice 1 contain notes in the same bar, the stem direction is automatically changed.

Showing rests or implicit rests in empty voices forces the stem direction of notes to follow the stem direction of their voice.

RELATED LINKS
Project-wide Notation Options for voices on page 707
Changing the voice column index of notes individually on page 713
Implicit rests in multi-voice contexts on page 714
Notation Options on page 119

Implicit rests in multi-voice contexts

In Dorico, implicit rests are shown automatically to fill in rhythmic positions around notes.

The same is true for notes when there are multiple voices in the staff. However, in these contexts you may 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 every note in all voices in the bar immediately clear.

When there are multiple voices in a staff, implicit rests are shown in every bar in which there are notes in more than one voice, of any duration.

You can choose when rests are shown when there are multiple voices in a number of different contexts project-wide on the **Rests** page in **Notation Options**. You can open **Notation Options** in 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.

You can also hide rests before the first note in voices and after the last note in voices individually. As this is done by activating properties in the Properties panel, rests before voices and after voices that have been hidden can be shown again at any time by deactivating the corresponding property.

A phrase with multiple voices showing implicit rests.

The same phrase without implicit rests.

Rests can also be deleted permanently.

NOTE

The only way to undo deleting rests is to do so immediately by pressing **Ctrl/Cmd-Z**, or by choosing **Edit** > **Undo**.

RELATED LINKS
Project-wide Notation Options for rests on page 559
Hiding rests before the first note in voices on page 715
Hiding rests after the last note in voices on page 715
Deleting rests on page 561

Hiding rests before the first note in voices

If the first note in a voice starts part of the way through a bar, rests are shown before the note from the previous barline by default so that its rhythmic position is clear.

However, there may be occasions when you do not want to show rests before the first note in a voice when there are multiple voices in 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.

An example of a second voice being used to notate passing notes.

To hide rests before the first note in voices:

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. Activate the **Starts voice** property in the **Notes and Rests** group of the Properties panel.

    NOTE

    This property cannot be activated for notes that are not the first note in a voice in the selected staff.

RESULT

When the **Starts voice** property is activated, rests are not shown before the selected notes, up to the previous barline.

The property can be deactivated at any time, which shows rests again.

RELATED LINKS
Deleting rests on page 561

Hiding rests after the last note in voices

If the last note in a voice ends part of the way through a bar, rests are shown after the note and until the next barline by default.

However, there may be occasions when you do not want to show rests after the last note in a voice when there are multiple voices in 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.

An example of a second voice being used to notate passing notes.

To hide rests after the last note in voices:

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. Activate the **Ends voice** property in the **Notes and Rests** group of the Properties panel.

3. Select the rhythmic position at which point the selected voices are ended from the following options:

   - **Immediately**

   - **After barline**

   NOTE

   This property cannot be activated for notes that are immediately followed by another note in the same voice in the selected staff.

RESULT

When the **Ends voice** property is activated, rests are not shown after that the selected notes, according to your selection.

The property can be deactivated at any time, which shows rests again.

RELATED LINKS

Showing multiple rests of the same rhythmic value at the same rhythmic position in multiple voices

You can choose whether all rests are shown in every voice or whether only one rest is shown for all voices in the **Rest positioning** section of the **Rests** page in **Notation Options**.

NOTE

You cannot change the position of rests by clicking and dragging them with the mouse.

You can show multiple rests of the same rhythmic value at the same rhythmic position when there are multiple voices in the staff.

PROCEDURE

1. Select the 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 the **Rest pos.** property.

3. If required, select each rest and change their position by changing 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.

When the default position of rests is changed, multiple rests are shown at that rhythmic position if there are multiple voices in the staff.

RELATED LINKS
Notation Options on page 119

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**

Changing the consolidation of rhythm dots individually

You can also change how rhythm dots in multiple voices are consolidated individually. See **Changing the consolidation of rhythm dots individually** for more information.

RELATED LINKS
Project-wide changes to the appearance of noteheads on page 453
Project-wide Engraving Options for notes on page 453
Changing the consolidation of rhythm dots individually on page 458

Glossary

articulation

(1) Symbols that are used to indicate how a note should be played, typically affecting their onset (attack), release, or duration. (2) In sample libraries, more generally referring to any playing technique.

attachment

The rhythmic position at which an item, such as a clef, dynamic, rehearsal mark, and so on, is found in the music.

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.

caret

The vertical line that extends above and below the stave and indicates the rhythmic position at which a note or chord can be input. See also rhythmic grid.

channel

Roughly analogous to a staff. In MIDI, a channel is a means to disambiguate which note, controller, or other data should be 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.

column

All of the notes and chords that start at the same rhythmic position are considered to be in the same global column, that is, across all of the staves in the system, for the purposes of spacing the music. If there are notes or chords in multiple voices starting at the same rhythmic position within a given staff, this may result in multiple voice columns, with notes or chords in some voices being offset horizontally from notes or chords in other voices.

disclosure arrow

Small arrow that is shown on all edges of the main window in Dorico. It allows you to show and hide the toolbar and panels individually.

EDO

An abbreviation for Equal Division of the Octave, a unit used particularly in microtonal music to describe how an octave can be divided into equal parts for the purposes of defining a microtonal scale or tuning system. Traditional Western European music uses 12-EDO, that is, each octave is divided into 12 equal semitones or half-steps, and 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, distances, and so on. These options are common to a whole project and apply to all flows and layouts.

ensemble

A predefined list of players, each holding instruments that are often used together, such as string quartet, wind quintet, brass quintet, string ensemble, double woodwinds, etc. Ensembles can be added to your project in Setup mode.

family

Instruments of a similar kind that are typically bracketed together in a score, such as woodwind, brass, percussion, and strings.

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. Dorico formats your music automatically, but allows you to adjust the formatting directly in Engrave mode.

fragment

Part of an item. For example, a note or chord contains many fragments: each notehead, each group of rhythm dots, each accidental, the tip of the stem, and the beam are all fragments. In Write mode, when you select an item, the entire item, including all of its fragments, is selected and is affected by any edit that you make. In Engrave mode, however, 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.

galley view

Music for one or more flows laid out as a single, infinitely wide system.

grace notes

Sometimes called arhythmic notes, grace notes are added as ornaments or embellishments and are printed smaller than normal notes. Grace notes are not counted towards the number of beats in a bar. When performed, they steal from the duration of either the preceding or the following rhythmic notes. In common practice, an acciaccatura is a grace note with a slashed stem, 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; an appoggiatura is a grace note that is written without a slash across its stem. It is to be 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.

hairpin

A gradual increase or reduction in the dynamic level, that is, a crescendo or diminuendo, indicated using a pair of angled lines that diverge from or converge to a single point.

horizontal justification

The alignment of musical content to the left and right edges of the frame. Typically all the staves in a system, and all of the systems on a page, occupy the same width. Different music in different staves is spaced differently. Therefore, to ensure that all of the staves are 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, that is, it is allowed to end midway across the width of the frame. See also frame, justification.

instrument

Anything that requires one or more staves in order to communicate its musical content, whether it is an instrument that is blown, struck, bowed, shaken, or otherwise coaxed into making sound. An instrument is also a human voice, a computer triggering samples, or a tape recording.

item

Generic term for any note, rest, chord, notation, or other selectable object that appears in the score in Dorico. See also fragment.

justification

The alignment of musical content to the edges of the frame, both horizontally and vertically. See also frame, horizontal justification, vertical justification.

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. See also layout.

lock duration

Functionality that allows you to change the pitches of existing music while retaining existing rhythms.

lyric

Any text – whether a whole word or individual syllable – that is intended to be sung or spoken by an individual singer or group of singers. Lyrics are shown at each rhythmic position where a new word or syllable begins. Typically, lyrics are found below the stave, but sometimes above the stave, for example, in the case of a short score.

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. 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.

modes

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

multi-bar rest

A series of empty bars in which a player is resting, that is, the player does not play his or her instrument. This is typically shown in a part as a single bar, with the number of bars' rest written above or sometimes below the stave. Instead of a normal bar rest symbol, a multi-bar rest normally shows an H-bar, which is a horizontal line with the same thickness as a bar rest, but 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.

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.

music area

The main part of the window in Setup, Write, and Engrave mode where you input and edit your music.

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.

page break

The forced termination of a page of music at a particular rhythmic position, typically, though not always, at a barline. Dorico creates page breaks automatically, but you can adjust them in Engrave mode, for example, to ensure a convenient page turn in a part.

page view

Music for one or more flows laid out on a page of a fixed width and height, as it appears when printed.

panel

Wide palettes of tools on the left, right, and bottom edges of the 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.

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.

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.

plug-in

A software program that can operate within another software program. Dorico supports the following kinds of plug-ins: VST instruments and effects, which are used to produce and manipulate the playback of your music; and script plug-ins, written in a programming language called Lua, that can automate repetitive tasks or even extend the functionality of Dorico in new and interesting ways.

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.

Print mode

A workspace that allows you to print to your printer, export to PDF, and export to other graphics files. See also modes.

project

A Dorico document.

properties

The characteristics of items in your project – such as the direction of a slur, the horizontal placement of a tempo marking, the precise shape of a tie – that can be edited via the properties panel.

rhythmic grid

Ruler markings showing beat divisions and subdivisions that appear above the bar in which the caret is currently located. See also caret.

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, flute 3 doubling piccolo. See also player.

space

The distance between the center of two adjacent staff lines, the main unit of measurement used in music engraving. For example, a notehead is normally one space tall. Practically all items in the score are scaled in proportion to the size of a space.

spacing

The act of determining the horizontal distance between successive columns in order to format the music. Horizontal spacing takes the following main considerations into account: the actual graphical shape and size of the notes, rhythm dots, accidentals, and so on, and the ideal horizontal distance defined for a given note value. When sufficient music has been spaced such that no further music can fit in the available width, the system is considered full, and the result is then 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♭, B . The same pitch is normally spelled a certain way in a given key: for example, MIDI note 61 would normally be spelled as C♯ in D major, but as D♭ in Ab major. See also EDO, MIDI.

system break

The forced termination of a system of music at a particular rhythmic position, typically, though not always, at a barline. Dorico creates system breaks automatically, but you can adjust them in Engrave mode.

system item

A notation that applies to all instruments in a system, for example, a tempo instruction, rehearsal mark, key signature, or time signature. Some system items, such as key and time signatures, are shown on every staff, while others, such as tempo and rehearsal marks, are normally shown above the top staff in the system, and in large ensembles also above one or more staves further down in the system.

system view

Music for one or more flows that is laid out as if on a page of the defined width but with variable height, with each successive system laid out to the right of its predecessor.

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.

transport

Encompasses all options related to playback and recording.

tuplet

Sometimes called an irrational rhythm or a countermetric rhythm, a tuplet is a rhythm that is performed at a fraction of its normal written duration. For example, a triplet is three notes of a given note value played in the time it would normally take to play two notes of that note value; each note is two-thirds as long as it would normally be.

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. The bottom line of the bottom staff of the bottom system is positioned at or near the bottom 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 if the remainder is larger, it is further distributed evenly between the staves within the systems. If the remainder is especially large, then the music may not be justified at all, since it may be preferable to leave a larger gap at the bottom of the frame than to have exceptionally wide gaps between the staves. See also frame, justification.

voice

A series of notes, chords, rests, and other notations that are normally played by the same instrument. Most instruments are typically monophonic, that is, they only play a single note at once, so most music is written in a single voice. When a single voice is active on a stave, the stems of notes and chords point in their natural directions, down for notes above the middle staff line, up for notes below the middle staff line, and either up or down according to context for notes on the middle staff line. Music for keyboard, guitar, and pitched percussion more commonly uses multiple voices on the same staff, in which case all notes and chords that belong to a given voice are shown with stems pointing in the same direction: the upper voice typically has all stems pointing up, while the lower voice typically has all stems pointing down. Dorico allows as many voices as are needed to be input onto a single stave, and lays them out and spaces them automatically.

Write mode

A workspace that allows you to input music and other notations. See also modes.

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